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A case study of one high performance baseball coach's experiences within a learning community

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The purpose of the present study was to examine the learning experiences of a high performance, head baseball coach within a learning community. We drew upon the barriers and enablers of a learning community to structure the current study's learning community intervention. Our learning community was comprised of one collegiate summer league head baseball coach and three coach educators (i.e. facilitators). Data were collected via eight weekly learning community meetings (i.e. recorded and transcribed), the coach's daily journal and post-learning community meeting journal, and the memory of his coaching experiences. The findings, which suggest a potential framework for sustaining an effective learning community, resulted in six themes (i.e. problem setting, problem sharing, questioning to prompt reflection, prescribed suggestions, collaborative solutions and psychological wellness) that describe the coach's experiences both internal and external to the learning community. The findings are discussed in relation to research on learning communities, experiential learning and reflection. Furthermore, we provide implications for future research by considering the learning community's influence on the head coach's reduction of stress and the utilisation of technology to sustain a stable learning community setting.

Keywords: experiential learning; reflection; coach development; coach learning; technology

The International Sport Coaching Framework has outlined the knowledge and skills a qualified sports coach should possess (ICCE *et al.* 2013). Coach educators are, in part, responsible for facilitating coaches' attainment of these expectations through coach development, which has been defined as, 'a chain of developmental outcomes and activities that occur in response to personal and contextual requirements over a period of time' (Côté 2006, p. 218). Research examining the development of coaches' knowledge has provided evidence that coaches gain knowledge through formal (Vargas-Tonsing 2007, Wright *et al.* 2007) and informal learning situations (Gilbert *et al.* 2010, McMaster *et al.* 2012). Formal learning situations typically entails 'train and certify' approaches that address sport-specific foundational knowledge and related concepts (Trudel and Gilbert 2006, Trudel *et al.* 2013). Informal learning situations entail learning through experience, which often involves collaborating

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with others in learning communities (Wright *et al.* 2007, Erickson *et al.* 2008). Building upon coaches' perceived importance of learning through collaboration with others, coach education researchers have taken an interest in learning communities as a social learning approach to coach development (Trudel and Gilbert 2004, Culver and Trudel 2006).

Learning communities are social learning networks that researchers have studied to understand how and what coaches learn through professional practice (Culver and Trudel 2006, 2008). However, the settings for learning community research have been limited to a few sporting contexts (e.g. karate, alpine skiing, baseball; Culver 2004, Culver *et al.* 2009, Lemyre 2009). Importantly, the findings of this research revealed several barriers (e.g. coaches' willingness to share) and enablers (e.g. competent facilitator presence) related to the functioning of learning communities (Culver 2004, Culver *et al.* 2009, Lemyre 2009). Additionally, in a review paper summarising the learning community research, scholars offered recommendations to facilitate coach development (Gilbert, Gallimore *et al.* 2009). In order to better understand the barriers and enablers of high functioning learning communities, additional research is needed across sporting contexts and competitive levels. Therefore, the purpose of the present study was to examine the learning experiences of a high performance head baseball coach within a learning community intervention. In the following sections we describe formal and informal coach learning, situated learning and learning communities in sport coaching contexts.

Formal and informal coach learning

Formal learning embraces institutionalised education, often culminating in certification of sport specific knowledge (Trudel and Gilbert 2006, Vargas-Tonsing 2007, Mallett *et al.* 2009). Research has recognised that very little time is spent pursuing formal education by high performance coaches, and it is typically not mandatory nor practical for voluntary youth coaches (Gilbert, Gallimore *et al.* 2009, Gilbert *et al.* 2010). However, research has found that youth coaches do value formal education (Vargas-Tonsing 2007). Research suggests that formal education enhances perceived coaching efficacy (Malete and Feltz 2000) and facilitates the psychosocial development of athletes (Conroy and Coatsworth 2006), while also reducing coaching stress and the rate of coach burnout (Frey 2007).

Another way for coaches to develop knowledge, one that coaches often cite as their preferred context, is informal learning (Erickson *et al.* 2008). Through informal learning coaches' learn through their own experiences and conversant social learning communities in which knowledge is shared and reflected upon (Werthner and Trudel 2006, Lemyre *et al.* 2007, Wright *et al.* 2007, Callary *et al.* 2012, McMaster *et al.* 2012). Informal social learning communities are often used by high performance coaches to negotiate meaning and facilitate learning through experience (Gould *et al.* 1990, Gilbert, Lichtenwaldt *et al.* 2009, Callary *et al.* 2012).

Research has recognised informal knowledge networks and communities of practice as different social learning communities in which coaches learn (Culver and Trudel 2006, 2008). Informal knowledge networks are considered groups of individuals who are not working together in the same setting, yet have developed enough of a trusting relationship to share information and knowledge (Culver and Trudel 2006, 2008). Communities of practice are groups of individuals who work in the same setting, share similar problems, and learn by interacting with each other

(Wenger 1998). However, learning in these informal social learning communities is often hindered by coaches' tentativeness to share knowledge as a consequence of sport competitiveness (Lemyre *et al.* 2007). This barrier is a reason why coach educators have suggested the need to use trained facilitators to manage the complex and often competing demands of both coaches and organisations within social learning communities (Culver and Trudel 2006, Erickson *et al.* 2008, Stoszkowski and Collins 2014a). A guided, social learning community involves a trained facilitator(s), who enhances the application of coaching knowledge to a specific context by helping coaches reflect, problem solve, and share information (Culver and Trudel 2006, 2008, Gilbert, Gallimore *et al.* 2009). Situated learning and communities of practice social learning theories have been conceptualised by researchers to be used by coach educators as a way to enhance coach learning (Gilbert, Gallimore *et al.* 2009).

