The Experience of Volunteer Minor Hockey Coaches, Program Organizers and Program

Facilitators in an On-Line Coach Education Program

Known as Play It Cool

Thesis

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This thesis has been prepared

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Dedication

For my nephew Pierre-Etienne Paquin

Abstract

This study described the experiences of volunteer minor hockey coaches (VMHC), program organizers program facilitators (the participants) in a web-based, facilitated coach education program (CEP) called Play It Cool (PIC). Fifteen VMHCs participated in weekly, structured lessons on safe and effective ice hockey coaching that were delivered asynchronously using streaming content. VMHCs were requested to apply lesson content (i.e., seven modules) with their teams and report back on the website discussion forum. This forum was intended to promote weekly collaboration between VMHCs and interaction with an on-line expert facilitator. PIC offered an alternative to traditional formal CEP (i.e., National Coach Certification Program in Canada) which are typically classroom-based, weekend seminars that are reportedly not well attended (Misener & Danylchuk, 2009). Various studies report perceived benefits resulting from trained and educated coaches but that coaches tend to prefer informal methods of learning how to coach (e.g., mentorship, personal playing experience) (Bloom, 2002; Gilbert & Trudel, 1991; Vargas-Tonsing, 2007). A qualitative case study methodology using thematic data coding (i.e., data sources included discussion board postings and related e-mail)was employed to describe the experiences of the PIC participants PIC. Fifteen participants, mostly middle-aged males (n=14) with limited formal coaching education and minimal amounts of playing and coaching involvement, left evidence over prescribed eight week periods. . Data analysis, member checking verification process, and data interpretation revealed three key themes. The time theme affected VMHCs' recruitment, participation, learning process, and collaboration on the PIC website. The second theme, salesmanship, related to the PIC facilitators' and the organizers' efforts to

address VMHCs' limited participation. The third theme, technology, dealt with VMHCs'

apparent difficulty with on-line technology which appeared to affect the VMHCs'

participation, completion and commitment to PIC. Given these findings, it appears that only

when VMHCs have the time and ability to use web-based technology, will the true value of a

web-based CEP become evident. Future versions of PIC are advised to take the finding of

this research into account.

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Glossary of Terms

Branch – Thirteen administrative offices, located provincially or regionally, responsible for governing ice hockey in Canada. They are responsible for enforcement of Hockey Canada rules and policies, as well as player, coach and administrator training (Hockey Canada, 2008).

Coach Education Programs (CEPs) – Recognized formal coach education provided by regional, provincial, state or national sport governing groups (Abraham & Collins, 1998).

Coach Mentor – An experienced and trusted adviser who trains and counsels other coaches (Hockey Canada, 2008).

Development Programs – Training, education and symposia created for players, coaches, trainers, on-ice officials and administrators. Development programs are created by the National Sport Organization (NSO) and delivered by the Branch or regional sport organizations (Hockey Canada, 2007).

Engagement – According to Chapman (2003), individuals who are engaged show sustained behavioural and cognitive involvement in activities and process, accompanied by a positive emotional tone. They select tasks at the border of their competencies, initiate action when given the opportunity, and exert intense effort and concentration in the implementation of learning tasks; they show generally positive emotions during ongoing action, including enthusiasm, optimism, curiosity, and interest (p. 3).

Hockey Canada – National sport organization (NSO) and governing body of ice hockey that represents Canada in international competition. As a member of the International Ice Hockey Federation (IIHF), Hockey Canada creates and disseminates instructional materials and programs for registered participants to fulfill their mandate of leading, developing and promoting positive hockey experiences (Hockey Canada, 2008).

Hockey USA – National sport governing body of ice hockey that represents the United States in international competition. USA Hockey is a member of the IIHF. Hockey USA also develops and distributes player, coach, and administrator programs and materials acting in a leadership capacity for its members (www.usahockey.com).

International Ice Hockey Federation (IIHF) - Worldwide federation of ice and in-line hockey. Based in Zurich, Switzerland, the IIHF has 68 nation members. The IIHF organizes international competition and promotes and controls international hockey. To a lesser extent the IIHF has a role in developing ice and in-line hockey worldwide (www.iihf.com).

Minor Hockey Association (MHA) – Association of club teams organized into leagues for competition. The MHA organize, register players, and represent ice hockey teams. MHA

are members of regional and district hockey groups governed by the branch and national sport organization (Hockey Canada, 2008).

National Coach Certification Program (NCCP) – A coach training and certification program for 66 different sports in Canada. The NCCP is the recognized national standard for coach training and certification and is administered by the Coaching Association of Canada (CAC). Sports such as ice hockey self-manage and deliver their own NCCP coach education and training programs (www.coach.ca).

NCCP Course Conductors - Subject matter experts with knowledge of technical, tactical and theoretical aspects of coaching. Course Conductors are trained by the NSO and certified by NCCP (www.coach.ca).

Play It Cool (PIC) – On-line ice hockey coach education program (CEP) that provides a structured facilitated learning environment for minor hockey coaches. The premise of Play It Cool is injury prevention through an educational intervention (Montelpare et al., 2010).

Regional Development Coordinators (RDC) – Volunteer branch personnel responsible for administering NCCP coach education and training (Hockey Canada, 2008).

Technical Directors (TD) - Paid personnel who work on behalf of branches to offer player and coach development to MHA. They act as a resource for MHAs and coordinate hockey development programs for their branch (Hockey Canada, 2008).

CHAPTER I

INTRODUCTION

Scholarly investigation into coach education and training reveals that coaches learn to coach through a variety of methods. This process of learning involves either informal methods of learning such as peer observation and apprenticeship, or more structured approaches like formalized coach education programs (CEPs) (Campbell & Sullivan, 2005; Cushion, Armour, & Jones, 2003; Erickson, Cote, & Fraser-Thomas, 2007). In general, CEPs involve an in-classroom weekend seminar and result in certification for participants. National sport organizations (NSOs) and educators assign importance to coach education and training. For example, National Sport Organizations promote CEPs by allocating human and financial resources to them. Macintosh and Whitson (1990) found that Canadian governments provided large scale investments for the development of grassroots, as well as high performance sports, especially for athletes and coaches (as cited in Betts, Forbes & Livingston, 2007).