Situated learning and community of practice

Situated learning theory was originally developed from Lave and Wenger's (1991) research on the social or situated nature of learning during apprenticeship. To understand knowledge development, Lave and Wenger examined learning in five apprenticeships (e.g. midwives, tailors, quartermasters, butchers and nondrinking alcoholics). Each apprenticeship consisted of a situated or in-field context, where a novice progressively develops knowledge and skills from a master (i.e. experienced) community member or other members of practice who are more advanced in their learning by participating in peripheral tasks. As the novice observes the master and gradually learns central skills through greater participation, the novice moves closer to fulfilling the role of a full participant. Lave and Wenger theorised situated learning theory as learning that takes place in the same context as it is applied and where knowledge is co-constructed in a social process.

Situated learning was further conceptualised by Wenger (1998) into community of practice (CoP), which has been 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 *et al.* 2002, p. 4). A CoP's potential impact on goal attainment and authentic learning relies on the operation of three interconnected dimensions: mutual engagement, joint enterprise and shared repertoire (Wenger 1998). The first dimension, mutual engagement, is the unique interaction between individuals in a group and their own contribution particular to the practice. Mutual engagement encompasses community member interaction, establishing relationships and understanding the specific knowledge capabilities of others within the community. The second dimension, joint enterprise, is arranged by the collective problem or domain, which may entail various un-prescribed situations and challenges between members of a particular practice. Within the context of sports coaching, for example, this could involve improving athletes' performance. The third dimension, shared repertoire, relates to the communal usage of technical terms or language, equipment, values and a commonality of routines within the community (Wenger 1998).

Learning communities can be either high or low functioning. Low functioning learning communities often contain group members who use each other to merely gather and pass along information without sharing a common interest in the problem (Allee 2003). Other low functioning learning communities contain a diverse group of practitioners who lack interaction and therefore do not promote collaborative

engagement in solving problems at work (Brown *et al.* 1989, Duguid 2005). Roberts' (2006) review of learning communities' research in management describes competitiveness and trust as barriers for a high functioning learning community. Contrary to these examples, Saint-Onge and Wallace (2003) provide an example of a high functioning learning community within the domain of business, where a facilitator was a key component in promoting problem solving. In the coaching setting, high functioning learning communities have been suggested to improve coaches' knowledge and practice when facilitators are able to maintain stable meetings and suggest un-prescribed solutions to coaching issues (Culver and Trudel 2006, Gilbert, Gallimore *et al.* 2009).

Learning communities research in sport coaching contexts

Coach education researchers have drawn upon situated learning and CoP theory to examine how coaches learn through social learning communities. For example, Lemyre (2009) documented the process of cultivating a collaborative learning community in a competitive karate dojo. Lemyre determined that the ranked structure of karate, headed by the *Sensi*, often impeded the facilitator's interactions and dialogue with the other instructors (coaches), which decreased the community's ability to facilitate learning. Contrary to the aforementioned research, Culver (2004) determined that a facilitator can help to produce a high functioning learning community by guiding weekly meetings. Within these facilitated learning community meetings, coaches reported meaningful learning experiences and knowledge development. However, upon the removal of the facilitator from the meetings, Culver concluded that without facilitator leadership, the learning community failed to meet its purpose to promote coach learning as the coaches reverted back to simply gathering information (i.e. low functionality).

While coach educators have assumed the role as the learning community facilitator in previous research (Culver 2004, Lemyre 2009), other research has examined a learning community which was facilitated by a technical director of a youth baseball league (Culver *et al.* 2009). In this research, the technical director experienced coaches who were averse to disseminate knowledge because this contradicted the norm of competition. However, through unyielding leadership, the facilitator forced the coaches to share knowledge and work cooperatively for the betterment of the youth participants and coach development (Culver *et al.* 2009). Culver *et al.* (2009) concluded that this high functioning learning community was reliant on the facilitator's authority, persistence, and ability to impel coaches to engage and share knowledge.

To date, research has explored the learning sources of high performance coaches (Gould *et al.* 1990). However, no research has explored how coaches learn from these sources nor has research contributed to facilitating high performance coaches' professional development and learning (Mallett *et al.* 2013). Therefore, no research has examined the use of a facilitated learning community intervention to enhance a high performance head baseball coach's learning experiences in professional practice. While learning community research has used technology through blogging to facilitate learning in coach education students, no research has used video conferencing (i.e. Skype) to extend learning community access and ease of use (Stoszkowski and Collins 2014b). In the present study, we only included one coach in the intervention because of the exploratory nature of the study and the likely barrier of competition for high performance coach learning. From a theoretical standpoint, our

intervention does not meet the aforementioned dimensions of a CoP. Thus, we consider the learning community intervention as an informal learning network that contained individuals who are not working together in the same setting, yet had developed enough of a trusting relationship to share information and knowledge. Furthermore, we drew upon the research on the barriers and enablers that affect the functioning of learning communities to frame our intervention (Gilbert, Gallimore *et al.* 2009). We sought to address the gaps in the literature by gaining an understanding of the coach's learning processes and interactions with facilitators. If coach educators can better understand the coach's experience within a learning community, then they may be able to structure more effective professional development opportunities for high performance coaches (Mallett *et al.* 2013).

Research design and methods

An instrumental case study design was used to understand the learning experiences of a high performance, head baseball coach within a learning community intervention (Stake 2006). The case was bounded within the time frame of a summer baseball season and delimited to the head coach's experience in the learning community. Case study designs do not seek statistical generalisability, but are well suited to understanding a particular, complex, and situated experience (Stake 2006). Given the lack of research specific to this topic, we focused on this case to maximise what we could learn and offer a tenable, petite generalisation (Stake 2006).

After collegiate baseball athletes finish their collegiate season, they are often recruited to compete in 'wood bat' summer leagues for the months of June, July and August. These summer league organisations exist across the United States (US) and are sanctioned by the National Collegiate Athletic Association (NCAA) to ensure that athletes maintain non-professional status. Teams are constructed with athletes from various levels of collegiate competition (e.g. NCAA I, II, III, two-year colleges and National Association of Intercollegiate Athletics [NAIA]) to provide athletes with an opportunity to compete in approximately 35–65 games. Although the athletes are not paid to compete, they are typically provided with housing, jobs, travel and meals. Ex-professional, current collegiate or ex-collegiate coaches are often hired for the summer months to manage these athletes. In the summer of 2012, the first author was a head coach of one of these teams in a 12 team league located in the southeastern US. The league maintained a 44 game regular season schedule that began on 1 June and concluded on 27 July.

The learning community intervention

Each Tuesday of the regular season, beginning on 29 May and concluding on 17 July, the head coach participated in a learning community meeting with coach educators, from a large southeastern university, who acted as learning community facilitators. A total of eight learning community meetings were completed during the study. The learning community in our study was constructed based on existing literature (Gilbert, Gallimore *et al.* 2009). The weekly meetings were conducted using Skype in order to maintain stable meetings and overcome the distance barrier between the head coach and the coach educators. The facilitators provided suggestions to the coach's problems during the weekly meetings (Gilbert, Gallimore *et al.* 2009). These weekly meetings ranged from 17 to 67 min in duration

($M = 53$ min, 12 s; $SD = 12$ min, 12 s). In conjunction with the weekly learning community meetings, the coach also wrote a post-learning community meeting journal, where he compiled his thoughts and ideas related to the learning community. The coach also engaged in journaling to capture his daily coaching experiences.

Participants

The participants were a high performance head coach and three coach educators who all worked at the same southeastern institution. The head coach (first author) played baseball at the NCAA Divisions I, II and professional level. Additionally, he was an assistant baseball coach for five years at the NCAA Divisions I and II level, along with four years of head coaching experience in the summer collegiate wood bat leagues. At the time of present study he had recently completed his first year of doctoral coursework at a university in the southeastern US. Two of the three coach educators served on his doctoral advisory committee. Coach educator one, and second author, is an assistant professor of sport coaching education. His main areas of expertise are in sport sociology and strength and conditioning. He has been a strength and conditioning coach at a high school, NCAA Divisions I and III, and Major League Baseball and a high school football coach. He served as a head strength and conditioning coach for a NCAA Division I collegiate baseball team for eight years, and travelled regularly with the team. He attended and participated in all eight of the learning community meetings. Coach educator two, and third author, is an associate professor of sport coaching education and a certified consultant with the Association for Applied Sport Psychology. Her main area of expertise is sport psychology. She has two years of assistant coaching experience at the NCAA Division I level and one year of experience at the NCAA Division II level, six years of experience conducting individual softball lessons to high school and youth athletes, and three years of head softball coaching experience at the youth level. She attended and participated in six of the eight learning community meetings. Coach educator three, and fourth author, is an instructor of sport coaching education. Her main area of expertise is sport psychology, softball coaching, and women in coaching. She was head softball coach at a junior college for seven years and an assistant softball coach at the NCAA Division I level for four years. Currently, she is in her fourth year of assisting as a softball coach at the high school level, where she has won one state championship. She attended and participated in two of the eight learning community meetings.

Data collection

Data were collected via taped audio recordings of the learning communities meetings, and the head coach's daily journals, post-learning community journal, and memory. As a co-researcher, the head coach's memory was used throughout the analysis of data as new thoughts and emotions were recollected, which coincides with Chang's (2008) assertion that personal memory 'taps into the wealth of information on self' (p. 72). Approximately one month after the final learning community meeting, the first researcher transcribed the audio recordings, which resulted in 88 single spaced pages of text. The daily journals yielded 28 pages of single spaced text, while the post meeting reflection compiled four pages of single spaced text.

Data analysis

We inductively analysed the data using the constant comparative method to explore the coach's learning experiences within the learning community intervention (Strauss and Corbin 1998). The data were read initially by the first author line by line to gain a sense of the experiences as a whole. Next, the first author analysed the data line by line to create initial meaning units (Patton 2002). The first author then took the transcriptions to the second author, who acted as a peer debriefer, to probe and challenge the first author's initial interpretation of the data (Lincoln and Guba 1985). The data were again analysed line by line by the first author to refine the initial meaning units. Using Microsoft Excel to manage the analysis, the first author then grouped the meaning units based on similarities and differences. A code map was created by the first author to show and make the data analysis transparent (Anfara *et al.* 2002). The code map was then examined by the second author to determine any amendments to the resulting thematic structure. A few items were discussed and minor modifications were made until a consensus was reached between the first and second author.

Judging qualitative research

While evaluating qualitative research used to be achieved through demonstrating trustworthiness (Lincoln and Guba 1985), this parallel position has been critiqued on multiple grounds (see Smith *et al.* 2014). In this study we drew upon many characterising traits to inform our inquiry, mainly rich rigour, sincerity, credibility and transparency (Smith *et al.* 2014). To enhance the depth and breadth of data collected, we used the transcriptions from the weekly meetings, the first author's daily journals, post-learning community journals and memory of his experience. Additionally, we used peer debriefing to compare interpretations and challenge individual biases and values. For the purpose of this paper, when disagreements occurred we discussed them until reaching a consensus, although this does not exclude further inquiry which could take a different focus or interpretation (i.e. new insights gained through questioning rather than agreements). To be transparent, we created a code map to demonstrate how the data were interpreted. Additionally, we provide thick, descriptive findings of a purposive sample to provide a substantive contribution to the field and generate a plan of action for coaches and coach educators to develop their practice. Lastly, we sought internal coherence by providing quotations from the learning community's meetings, the first author's journals and post-learning community journals to provide compelling evidence of the link between meaning units, subthemes and themes; and external coherence by discussing our study in relation to existing theories and previous research (Shenton 2004, Smith *et al.* 2014).