Researchers studying coach preparation and coaching practice also ascribe 'value' to a well-trained coach. Value, in this context, is the perceived worth or importance of an educated coach (Cassidy, Potrac, & McKenzie, 2006). Furthermore, researchers often equate coaching success with coaches who can create a positive sporting environment. These coaches are typically trained and educated in the sport system:

> … the importance of the roles and responsibilities of the coach remain constant regardless of the level of competition. Whether success as a coach is defined by athlete skill improvement, increased enjoyment of play, winning percentage, national championships, or Olympic medals, coaches are essential to athlete achievement. This notion has been clearly delineated by the body of scholarship on coaching which,

collectively, posits that the "quality of a participant's experience . . . is largely dependent

on the environment created by the coach" (NASPE, 2008, as cited in McCullick,

Schempp, Mason, Foo & Vickers, 2009, p. 3).

The experiences of athletes in sport are therefore linked to the coach's ability to meet their

athletic needs. This capacity is a product of a coach's training.

In most countries, coach training involves participation in a formal CEP comprised of

coaching theory and the various technical and tactical aspects of sport (Abraham & Collins,

1998). In Canada, the National Coaching Certificate Program (NCCP) offers this type of coach

education and training for sport. Certified graduates of the NCCP are regarded as competent and

skilled in coaching as a result of the training provided by NCCP Course Conductors and sport

governing bodies (i.e., Coaching Association of Canada, Hockey Canada). Athletes, sport

organizers and parents see coaches as individuals versed in the knowledge and skill of sport, as

well as having expertise in teaching, performance psychology, physiology and human

development (Alfermann, Lee, & Würth, 2005). Several studies support these assumptions

indicating that effective coaching practices are the result of skilled and knowledgeable

individuals (Bloom, 2002; Gilbert & Trudel, 1999; Smith, Zane, Smoll & Coppel, 1983).

Benefits provided to participants by trained and educated coaches include enhanced enjoyment,

skill learning and learning developmentally appropriate physical and social skills. These benefits

result from the formal training of coaches who, "through participation in CEPs, coaches can

improve their skills and knowledge. CEPs can expose coaches to content knowledge,

pedagogical knowledge, and sport science" (McCullick et al., 2009, p. 43). Research relating to

coaching practices frequently identify athlete benefits as the best reason for CEPs. For example,

an athlete's development and acquisition of social skills like co-operation, collaboration, goal

setting and team cohesion are seen as outcomes of working with a trained coach (Weiss &

Fretwell, 2005). Furthermore, a coach's capacity to develop ancillary skills in participants such

as physical fitness, healthy lifestyle awareness, wellness and an appreciation for recreation also

appear linked to a trained coach (Coté, 1998; Coté, 1999).

However, Cushion and colleagues (2003) questioned formal coaching education's

efficacy, finding examples of idiosyncratic coach preparation and training, as well as irregular

methods used by sport organizations to determine coaching competence. Despite these findings

they concluded:

Although not a guarantee, it could be argued that a coach with formal preparation is

better able to provide athletes with appropriate playing experiences rather than a coach

who does not complete such programs and are therefore less likely to be equipped with

the requisite knowledge, skills, and values of a competent coach (Cushion et al., 2003, p.

219).

Nevertheless, the description of an effective coach, skills a coach possesses, and aspects

of the coach - athlete interaction (i.e., the act of coaching) continues to be inconsistently

described in the literature (Newin, Bloom, & Loughead, 2008). This ambiguity and limited

understanding of coaching practices has led to confusion when evaluating coach competence.

For example, Cushion et al. (2003) describes "coaching as an art" as opposed to being

scientifically-based, which implies that coaching cannot be entirely taught or learned in CEPs (p.

215). In this context, experience and a learning-by-doing approach, appears to be a readily

accepted, common method of coach training and preparation (Bloom, Durand-Bush, Schinke, &

Salmela, 1998).

The acceptance of informal methods of coach training, at least indirectly, appears to not only devalue formal coach education but also confuses the evaluation of a coach's competence. In practice, coaches are rarely evaluated based on educational credentials or the level of certification acquired. They are, however, often evaluated by non-descriptive measures such as tenure (e.g., number of games or years coaching). In addition, a coach's elite playing experience is often indiscriminately grouped into the evaluation and measure of coaching competence. Similarly, evaluative criteria based on performance factors such as winning record are often utilized as a benchmark for coaching competence. Unfortunately, a formal coaching credential (e.g., certification) is not always considered essential.

Knowles, Borrie and Telfer (2005) suggest the evaluation of coaches in amateur sport is based on performance and, therefore, is notoriously invalid and unreliable. In this context, a performance bias in evaluation like a competitive standard (e.g., win/loss percentage) is utilized to determine coaching effectiveness. This type of evaluation leaves coaches with little incentive to engage in and learn about coaching theory and practices designed to improve their skills and help their athletes. Such an evaluative performance standard creates coaches who reject a developmental approach to sport and instead adopt selection criteria and recruitment to build teams (Cushion, et al., 2003). In contrast, a coach who is being evaluated based on his/her education and training has a need to engage and be proficient in an athlete-centred, coach-led, environment (Wiersma & Sherman, 2005). An educated coach's knowledge and skill are therefore aligned with sport pedagogy and an endorsed method of athlete development.

The diversity of volunteer coaches is also problematic in the investigation of coach training and education. Differing coach profiles, educational levels, ethno-cultural origins and aptitudes are variables considered to influence motivations to participate in continuing education

(Wilson, Bloom & Harvey, 2008). In addition, volunteer coaches' varying sport philosophies and interests in sport, recreation and health affect their leadership styles and what they decide to provide athletes under their control (Wiersma & Sherman, 2005). For example, a coach may use his or her prior experience as a player or drawing on an old coach's philosophy rather than using coach education. In this way, a coach may stress tactical play and competition at the expense of sport ethics, skill development and team building. In contrast, a trained coach is more inclined to follow a curriculum guide or CEP recommendations instead of following their own bias. This profile of volunteer coaches may also explain why Minor Hockey Associations (MHA) appear less interested in formal qualification and certification of coaches beyond their expressed interest in volunteering (R. Zuback, Minor Hockey Executive, personal communication, May 7, 2008). Minor hockey administrators appear fearful of discouraging volunteers and therefore accept coaches with a broad range of experience and wide-ranging aptitudes in coaching. Reportedly, MHAs do not use an evaluative process or discrete measure of coaching proficiency to determine a coach's capability (R. Zuback, Minor Hockey Executive, personal communication, May 7, 2008).

In many countries, an assortment of education and training programs for coaching amateur sport exist (Taylor, 1999). For example, in countries, like the United States, where sport is an integral component of elementary and secondary schools, post secondary education in Physical Education and a University Diploma in Education are often required. But, in other countries (e.g., U.K., Australia, Canada), coaching certification/training standards are reported as the method of formal coach education. Certification programs in these countries act as a representation of coach competency (Tinning & Hanke, 2001). CEPs like these are often supported in policy statements of regional and territorial sport organizations. For ice hockey,

bodies such as minor hockey branches identify the basic entry-level proof of coach certification

for volunteer minor hockey coaches in their constitutions (Hockey Canada, 2008). For example,

simply having a NCCP certification number qualifies a volunteer to coach at the entry levels of

ice hockey. Entry-level coach certification training in Hockey Canada's NCCP training involves

participating in a Coach or Development 1 (i.e., D1) seminar. In these four to eight hour in-class

seminars, coaches select their competitive stream (i.e., Coach, Recreation, Developmental, High

Performance) and are provided with introductory information on coach theory, teaching

fundamental skills, as well as basic instruction in practice and game planning. Prior to the

seminar, participant coaches are pre-tasked with completing a philosophical statement on their

leadership style and a seasonal goal statement. Even though NCCP coach development programs

are endorsed and described as mandatory, they are not well attended. In theory, without proof of

certification hockey coaches are not approved to get behind a bench (Hockey Canada, 2008).

Yet, in practice, volunteer minor hockey coaches (VMHC) become certified and trained only

after coaching, and only when asked or directed to participate in coach training by their MHA

administrator (P. Tocheri, Minor Hockey Executive, personal communication, Dec. 27, 2010).

Whether a certified coach is better equipped than a coach without formal training also

brings into question what is provided in CEPs and how it is taught. For example, when CEPs are

critically evaluated they reportedly fail in terms of content validity and reliable delivery

(Cassidy, Potrac, & McKenzie, 2006). Gilbert and Trudel (1999) argue that CEPs' general

inadequacy is due to the limited use of scientifically validated information and the inherent

weaknesses of the programs in providing content that can be put into practice. Furthermore,

> … no studies in the 13-year period (studied) focused on the graduates of formal CEPs.
>
> The dearth of program assessment studies focusing on the alumnae of those CEPs is

somewhat alarming given what could be an informative way of measuring effectiveness. That is, what do coaches take from the CEP and use in their coaching (Carter & Bloom, 2009, p. 6).

NCCP course content also has difficulty staying relevant in terms of new sport innovations (e.g., rule changes), changes in technical and tactical play, and equipment innovations. For example, Wright, Trudel and Culver (2007), found that intermediate level volunteer ice hockey coaches were dissatisfied with NCCP training because of repeated content from other coach level certification courses and the lack of new information they could immediately use with their teams.

The challenges affecting coach education and training seem formidable but researchers like Montelpare et al. (2010), Glang, Koester, Beaver, Clay and McLaughlin (2010) and others have recently endorsed the internet and on-line education as a possible answer to some coach education issues. For example, Montelpare and colleagues' (2010) work related to the Public Health Agency of Canada's on-line delivery of epidemiology training demonstrated the success of on-line education in training for a special group of participants. In general, on-line training and education in fields like health and safety, corporate training, and post-secondary education are common and suggest a growing trend in web-based education and training. However, on-line training success in terms of learning outcomes is difficult to determine. For ice hockey specifically, on-line coach training and education is suggested as a modality that could bridge the gap between formal and informal methods of coach education. In particular, Montelpare et al. (2010) described web delivered education as exciting, efficient and effective. However, they also identify limitations of such training for ice hockey coaches, including basic computer technical

savvy of participants, familiarity with on-line navigation and the participants' interest or capacity to invest in on-line learning.

Statement of Purpose

The purpose of this research was to describe the experience of volunteer minor hockey coaches, program organizers and program facilitators in an on-line coach education program known as Play It Cool.

Research Question

"What is the experience of volunteer minor hockey coaches, program organizers, and program facilitators in using the coach education program known as Play It Cool?"

CHAPTER II

REVIEW OF LITERATURE

Data from the International Ice Hockey Federation (IIHF) 2009 census identified 499,695 registered participants playing ice hockey under the governance of Hockey Canada. This ranks Canada first for all IIHF member nations in terms of registered player membership. The American numbers provide evidence of nearly equal popularity of ice hockey with Hockey USA registering 465,975 participants (IIHF, 2009). Participant numbers of this magnitude demand that both countries manage large and complex infrastructures for the sport. Consequently, within hockey's organizational structures multi-leveled play categories, detailed rules and intricate policies exist that govern both adult volunteers and youth participants in the sport. It would logically follow that coaches in this complex and large sport structure are also equally organized, expertly trained and have impressive competencies thereby acting as leading professionals for the sport.

The Role and Value of Coaches

Numerous studies on athletics, sport and recreation have identified the role and value of coaches (Bloom, Salmela, & Schinke, 1995; Cote, 1998; Cushion, et al., 2003). The coach is frequently identified as a powerful socializing agent (Horn, 2002). In   -
and Deakin's research added to existing evidence on coaching importance by describing the critical role of trained coaches in facilitating and nurturing key objectives in youth development such as sports' ability to benefit health and wellness. In addition, competent coaching of sport has been documented to benefit the psychosocial development of youth participating in sport (Abraham & Collins, 1998). Researchers routinely describe sports' capacity to provide opportunities for learning life skills like cooperation, discipline, leadership, and self-control.

Lastly, research on coaching has characterized a coach's influence on the teaching of appropriate motor skills such as agility, balance and coordination (Baker & Horton, 2003). This is important because learned motor skills act as a foundation for future sport performance or recreational participation. Coaches, in the way they structure practice and their response to athletic behaviour outcomes, significantly affect youth competence perceptions and actual participation interest (Bloom, 2002). Researchers, however, identify that benefit through participation in sport does not automatically occur. Rather, positive outcomes for participants result from informed coaching practices that are aligned with scientifically based development sport models – a derivative of coach education programs (Fraser-Thomas, Coté, & Deakin, 2008).