Findings

This section describes the findings presented as the following six themes: problem setting, problem sharing, questioning to prompt reflection, prescribed suggestions, collaborative solutions and psychological wellness. The themes are organised chronologically with respect to the head baseball coach's experiences leading up to and within the learning community meetings each week.

Problem setting

The problem setting theme is defined as the weekly, reoccurring process the coach (i.e. first author and head coach) went through to bring problems to share with the learning community. The learning community's weekly meetings coerced him to observe, reflect upon and evaluate his coaching practices throughout the week. Because the coach had envisioned the learning community as a way to improve athletic performance, he sought out coaching problems to be brought to the learning community for discussion. He believed that the community would help him in generating ideas to overcome problems to not only enhance his coaching practices, but ultimately athletes' performance.

Throughout the summer, the coach was constantly observing and evaluating the effects of his coaching practices. In his daily journal he wrote, 'Another observation during pre-instruction that I noticed was the change in the athlete's focus after about one minute of direct instruction' (1 June 2012). The coach's observations of his coaching practices stimulated reflection and critical thought on how to apply new practices. In his journal he wrote:

After the fact, I would like to have asked certain players that had been successful to share with the team what was working for them offensively in the post-game meeting ... This may be beneficial in incorporating player input and generating ideas that facilitate success from some productive teammates. (3 June 2012)

After reflecting on how to apply potential solutions, the coach immediately implemented and acted upon these practices on his own. In his journal he wrote:

One thing we will be implementing, which I think will ... help the hitters ... is individualized batting practice. I asked the players to think about what kind of rounds of batting practice will help them best get ready for the game ... I wanted to give them time to think about it before we implement it tomorrow, so that they can come up with a plan and critically think about what rounds will best facilitate their success in the game. This is most definitely a new technique for them, so allowing time for them to process this will hopefully be more beneficial. (7 June 2012)

In some instances, the coach believed he had successfully employed many coaching practices that improved athlete outcomes. However, on many occasions he considered his coaching practices to be of little to no influence on the athletes, which left him wondering why the coaching practices did not produce positive outcomes. The coach labelled these as unsuccessful coaching practices, which would become the problematic content to be presented in the learning community's weekly meeting. Unable to solve or understand a particular problem on his own, he brought this content to the community for discussion. For example, his unsuccessful motivational methods seemed to persist throughout the summer. In the coach's journal he wrote, 'The feelings that I have of players not showing care or initiatives for getting better have been a frustration of mine in summer baseball since I have been a head coach (23 June 2012)'.

Other problems that were encountered throughout the season consisted of: non-influential coaching practices, the inability to instil intrinsic motivation in athletes, the failure to increase autonomy in athletes, poor offensive production, athlete specific problems (i.e. athlete's living arrangements, athlete's playing time, athlete's lack of response to instruction), lack of coach-athlete trust and building athlete's confidence. When these problems were unresolved by the coach, he noted

them throughout the week and then shared them with the learning community as the main focus for discussion.

Problem sharing

The problem sharing theme is defined as the coach initiating the discussion within the learning community by sharing the details of his problems. Each meeting began with the coach sharing problems that had accumulated during the week. These problems served as a foundation for initiating conversation, which fostered the interaction with the learning community's facilitators. In a daily journal the coach wrote:

I am concerned [about] how I can get them [late arriving athletes] up to speed with the rest of the team as efficiently as possible ... how can I get them up to speed on our team's strategic plan, tactical philosophy, and technical skills when games are starting. (1 June 2012)

A few days later in the learning community the coach initiated the discussion by stating:

I have 12–15 guys that have been here for a week ... They are familiar with each other, and now I have six new guys. I want to make them feel like an in-group member ... I need to get the new guys up to speed on the fly with our offensive strategy and team philosophy. (5 June 2012)

Problems that were shared, which were coaching issues that the coach was unable to resolve on his own, typically consisted of the problems noted in the previous section (i.e. problem set; non-influential coaching practices, the inability to instil intrinsic motivation in athletes, etc.). Because he had noted each problem to share with the learning community, the coach had an agenda to ensure that all of his problems were presented. Upon sharing each problem one at a time, the facilitators would engage him in questioning to prompt reflection.

Questioning to prompt reflection

The questioning to prompt reflection theme represents how the facilitators' questioning caused the coach to actively engage in immediate reflection on his shared problem. The questions generated by the facilitator during each session allowed the coach to generate new ideas and insight that had not previously transpired. The reflective questioning made him articulate why he had perceived something to be a problem. At times, the coach would begin to immediately generate potential solutions and understanding. After sharing the details of one of the coach's problems, one of the facilitators asked, 'How much time did you give them?' The coach then subsequently reflected out loud:

How much time did I give them to answer the question? (pause) Ahhhhhh! I definitely paused for a while. And eventually one came limping in and said, 'Let's do the drive back.' But it wasn't with any confidence at all. That's when I said great, awesome and let's put it in. And then [I]asked, 'What are the keys for the drive back?' and then I had to keep pulling out information. (5 June 2012)

In the coach's post-learning community journal, he reflected on what he learned from the session and stated, 'I must give time for players to process different ideas (5 June 2012)'.

In order to prompt reflection, the facilitators' questions typically consisted of: Do you think there is anything else you could have done? How else could [practice] turn out with another player? Have you thought about [idea, practice, explanation]? What are some other ways to move runners? and Why is showing energy so important? Through reflection, when the coach was able to understand the details for problem solutions and immediately generate ideas to be implemented, he did not induce any further questioning nor probed the facilitators for additional discussion involving the issues. Upon determining no further problem solving conversation was necessary for discussion, the coach moved on to his next problem to share with the learning community. The week following the learning community meeting the coach engaged the coaching practices that were identified as possible solutions. However, often times, questioning that prompted reflection did not produce solutions or understanding. When these incidents occurred within the learning community, a need existed for the coach to continue to further understand and to generate new practices. This, then, resulted in the facilitators offering suggestions.