Trained coaches are consistently identified as being crucial to developing young athletes' physical, mental, social and psychological image of self. Harter (1978, 1981a) highlighted the role of significant others, especially coaches, in shaping youth self-perceptions, affect, and motivational orientations in specific domains (as cited in Horn, 2002, p. 344). For example, an athlete's motivation for sport participation, known as perceived competence, is described as an important foundation for involvement in sport (Canadian Sport for Life [CS4L], n.d). A capable and knowledgeable coach has a role in this regard:

> As children (ages 6-12) become progressively more concrete thinkers, they learn to judge their competence through adult feedback, peer comparison and performance outcomes (e.g., win/loss). The coach can be (and often is) held responsible for this feedback and the success or failure of athletes in terms of winning or advanced placement (Fraser-Thomas & Cote, 2006, p.17)

A competent coach's value is also particularly relevant to a player's future in sport (Bloom, 2002). In ice hockey, for example, it is anecdotally known that a knowledgeable coach can mean

the difference between promotion of a player to higher levels of competition or, conversely, a player's attrition from the sport.

The documented value in coaching as a practice and the organizational complexity in Canadian and American amateur hockey appear to correspond with the need for the skills and abilities of qualified and trained expert coaches. However, volunteer minor hockey coaches (VMHCs) are not typically experts nor do they tend to be highly trained. Instead, the average VMHC is an adult volunteer, typically male, with some experience in playing ice hockey (Hockey Canada, 2007, USA Hockey, 2011). Parent volunteers are recruited into coaching by volunteer hockey administrators and assigned to lead teams and teach hockey for Minor Hockey Associations. In practice, the appointment of VMHCs by hockey administrators occurs without much screening or deliberation when it comes to coach training in the current system (Ed Nieckarz, Minor Hockey Executive, personal communication, September, 2010). Minor hockey organizations do, however, report some screening of volunteers. For example, VMHCs must obtain a criminal record check and participate in an abuse and harassment seminar (i.e., Speak Out) before they can coach (Jackson, 2010). In most cases, these screening procedures include an understanding that some additional coach education will be expected (Hockey Canada, 2008). Accordingly, many VMHCs coach minor hockey teams without authenticated credentials and limited coaching pedagogy. The research repeatedly shows that most minor coaches do not possess sport specific, up-to-date training, advanced coaching knowledge or even a physical education background (Cassidy &Kidman, 2010; McCullick et al., 2009; Tinning & Hanke, 2001). In fact, VMHCs readily report being under-trained and overwhelmed by the sport's demands (Montelpare, et al., 2010). Unfortunately, VMHCs limited training creates an

environment where hockey players must learn to play the game from well-intentioned but potentially poorly trained coaches.

Coach Education and Training

Coach certification and training programs, for all coaches amateur to elite, exist worldwide (Abraham & Collins, 1998; Tinning & Hanke, 2001). For example, Gilbert and Trudel (1999) identify "large scale" national certification programs in coach education in most developed countries; however, in the United States' coaching education is left to individual states and a variety of independent commercial sport groups. In Canada, the Coaches Association of Canada (CAC) provides the NCCP as a coaching registry and certification program for volunteer coaches. In ice hockey, unlike most other sports, Hockey Canada and Hockey USA, administer their own Coaching Development Programs. As of the 1999 – 2000 season ice hockey coach education was organized into a competency-based system aligned to competitive categories of play thereby directing coaches into recreation, development or high performance (Hockey Canada, 2007).

Regardless of the structure, coach education programs are frequently criticized by researchers. Content validity, standardization and poor reliability when it comes to delivery, are commonly highlighted as problems (McCullick, et al., 2009). In ice hockey, differences in how programs are taught (e.g., unreliable delivery in terms of teaching methods and variability in content) result in differences between what coaches learn during the weekend NCCP seminar and what they teach their athletes. In a practical sense, delivery issues result in scepticism and a general reluctance on the part of VMHCs to take NCCP courses. Frequently, a minor hockey coach's decision to participate in an NCCP course becomes an appraisal of who the course

conductor is and how much time the training will take rather than what could be learned

(Wiersma & Sherman, 2005).

Smith, Smoll, and Curtis (1979) were among the first researchers to examine coaching.

Using athlete surveys, these researchers found that the best-liked coaches were those who

demonstrated high levels of technical instruction, reinforcement and mistake contingent

feedback. Bloom (1997), as well as Mallett, Trudel, Lyle and Rynne (2009), confirmed these

findings by comparing trained and untrained coaches. These researchers found that trained

coaches were not only preferred by athletes, but such coaches had the skills necessary to create

positive and fulfilling environments to support athletic development and ultimately,

performance. NSOs also see merit in coach education programs and, when doing so, allude to

volunteer coach motivation to participate and improve themselves through CEPs (Baker, Coté, &

Hawes, 2006; Bloom, et al., 1998; Campbell & Sullivan, 2005; Cassidy, et al., 2006; Gilbert

&Trudel, 1999; Santos, Mesquita, Graça, & Rosado, 2010; Siedentop, 1998). However, much of

the evidence describing the worth of formal coach education involves descriptions from elite

level coaches with varsity and/or Olympic experience rather than volunteer amateur level

coaches (Wilson et al., 2008). Recent evidence from several studies (Misener & Danychuk,

2009; Vargas -Tonsing, 2007; Wiersma & Sherman, 2005) described novice coaches' poor

perception of formal CEPs and pointed out that only a small number of novice coaches actually

participated in these courses when compared to the total registered coach population, and those

who did attend reported information overload and limited application of content as frequent

outcomes. A review of the Hockey Canada 2007 Annual General Report and the IIHF census

data (2009) also reveals a low certified coach population in Ontario (i.e., five to one player to

certified coach ratio). Most certified coaches in Ontario carry outdated credentials because there

is no requirement to upgrade or re-certify and nor is there incentive for coaches to improve their training to more advanced levels. In other words coaching knowledge in minor hockey is dated and, accordingly what coaches know and do fails to meet the needs of the sport. The low coach certification ratio may also suggest that VMHCs are interested in or opted for other methods of learning how to coach.

For those VMHCs who do participate in NCCP training the effect of the training is not known. Reasons for this include lack of outcome measures related to the curriculum, failure to collect coach profile data that could be used for follow up, and no post-CEP testing to measure the NCCP efficacy. Coaching development programs have also not been critically evaluated in terms of the effect of these programs on players (e.g., observed behavioural change or a coaches' self-report of change to coaching practices). Instead, research found some support for CEP and other informal methods of coach education (Wright, Trudel, & Culver, 2007). Additionally, Cushion et al. (2003) found the lack of CEP evaluation to be associated with poor outcomes for athletes "…without a reliable knowledge base (athletes) get more of the same from coaches with no growth or improvement (in what is taught by coaches and learned by athletes)" (p. 220). In ice hockey, CEPs are also struggling to keep up with the changing needs of athletes and advancement in sport. Taylor (1999) suggests that it is imperative that research be conducted to find ways to avoid stagnation by improving upon weaknesses in the programs.

Despite the various weaknesses of CEPs, coach education continues to be frequently recommended by researchers and educators as the best method to train coaches. It is thought that when CEPs are well designed and well delivered they have the potential to improve coaching skills and bolster the practical knowledge of participants (Abraham & Collins, 1998; Baker & Horton, 2003; Bloom, et al., 1995; Cassidy & Kidman, 2010; Santos, et al., 2010). According to

Demers, Woodburn and Savard, when compared with informal methods of coach training (e.g., apprenticeship or observation), CEPs tend to expose coaches to more current content knowledge, pedagogical perspective, and sport science (2006).

> Although not a guarantee, it is argued that a coach with this preparation is in better stead to provide athletes with appropriate playing experiences than coaches without. For example coaches who complete such programs are more likely to be equipped with the requisite "knowledge, skills, and values" of a competent coach. (NASPE, 2008 as cited in Cassidy et al., p. 8)

The State of Coach Education in Minor Hockey

Research on coaching describes an inconsistent definition of the standards of practice for coaching (e.g., ethical standards and theoretical parameters) and also limited collaborative and self-reflective practices used by coaches in their work (Seale & Cann, 2000). Yet, collaboration and critical reflection are common practices used by educated practitioners in fields like health, wellness and education (Demers, Woodburn & Savard, 2006). In ice hockey specifically, VMHCs do not regularly collaborate with other coaches on a standard curriculum or accepted model of athletic development when planning individual team instruction or seasonal learning outcomes. Instead, the common practice of coaching involves VMHCs drawing on their own playing experiences in the sport or how they were coached decades earlier (Trudel, Cote, & Bernard, 1996). As Derek Descoteau, Manager of Coaching for Hockey Canada, noted it is normal for VMHCs to plan training and practice sessions "on-the-fly" rather than drawing from specific resources or prospectus (Kerr & Descoteau, 2010, http://www.hockeycanada.ca/index.php/ci_id/66604/la_id/1.htm). Furthermore, coaches rarely appear to structure learning objectives around athlete needs (Sullivan, Gee, & Feltz, 2006).

Despite the existence and availability of coaching resource materials produced by Hockey Canada and Hockey USA, VMHCs appear to rarely use these technical and tactical resources (i.e., print and/or video media) when coaching. This phenomenon appears common to most amateur sport coaches who appear to prefer informal process when learning to coach rather than engaging in a more formal learning process (McCullick et al., 2009). Researchers point out that experiential coaching may be problematic as it often lacks pedagogical underpinning and is inclined to use obsolete sport concepts (Tinning & Hanke, 2001).

The ability of VMHCs to provide their athletes effective training and efficient sport development is, therefore, questionable because they appear not to access CEPs, use coaching resource materials, or are not interested in how coach education and training is provided. This experience appears to be at the heart of the inconsistent training, ineffective coaching and the questionable leadership that exist in most rinks in Canada and the United States. Researchers, educators and those interested in ice hockey may have only scratched the surface when assessing poor coaching practices and its results (e.g., player attrition in youth ice hockey). Evidence of inadequate or inappropriate practices in coaching suggest a need for coach education programs that meet amateur coaches' needs and act as either official or de facto gatekeepers for the 'job' of coach (Bloom, et al., 1995). At present CEPs appear to fall short of this goal and, thereby fail to engage a majority of the volunteer coaches in the sport.

CHAPTER III

THE PLAY IT COOL COACH EDUCATION PROGRAM

Introduction to Play It Cool

Play It Cool (PIC), started as a public service instrument supported by the Canadian

Spinal Research Organization (CSRO) and the Ontario Neurotrauma Foundation (ONF). It was

intended to generate awareness of spinal cord and concussion injury in ice hockey. Shortly into

development, Play It Cool was transformed into an on-line facilitated CEP that advocated a more

balanced approach to the game of ice hockey. Designed to help coaches teach players the skills

of the game combined with concepts of sportsmanship and safe play, the goal of PIC was to

influence safe ice hockey outcomes by providing VMHCs with the necessary knowledge and

skills to educate their players thereby preventing serious injury from occurring in the sport.

At the program's onset, PIC consisted of seven "skill tips" for players provided in a video

format. By the 2006 season, PIC expanded to include a pamphlet of drills for minor hockey

coaches to use with their teams. During the next season, researchers and content experts

consulted on the enhancement and reconceptualization of PIC creating a complete and structured

on-line CEP. PIC became a skill enhancement program for VMHCs modeled after the Public

Health Agency of Canada's online delivery of epidemiology training through the Skills

Enhancement for Public Health Program (Montelpare et al., 2010). PIC was similar to this Public

Health program in that it was an on-line education program, delivered asynchronously over an

eight week period with the support of an on-line facilitator. The adaptations made to PIC led to

the 2008-2009 version.