Prescribed suggestions

The prescribed suggestions theme is defined as potential generic practices offered by the facilitators in response to questioning that did not produce understanding or applicable coaching practices. The coach perceived that the suggestions were intended to help him understand what was going on and why and to identify possible solutions. At times, he immediately accepted the prescribed suggestions shared by the facilitators such that solutions, better understandings, and new coaching practices were realised. For example, one of the facilitators suggested:

If you think that is something they need to work on, and you have talked about it as a group, then their first three swings in the box ... I would say that if we are in a situation where we have runners in scoring position ... You get three pitches. And see what the result is and then reinforce that ... that you need to be aggressive early in the count. (12 June 2012)

If the coach accepted the facilitators' suggestion(s), he would then discontinue the current discussion and subsequently share other content. At practice the following week the coach would use these suggested practices. Suggestions presented within the meetings included: applying diverse coaching practices, explanations of why a particular practice was potentially ineffective, instilling confidence in athletes, offensive tactics, defensive tactics, goal setting, solutions to specific athlete problems (e.g. individually conversing with the athlete, asking the athlete questions to prompt reflection, providing reinforcement), and game management. However, the coach did not always accept the facilitators' prescribed suggestions. Rather, the coach believed that as the prescribed suggestions were explained, were too generic or superficial and would not work effectively. For example, some prescribed suggestions might not have produced enough essential details or were specific enough for how to implement the coaching practices to solve the problem. Although he did not explicitly state to the facilitators that the suggestions lacked insightfulness or applicability, he responded to the suggestions by prompting the discussion towards generating a more practical solution through collaboration.

Collaborative solutions

The collaborative solutions theme reflects the ideation through dialogue in response to the coach's lack of acceptance to prescribed suggestions. During this step, the community members collaborated on potential solutions to the coach's problems that went unaccepted, unresolved, or misunderstood in the previous theme. For example, a typical conversation would consist of:

- Facilitator: I would also keep track of what they said. If you start to see a pattern, you want to be reinforcing that. For example, I've heard three times now that we need to be more aggressive early in the count. You want to be reinforcing what they say. And maybe that's something you want to address before batting practice.
- Coach: It has been three or four times in a row, and they have suggested that we are not aggressive enough with men in scoring position. I say [to the players], 'I know, I agree, we have said this four times in a row, how do we fix it?' We need to be more aggressive early in the count. It's not every night, but it usually is about scoring runs and doing the same thing early in the count. I think adding an unknown number of pitches during batting practice might be helpful for that. (12 June 2012)

In the aforementioned example, the coach believes he has already heard a pattern in the coach-athlete interaction and has reinforced aggressiveness three or four times through communication as suggested by the facilitator. But through dialogue, he is guided to the idea of implementing an unknown number of pitches round into batting practice as a way of further reinforcing aggressiveness. Ideas were discussed between community members until the coach felt comfortable with the explanations as a viable solution. In the days that followed, the coach then applied the potential collaborative solutions to the coaching context. Examples of the collaborative solutions generated within the learning community's meetings were: diverse coaching practices, motivational strategies, psychological approaches (i.e. goal setting, enhancing athletes' confidence), offensive and defensive tactics and athlete specific coaching practices (i.e. why an athlete acted the way they did, what to say to a particular athlete). When all potential solutions to problems were refined to the coach's liking through collaboration, the learning community meeting ended. Afterwards, the coach felt rejuvenated for the upcoming week and energised to apply the potential solutions.

Psychological effects

The psychological effects theme reflects the beneficial outcomes of the learning community discussions on the coach's psychological skills. The coach experienced psychological effects spanning: increased vigour, confidence and stress relief. At times throughout the season, the coach seemed to have been consumed by trying to understand the complexities of individual athletes, his coaching practices, and coaching in general. The learning community offered a structured outlet for discussion about his problems, which helped him to reduce coaching distress. At times, when the coach would feel frustrated and exhausted from coaching, the community members would provide a boost in moral. For example, one of the facilitators stated:

One day you have your hat on, the next time we see you and you haven't shaved in three days. The next day your hair is pulled back and you're bright eyed ... and you're like (mimicking coach), 'I like it. I like it.' So, you seem like you have experienced quite a bit of emotional labor of the ups and downs [of coaching] as well. (10 July 2012)

Subsequently, in a post-meeting journal entry the coach reflected, 'I feel a lot better about the few issues that I was concerned about after speaking with both facilitators. Their suggestions make total sense and will certainly be implemented (29 May 2012)'.

Further evidence of the psychological effects of the learning community were evident in a post the coach made in a post-learning community journal when he stated, 'Today's learning community served as a form of encouragement and motivation ...' and '... the learning community certainly rejuvenates me each week (7 July 2012)'. The importance of winning and maximising athletic performance over the course of the season caused the coach a significant level of stress. Upon conclusion of the community meetings, the coach felt relieved and optimistic.

Discussion

The following section discusses the findings in relation to the literature on learning communities, experiential learning, reflection and the beneficial psychological outcomes experienced by the coach. Additionally, the following section addresses the limitations of the current study and provides implications for future research.