PIC's (2008-2009) design differs from traditional CEPs in four ways. First, it utilized a

preventative approach (Montelpare et al., 2010). For example, PIC content provided VMHCs

with sport-specific information and practical techniques that emphasized safety components

coaches could put into immediate practice to create safe hockey environments conducive to

learning. Through the application of PIC's content, VMHCs were encouraged to provide their

players with techniques, tactics and strategies on the ice in an effort to prevent or minimize

injuries. To illustrate further, Module One (Competence in Sportsmanship and Ethics), provided

coaches with a practical guide to managing unsafe player behaviour. Module Three (Competence

in Skating Skills), enabled coaches to teach the biomechanical foundations for skating that lead

to player stability and safety. Second, PIC promoted a player-centred and coach-led model for

coaching ice hockey. In this way the program was designed to meet the physical, social, and

mental needs of players with the leadership and guidance of the coach. In contrast, traditional

CEPs provide a more coach centered approach where the coach takes the information interprets it

for the players with little or no consideration of the impact on players (de Sousa & Oslin, 2008).

Third, PIC provided asynchronous access to web-based on-line content (i.e., anytime, anyplace,

any pace) that was available on the Internet when and from where the coach wanted it, thereby

encouraging coaches to be more active learners. Conversely, traditional CEPs provide scheduled,

highly structured coaching education events, at specified times. For example, NCCP coach

certification courses are classroom based, range from 8 to 32 or more hours depending on the

level of the course, and are typically delivered on weekends at facilities that may require coaches

to travel to the identified venue. Finally, PIC was facilitated by an on-line content-

knowledgeable leader. The PIC facilitator interacted with VMHCs on discussion boards and

supported VMHCs' application of the concepts and provided techniques. The facilitator also

acted as a resource person answering and asking questions to drive VMHCs' critical reflection of

the PIC content. In contrast, Course Conductors in a traditional CEP delivered prescribed content

from course manuals in a lecture format. Interaction between coaches and Course Conductors are typically limited to brief periods between lessons.

Play It Cool's Process of Learning Overview

The PIC (2008-2009) process of learning involved building on VMHCs existing understanding of coaching and their knowledge in ice hockey. The PIC (2008-2009) content was designed to challenge VMHCs' basic assumptions in each of the seven topic areas. Each module asked for careful self-appraisal and personal coaching reflection. PIC's content was intended for a coach audience of Atom (Age 9-10), Peewee (11-12) or Bantam (13-14) VMHCs. Coaches would access the module content via a secure managed website and work sequentially through the material on a weekly basis. Registered VMHCs accessed the modules through a landing page (Figure 1). Each week's module required approximately one hour of computer time to review. This included viewing the streaming modules and completing content questions found at the end of each module. VMHCs were restricted from advancing to the end of a module without answering the content question correctly. The answer was highlighted when completed with a correct response. An incorrect response prompted the VMHCs to once again review content prior to advancing. VMHCs could return to the site at anytime between modules and attend the discussion board page to discuss the practical implications of the module and to share their experiences with other VMHCs and the PIC facilitators. Access to the discussion board was not controlled allowing VMHCs to read and post as often as they wished.

Play It Cool's Seven Learning Modules

PIC consists of seven learning modules (Figure 1) provided to VMHCs over an eight-week period via their personal computers. Streaming content was created from scripted lesson plans to provide a VMHC an interactive experience while listening and viewing the modules.

The module's subject matter ranged from behavioural modification approaches in coaching to technical and tactical lessons such as checking skills. For example, the learning content of Module 1 provided instruction in Sportsmanship and Ethics was to be completed during the first week of the program. Competence in Teaching Techniques and Building an Optimal Environment (Module 2) corresponded with week two and provided learning material on athlete centered teaching techniques. Each successive module was launched weekly with an unstructured break week scheduled after week three to allow for catch up.

Facilitated Learning

Individual facilitator selection for PIC (2008-2009) was completed in consultation with coaching development staff of the hockey Branches, MHAs, hockey groups, and sport governing bodies. The *PIC Facilitators Manual* (Play It Cool, 2007) outlined individual facilitator candidate qualifications. In some cases, Regional Development Coordinators and community hockey administrators were directly consulted to assist in the recruitment and selection of facilitators. These included experience and credibility in coaching hockey and a recognized capacity in player development (i.e., demonstrated experience in coaching minor hockey players, or known reputation as leader in ice hockey). This was personal experiences, participation as a coach, or qualification as a coach course conductor or deliverer of coach education programs. Additional qualification considered to be beyond the experience as a coach, player and graduate of coach education were also recommended. Facilitators were also expected to be certified coaches at a minimum of an Intermediate Level - Development II standard in an accepted traditional coach education program (e.g., National Coach Certification Program or equivalent). This would include experience and competence in the delivery of coach education programs in the sport of hockey as either a Course Conductor (CC), Regional Development Leader (RDL), or

Coach Mentor (CM). It was also recommended that facilitators have above average leadership

abilities and above average communication skills (i.e., written and verbal) and that they should

be well respected within their coaching community, be committed to ethical practices and value

based coaching – player centered methods. Furthermore, selected facilitators should have the

endorsement of their sport organization (e.g., Branch/minor hockey group) (Play It Cool, 2007).

These criteria were used to select three facilitators who then assisted VMHCs in learning

by interacting on the Discussion Board page on the PIC website (Figure 2). Facilitators

interacted with VMHCs by responding to discussion postings based on seven scenario questions

that reinforced the PIC modules topics. Facilitators supervised dialogue and contributed to

discussions through open ended questioning. Questions offered by facilitators used prompts or

posting topics under discussion to stimulate VMHCs to critically reflect on their use of the PIC

content.

Rationale for the Discussion Board

Coaches participating in PIC were placed into small working groups of approximately

twelve members. These original groupings were organized based on coaching level (i.e., Peewee

AA VMHCs, Bantam A VMHCs, etc.) and geographic location. However, a requirement to

combine groups became apparent to the PIC organizers and facilitators for the Ontario VMHC

and the American VMHC due to minimal weekly discussion postings in week 1 and 2 of the

program. This re-organization of groups created a more diverse range of VMHC in terms of

coaching levels, but served to provide the potential for collaboration between VMHC at the

discussion forum. Individuals in each coach group participated independently on the discussion

board but were also encouraged to interact with one another to establish a cooperative on-line

community. The discussion board forum provided a location where mutual learning,

collaboration and definition of best coaching practices could be achieved by the VMHC. The

process of posting involved VMHCs navigating to their assigned group's discussion board and

posting a comment as well as responding to at least two other group member's comments.

Weekly scenario topics were provided to allow participants a starting point for discussion. The

discussion topics provided were:

> Discussion 1 - Introduction of participants
>
> Discussion 2 – Focus on respect and fair play
>
> Discussion 3 – Use of new instructional methods
>
> Discussion 4 – Understanding skating skills
>
> Discussion 5 – Rules and game conventions
>
> Discussion 6 – Review of PIC learning outcomes

To discuss these topics VMHCs simply typed their ideas into the discussion window.

The typed responses of participants were available for viewing by everyone in their designated

coach group. Graphics, multi-media and file exchange were not enabled. Postings were typically

short exchanges, usually less than a paragraph between participants. All postings between

individuals (i.e., facilitators, VMHCs) had the first name of the posting person attached for

identification.

CHAPTER IV
METHODOLOGY

Ethics Statement

Prior to beginning this study, methodologies were vetted and the Lakehead University

Research Ethics Board granted ethics approval. The author, whose name appears on the title page

of this work, obtained the noted ethics approval for the research described in this work as the

result of being a research assistant on the project entitled "Using Facilitated Online Curriculum

Delivery For Coach Preparation In Teaching Safety and Injury Prevention In Ice Hockey:

Development, Delivery, And Evaluation Of The Play It Cool Program," which was approved in

advance (Montelpare, 2010). All participants in this studied were advised that their participation

was voluntary, and that they may refuse to participate, and that they may withdraw from the

study at any time.

Researcher's Role

As the researcher, I assumed a number of roles in the Play It Cool program. Starting as a

consultant and advisor to the program, my role evolved into that of being a contributing author of

the Play it Cool curriculum and its various supporting materials. I was also responsible for

strategic planning, administration and the recruitment of facilitators for the Play It Cool program,

as well as liaising with and acting as a consultant with external organizations such as the

Canadian Spinal Research Organization (CSRO) and the Ontario Neurotrauma Foundation

(ONF). In addition, I served as a facilitator for two of the on-line participant groups. As a

facilitator I was provided privileged access to the PIC web site as well as coach profile

information. Similarly, as a PIC organizer I was provided access to the web site, but had limited

access to coach profile and log-in details for most of the Ontario VMHCs. As a subject matter

expert, I contributed to content on the Play It Cool website. Most importantly, I also assumed the

role and responsibility as a de facto gatekeeper in the study. In this role, I gained access to, and

developed the trust of and rapport with various hockey organizations, administrators, key

personnel, and the hockey community.

Participant Recruitment Strategies

A large part of the researcher's efforts in this study involved the time intensive task of

recruiting participants. Recruitment followed a strategy of formal contact via letter with each of

Hockey Canada's Ontario Branch offices by letter. These Branches included the Ontario Hockey

Federation, the Ottawa District Hockey Association, the Northern Ontario Hockey Association

and Hockey Northwestern Ontario. Each of the Ontario Branch offices were then re-contacted by

telephone or email to follow up on expressions of interest. With key personnel (i.e., hockey

development staffs) identified, multiple face-to-face meetings, recruitment presentations,

seminars and symposia were scheduled to follow up on direct leads. These meetings were

conducted with TD, RDC, hockey leaders, MHAs and administrators. The meetings served the

purpose of explaining the PIC program to decision makers and registering participants. The

Ontario sample frame was the priority for recruitment because Ontario has a very large registered

VMHC base of 40,408 (Hockey Canada, 2007). Of these, 39,449 were male and 959 were female

(Hockey Canada, 2007). When scrutinizing this population further, the number of Ontario

VMHCs registered to coach in Bantam, Peewee and Novice totaled 11,989. Unfortunately,

despite this large population and months of concentrated recruitment, only 20 Ontario VMHCs

identified interest in participating in PIC.

The limited success of formal recruitment led to the researcher adding a snowball

recruitment strategy and a more direct recruitment approach to bolster the number of

participants. The snowball strategy was employed to leverage interested Branches, MHA, club teams and individual coaches. In this process pre-registered VMHCs were asked to identify a co-coach in their MHA that would be interested in PIC. Minor Hockey Associations and club teams proved useful in this process adding to the initial group of 20 VMHC by 33. With 53 VMHC from Ontario identified, the participants were organized, grouped and were emailed log in instructions to begin PIC in 2008.

While the Ontario VMHCs participated, two additional select groups were recruited from the USA. The USA groups were recruited through personal and professional associates of PIC program organizers. These associates provided VMHC names and contact information performing a similar role, as had minor hockey administrators in Canada. They assisted PIC organizers by arranging access to VMHC who were actively coaching in their region and that were interested in PIC. The American VMHCs were also organized and received email log in information over the winter of 2008. With the American groups (i.e., 23 VMHC from Rochester, Minnesota and 31 VMHC from Boston, Massachusetts) a total VMHC group of 107 initially volunteered to participate in the study. As the study progressed, the number of actual participants decreased to a total of 15 VMHCs.

Description of the Participant Sample

Of the 15 PIC VMHCs, the majority were male (n=14), primarily head coaches, aged 30-51 years, with a range of 4-7 years of coaching experience and most were untrained. Play it Cool VMHC's coached mostly adolescent male hockey players at competitive levels of play (AA, A). It is noted that many teams in this category of play (Peewee) are mixed teams in terms of gender, with a few female players playing on boy's teams. No exclusively female team VMHCs were identified as participating in PIC. VMHC participants also presented with very limited formal

coach education experience (i.e., four coaches had certification at the NCCP Intro/Coach level).

These VMHCs also appeared to have had limited transferable skills (i.e., other sport coaching

experience, other formal coach education training, physical education or training). The VMHCs

also reported limited playing experience with only two coaches reporting to have played beyond

a Midget category of play.

Sources of Evidence and Authority

The primary sources of data were collected and interpreted retrospectively for this study.

Fifteen participating VMHCs had deposited data (i.e., discussion board postings, time on task

data) on the web site as they progressed from module to module in 2008-2009. Other sources of

data were e-mail correspondence that were delivered and stored external to the PIC web site

addressed to the email site of organizers and facilitators. Ninety-two VMHCs, who volunteered

to participate in the program, left no evidence or data of their experiences with the program. For

the 15 VMHCs who did participate, records of their experiences with PIC were retrieved,

organized, analyzed and interpreted. Retrievable sources of data found included discussion board

postings, time on task in the PIC modules, and content question completion. Evidence of

facilitator (e.g., emails, discussion board postings) and organizer (e.g., emails) participation were

also extracted and included for interpretation.