Existing research has discussed the barriers and enablers for sustaining an effective coach learning community (Culver 2004, Culver *et al.* 2009, Lemyre 2009), and that reflection occurs through a cycle of a problem setting (i.e. dilemma), strategy generation, experimentation and evaluation through a process called reflective conversation (Schön 1983, 1987, Gilbert and Trudel 1999, 2001). This research and the corresponding theoretical frameworks used to guide these studies tend to focus on either the coach as reflective practitioner or the functioning of a learning community. Our study adds to the existing literature by demonstrating the social-psychological connection and process by which the community members interacted to facilitate the coach's reflective conversation (i.e. problem share, questioning to prompt reflection, prescribed suggestions and collaborative solutions; Culver 2004). Research examining youth coaches provides evidence that strategy generation, experimentation and evaluation (i.e. reflective conversation) can at times be inhibited, eliciting the coach to re-experience the same coaching concerns at a later time during the season (Gilbert and Trudel 2001). As we might expect, our findings provide evidence of a similar cycle of reflection, while adding how this reflection occurred within the learning community. The baseball coach in the current study also displayed inhibition of reflective conversation, however, the learning community provided a path to continue learning when strategy generation, experimentation and evaluation were terminated (i.e. problem sharing, questioning to prompt reflection, collaborative solutions). In this way our study shows how social learning occurs through the individual's relation with a community or what we propose labelling social-reflection, where the learner relies on the perspectives and ideas of others to facilitate the reflective processes. In addition to providing a framework for how to construct social-reflection for a high performance coach within a learning community, we

provide questions that were used in group discussion to facilitate learning (e.g. see questioning to prompt reflection section in findings).

While the findings add to the literature on learning communities by describing the interactions amongst community members, the current study's learning community also emphasised the coach documenting his learning experiences in a coherent storyline throughout the course of the season. The coach's learning experiences were engaged through journaling, follow-up learning community reflections, testing hypotheses discussed in the learning community, and relying on evidence to guide reflection. These types of strategies have been collectively used to elicit high functioning and effective learning communities for teachers' professional development (Ermeling and Graff-Ermeling 2013), but not in coach education. While some of the aforementioned strategies have independently been supported in coaching research to facilitate learning through reflective practice (Gilbert and Trudel 2006), deliberate practice (Gilbert and Trudel 2013), and learning communities (Culver and Trudel 2006), they have not been collectively used as an intervention to facilitate learning. One critical point in the current study is the documentation of the coach's learning experiences to create a clear storyline and the use of follow-up reflections as part of the learning community's structure to further engage learning. We would suggest, however, a need to extend our research by assessing tangible gains in athlete development in the learning community (Gilbert, Gallimore *et al.* 2009), as we relied on the head coach's observations of the athletes' gains to assess and guide reflection. This is an important point that warrants further research and theorising to help coaches validate desired athlete outcomes used to guide their reflection.

Regardless if a coach is a novice or a high performance coach, researchers have noted how competition between practitioners within a learning community can be a barrier to knowledge sharing (Trudel and Gilbert 2004, Culver *et al.* 2009). In the current study, we removed the competitive structure by providing one coach access to knowledgeable peers who elicited reflection and experiential learning rather than all of the learning community members being engaged in a common domain (Lave and Wenger 1991). Therefore, it may be worthwhile for future researchers and coach educators to (re)consider smaller facilitated learning communities as a way of promoting coach development. The idea of establishing smaller learning communities should especially be influential in developing high performance coaches, considering the highly competitive nature of their work environment.

The make-up of the current learning community, which comprised three coach educators with emphases in sport sociology, sport psychology, and coach education, provided an eclectic mixture of expertise areas that could have influenced the learning community's functionality. Perhaps, learning communities could benefit from containing varying perspectives, rather than job a-like teams, given the dynamic nature of coaching in general and the multitude of activities in which coaches engage (i.e. social aspects, administrative, motivation, leadership, recruiting, organisational; Lyle 2002). In the current study, a majority of the issues the coach brought to the learning community were outside (i.e. social aspects, administrative, motivation, leadership, recruiting) of the technical and tactical aspects of baseball. In order to construct learning communities for high performance coaches, it may more beneficial and realistic to have a facilitator who has a diverse knowledge base (i.e. social aspects, administrative, leadership, motivation, organisation) and is able to provide high performance coaches with insight in areas where they may be lacking knowledge or willing to learn. This idea of learning communities that contain facilitators

with a diverse range of expertise was found to be a valuable resource for the high performance coach in the current study.

Although the coach educators were considered to be facilitators, the learning community's functionality relied heavily on the coach bringing the content to the meetings. Each learning community meeting began with the coach initiating the discussion by sharing the concerns that had accumulated throughout the week. He shared the concerns that had resulted from his inability, or dissatisfaction with, problem solving on his own. Collectively, the learning community was sustained by the knowledge of all members, and therefore maintained a consistent environment to collaboratively strategise coaching practices that might be implemented (Gilbert, Gallimore *et al.* 2009). Although our study did not use a facilitator directed approach nor contain members of job-alike teams, an effective learning community was likely developed by a coach guided approach (i.e. bringing content to the learning community, problem sharing), the coach educators strategising to prompt reflection (i.e. questioning to prompt reflection, prescribed suggestions, collaborative solutions), and the mutual trust and respect of all parties. Although a coach guided approach requires the coach to have a degree of autonomy to take ownership of his/her learning, as did the coach in the current study, further research needs to explore if learner engagement is greater in smaller learning communities and/or learning communities with less facilitator structure.

One unexpected effect from the learning community was a reduction in the coach's experience of stress. Coach effectiveness has been shown to be negatively affected by stressors in the coaching environment (Price and Weiss 2000), and we propose that the coach's effectiveness was improved as a direct result of mitigating the negative effects of stress. Other research supports the finding that high performance coaches experience stressors such as those evident in the current study (i.e. athlete concerns, competition preparation; Olusoga *et al.* 2009, Chroni *et al.* 2013). These stressors experienced by the coach have been exhibited in existing literature to result in coach burnout and thus the potential for leaving the coaching profession (Smith 1986, Frey 2007). Additionally, research has shown a need to provide resources for high performance coaches to cope more effectively with stress (Olusoga *et al.* 2009). The findings from the current study are the first to our knowledge to provide evidence for the use of a learning community as a psychological support network to reduce coaching stress. Future research could further explore the psychological implications of learning communities on the coach, considering such effects (i.e. reduced stress, improved knowledge and practices, cognitive processes), which we argue, contribute to the coach's quality of life.

While it was outside the scope of the current study to seek statistical generalisability, a central limitation was the reliance on the experiences provided by one head coach. However, given the extensive data collected, the themes may, to a degree, be theoretically generalisable, and future research could explore coach's experiences in learning communities in different contexts using the framework developed from the present study. A further limitation, and a likely facilitator to the functioning of the learning community, was the familiarity of the participants. Additionally, although the three researchers enacted the role of facilitator, a more fully collaborative presence was not always experienced since on occasion only one or two facilitators participated in meetings.

One key component for sustaining coach learning in a community that has been established through research is the need for a stable and consistent setting (Gilbert,

Gallimore *et al.* 2009). Research on learning communities has relied on face-to-face interaction to promote coach learning in a stable and consistent setting (Culver 2004, Culver *et al.* 2009, Lemyre 2009). In the present study, and to our knowledge the first in coach education, technology based video conferencing was used to maintain a stable environment through the use of Skype. Although the learning community meetings occurred on the same day and time each week, the use of Skype allowed the coach to participate in the meetings wherever there was Internet access. Having the ability to participate in meetings wherever the Internet is accessible, mitigates the coach's time for travelling to learning community meetings. Thus, technology based learning community meetings similar to those employed in the current study would serve a purpose for fitting high performance coaches' busy schedules and only to connect coaches with trustworthy and knowledgeable facilitators or peers. Additionally, we should note that the community members did not report any problems using technology. Therefore, the use of technology deserves further research to more fully understand its effectiveness in promoting coach learning and therefore developing the expectations established by the International Sport Coaching Framework of a qualified coach regardless of the coach's level of competition (ICCE *et al.* 2013).

Disclosure statement

No potential conflict of interest was reported by the authors.

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References

- Allee, V., 2003. *The future of knowledge: increasing prosperity through value networks*. Burlington, MA: Butterworth-Heinemann.
- Anfara, V.A., Brown, K.M., and Mangione, T.L., 2002. Qualitative analysis on stage: making the research process more public. *Educational researcher*, 31 (7), 28–38.

- Brown, J.S., Collins, A., and Duguid, P., 1989. Situated cognition and the culture of learning. *Educational researcher*, 18 (1), 32–42.
- Callary, B., Werthner, P., and Trudel, P., 2012. How meaningful episodic experiences influence the process of becoming an experienced coach. *Qualitative research in sport, exercise and health*, 4 (3), 420–438.
- Chang, H., 2008. *Autoethnography as method*. Walnut Creek, CA: Left Coast.
- Chroni, S.A., Diakaki, E., Perkos, S., Hassandra, M., and Schoen, C., 2013. What stresses coaches in competition and training? An exploratory inquiry. *International journal of coaching science*, 7 (1), 25–39.
- Conroy, D.E. and Coatsworth, J.D., 2006. Coach training as a strategy for promoting youth social development. *Sport psychologist*, 20 (2), 128–144.
- Côté, J., 2006. The development of coaching knowledge. *International journal of sports science & coaching*, 1 (3), 217–222.
- Culver, D.M., 2004. *Enriching knowledge: a collaborative approach between sport coaches and consultant/facilitator*. Dissertation (PhD). University of Ottawa, Canada.
- Culver, D. and Trudel, P., 2006. Cultivating coaches' communities of practice: developing the potential for learning through interactions. In: R.L. Jones, ed. *The sports coach as educator: re-conceptualising sports coaching*. New York: Routledge, 97–112.
- Culver, D. and Trudel, P., 2008. Clarifying the concept of communities of practice in sport. *International journal of sport science and coaching*, 3 (1), 1–10.
- Culver, D., Trudel, P., and Werthner, P., 2009. A sport leader's attempt to foster a coaches' community of practice. *International journal of sport science and coaching*, 4 (3), 365–383.
- Duguid, P., 2005. "The art of knowing": social and tacit dimensions of knowledge and the limits of the community of practice. *The information society*, 21 (2), 109–118.
- Erickson, K., et al., 2008. Gaining insight into actual and preferred sources of coaching knowledge. *International journal of sports science & coaching*, 3 (4), 527–538.
- Ermeling, B.A. and Graff-Ermeling, G., 2013. Learning to learn from teaching: a first-hand account of lesson study in Japan. *International journal for lesson and learning studies*, 3 (2), 170–191.
- Frey, M., 2007. College coaches' experiences with stress – "problem solvers" have problems, too. *Sport psychologist*, 21 (1), 38–57.
- Gilbert, W., Côté, J., and Mallett, C., 2010. Developmental paths and activities of successful sport coaches. *Soccer journal*, 55 (3), 10–12.
- Gilbert, W., Gallimore, R., and Trudel, P., 2009. A learning community approach to coach development in youth sport. *Journal of coaching education*, 2 (2), 1–21.
- Gilbert, W., Lichtenwalddt, L., Gilbert, J., Zelezny, L., and Côté, J., 2009. Developmental profiles of successful high school coaches. *International journal of sports science & coaching*, 4 (3), 415–431.
- Gilbert, W. and Trudel, P., 1999. Framing the construction of coaching knowledge in experiential learning theory. *Sociology of sport online*, 2 (1). Available from: <http://physed.otago.ac.nz/sosol/v2i1/v2i1s2.htm>.
- Gilbert, W.D. and Trudel, P., 2001. Learning to coach through experience: reflection in model youth sport coaches. *Journal of teaching in physical education*, 21 (1), 16–34.
- Gilbert, W. and Trudel, P., 2006. The coach as a reflective practitioner. In: R.L. Jones, ed. *The sports coach as educator: re-conceptualising sports coaching*. London: Routledge, 113–127.
- Gilbert, W. and Trudel, P., 2013. The role of deliberate practice in becoming an expert coach: part 2 – reflection. *Olympic coach*, 24, 35–44.
- Gould, D., et al., 1990. Educational needs of elite U.S. National team, Pan American, and Olympic coaches. *Journal of teaching in physical education*, 9 (1), 332–344.
- International Council of Coaching Excellence [ICCE], Association of Summer Olympic International Federations [ASOIF], and Leeds Metropolitan University [LMU], 2013. *International sport coaching framework* (Version 1.2). Champaign, IL: Human Kinetics.
- Lave, J. and Wenger, E., 1991. *Situated learning*. New York: Cambridge University Press.
- Lemyre, F., 2009. *La reflexion et les communautés de pratique pour faciliter l'apprentissage par experience d'entraîneurs d'un club de karate et d'un programme de sport scolaire*

- [Reflection and communities of practice for facilitating coaches' learning from experiences]. Dissertation (PhD). University of Ottawa, Canada.
- Lemyre, F., Trudel, P., and Durand-Bush, N., 2007. How youth-sport coaches learn to coach. *Sport psychologist*, 21 (2), 191–209.
- Lincoln, Y.S. and Guba, E.G., 1985. *Naturalistic inquiry*. Beverly Hills, CA: Sage.
- Lyle, J., 2002. *Sports coaching concepts: a framework for coaches' behaviour*. New York: Routledge.
- Malete, L. and Feltz, D.L., 2000. The effect of a coaching education program on coaching efficacy. *Sport psychologist*, 14 (4), 410–417.
- Mallett, C., Rynne, S., and Dickens, S., 2013. Developing high performance coaching craft through work and study. In: P. Potrac, W. Gilbert, and J. Denison, eds. *Routledge handbook of sport coaching*. New York: Routledge, 463–475.
- Mallett, C.J., Trudel, P., Lyle, J., and Rynne, S.B., 2009. Formal vs. informal coach education. *International journal of sports science & coaching*, 4 (3), 325–364.
- McMaster, S., Culver, D., and Werthner, P., 2012. Coaches of athletes with a physical disability: a look at their learning experiences. *Qualitative research in sport, exercise & health*, 4 (2), 226–243.
- Olusoga, P., et al., 2009. Stress in elite sports coaching: identifying stressors. *Journal of applied sport psychology*, 21 (4), 442–459.
- Patton, M.Q., 2002. *Qualitative research and evaluation methods*. 3rd ed. Thousand Oaks, CA: Sage.
- Price, M.S. and Weiss, M.R., 2000. Relationships among coach burnout, coach behaviors, and athletes' psychological responses. *Sport psychologist*, 14 (4), 391–409.
- Roberts, J., 2006. Limits to communities of practice. *Journal of management studies*, 43 (3), 623–639.
- Saint-Onge, H. and Wallace, D., 2003. *Leveraging communities of practice for strategic advantage*. Burlington, MA: Butterworth-Heinemann.
- Schön, D.A., 1983. *The reflective practitioner: how professionals think in action*. New York: Basic Books.
- Schön, D.A., 1987. *Educating the reflective practitioner: toward a new design for teaching and learning in the professions*. San Francisco, CA: Jossey-Bass.
- Shenton, A.K., 2004. Strategies for ensuring trustworthiness in qualitative research projects. *Education for information*, 22 (2), 63–75.
- Smith, R.E., 1986. Toward a cognitive-affective model of athletic burnout. *Journal of sport psychology*, 8 (1), 36–50.
- Smith, B., Sparkes, A., and Caddick, N., 2014. Judging qualitative research. In: L. Nelson, R. Groom, and P. Potrac, eds. *Research methods in sports coaching*. New York: Routledge, 192–202.
- Stake, R., 2006. *Multiple cases study analysis*. New York: Guilford.
- Stoszowski, J. and Collins, D., 2014a. Communities of practice, social learning and networks: exploiting the social side of coach development. *Sport, education and society*, 19 (6), 773–788.
- Stoszowski, J. and Collins, D., 2014b. Blogs: a tool to facilitate reflection and community of practice in sports coaching? *International sport coaching journal*, 1 (3), 139–151.
- Strauss, A. and Corbin, J., 1998. *Basics of qualitative research: techniques and procedures for developing grounded theory*. 2nd ed. Thousand Oaks, CA: Sage.
- Trudel, P., Culver, D., and Werthner, P., 2013. Looking at coach development from the coach–learner's perspective: considerations for administrators. In: P. Potrac, W. Gilbert, and J. Denison, eds. *Routledge handbook of sports coaching*. London: Routledge, 375–387.
- Trudel, P. and Gilbert, W., 2004. Communities of practice as an approach to foster ice hockey coach development. In: D.J. Pearsall and A.A. Ashare, eds. *Safety in ice hockey*. West Conshohocken, PA: ASTM International, 167–179.
- Trudel, P. and Gilbert, W., 2006. Coaching and coach education. In: D. Kirk, D. Macdonald, and M. O'Sullivan, eds. *The handbook of physical education*. London: Sage, 516–539.
- Vargas-Tonsing, T.M., 2007. Coaches' preferences for continuing coaching education. *International journal of sports science & coaching*, 2 (1), 25–35.
- Wenger, E., 1998. *Communities of practice*. New York: Cambridge University Press.

- Wenger, E., McDermott, R., and Snyder, W.M., 2002. *Cultivating communities of practice: a guide to managing knowledge*. Boston, MA: Harvard Business Press.
- Werthner, P. and Trudel, P., 2006. A new theoretical perspective for understanding how coaches learn to coach. *Sport psychologist*, 20 (2), 198–212.
- Wright, T., Trudel, P. and Culver, D., 2007. Learning how to coach: the different learning situations reported by youth ice hockey coaches. *Physical education & sport pedagogy*, 12 (2), 127–144.