Thematic Coding and Analysis Technique

Meaning arising from the evidence left by the participants of PIC were interpreted and

deconstructed using an emergent theme coding procedure. For example, each written posting was

read and re-read with common descriptors identified. Scanning of the written artifacts confirmed

or cancelled descriptive themes. Next descriptive word sets were identified, organized, and

linked according to similar definition. The most common terms were then analyzed for meaning.

Member checking and briefing supplied data verification and trustworthiness for the study. In the process used, a member from the thesis research committee independently reviewed, organized, and gathered data statements thematically. In a review meeting between the researcher and the thesis research committee member, witnessed by another committee member, verification and agreement of the emerging themes was reached. In addition, the themes identified were noted to be consistent between the researcher (primary evaluator) and the checking member. Consensus was reached on both the thematic terms and their meaning.

The methodology utilized in this study captures multiple sources of data and evidence and provides verification, duplication and a dependability processes. The multiple sources of data analyzed also provided a multifaceted perspective on the research question and provides added insights and description into VMHC experiences with the PIC program.

Limitations

This study's findings are limited by four noteworthy factors. The first of these is researcher bias. Researcher bias occurs in this study due to the imbedded nature and interrelatedness of the researcher with the Play It Cool program. The second limitation was related to the participants themselves. The Play It Cool VMHC participants in this research did not represent or describe all volunteer minor hockey coaches in all jurisdictions and geographic locations in Canada and the United States. It is for this reason that the findings of the study are limited to describing the investigated participant groups. Third, secondary analysis was also a limiting factor for this study. The process of data mining after the fact, when participants were no longer active in learning, limited the researcher's understanding and description of many aspects of the participant's experiences on the site. Furthermore, the ability to seek clarification and supplement meaning beyond what was left on the Play It Cool database was limiting.

CHAPTER IV

RESULTS

Emerging Theme # 1 "Time"

When examining e-correspondence evidence (i.e., as generated by PIC facilitators and

organizers), a broad sense of reluctance in getting involved with the Play It Cool Coach

Education Program was revealed. The reluctance was noted to be among hockey's administrative

members (e.g., branch hockey development staff and minor hockey executive) to become

involved. This evidence appeared in e-correspondence despite the researcher's "selling" of the

programs benefits to them (e.g., asynchronous delivery, on-line access, prevention of injury). For

example, two members of the Ontario Hockey Federation (OHF) known as the Greater Toronto

Hockey League (GTHL) and the Minor Hockey Alliance of Ontario (MHAO) chose to opt out of

participation in PIC despite the OHF's endorsement of the program. Administrators for the

GTHL and MHAO described participation in "other" programs or priority in promoting their

existing hockey development initiatives as reasons for not participating in PIC.

> *We are currently running several education programs…and at this time we would like to focus on those efforts.*
>
> *I appreciate the offer and look forward to hearing the reports from the OHF on the results of these sessions.*
>
> *MHA (A)*
>
> *We just have too much on our plate with new programs etc. to make this work.*
> *As indicated before we have our own programs that have to take priority.*
>
> *MHA (B)*

Common constraints to participating in PIC found in e-correspondence included other

Branch coach development program priorities, conflict with old and new coaching development

program schedules, and seasonal time constraints. When coding the data, each of these obstacles

to participation appeared to be related directly to time factors. Even among VMHCs who did

engage, time factors influenced their experiences in terms of their ability to understand and apply

the concepts and techniques advocated in PIC. In several instances, the VMHCs rushed through

modules and content, and appeared to fit the completion of weekly modules around their busy

lives. For example, in response to the following prompt from the PIC facilitator, one VMHC

coach spoke about a variety of competing demands on his time:

> *Hi Coaches,*
>
> *We've reached the "Break Week" of the program (January 12th – 19th). Please take this time to catch up on Modules 1 – 4 and Discussion Board Topics 2 – 4.*
>
> *This is a good time to explore the "Practice Playing" manual, here is the link: http://bolt.lakeheadu.ca. You'll notice that each game corresponds to particular Play It Cool Modules. Also, check out Malcolm's latest Blog, you can find it on the Discussion Board page.*
>
> *We're approaching the home stretch with only three Modules remaining… keep up the great work!*
>
> *Facilitator (A)*
>
> *Dear (PIC Facilitator)*
>
> *Got so swamped with patients, manuscripts, etc. and then was away and off computer almost 2 wks in Dec/Jan. Away now again for a week in Aspen but hope to get onto it.*
>
> *VMHC (A)*

In contrast, the Ottawa District Hockey Association (ODHA), Hockey Northwestern

Ontario (HNO), the OMHA (Ontario Minor Hockey Association) and the Northern Ontario

Hockey Association (NOHA) did identify the "time" to participate and therefore these groups

became the focus of recruitment and participant identification for PIC.

Based on further investigation and analysis of e-correspondence from PIC organizers and

facilitators, it is clear that many VMHCs did not appear to respond to log in invites or directly

engage in the PIC curriculum. In fact, a loss of 92 VMHCs was found. These 92 VMHCs left no

identifiable evidence or artifact of their participation in PIC. This included no evidence of time

on task in the seven modules, no evidence of content question completion and no evidence of

discussion board postings. This limited participation of VMHCs appeared to puzzle the

organizers and the facilitators of PIC. For example, the following e-correspondence between PIC

organizers describes limited participation of one of the American groups. It was noted that this

problem persisted beyond the Ontario VMHC groups that were formally recruited and continued

with the VMHCs from the U.S.A that were directly recruited:

> *I just surfed the site and see that out of 30 coaches we have only one posting and really know discussions to speak of that are active on the Boards! WHERE ARE THESE BOSTON DUDES? At a tea party? We are now moving into the later half of week #2. I have some indication that about 9 coaches have completed profile information from the Coach Profile data form...it is hard to tell with the info I can see...Can you request an admin. review/summary from Wellnet so we can see login and learner/participant data. We can use this info to verify activity of the participants from Boston. I note that (the Facilitator) has sent out follow up emails to encourage the 30 VMHC. No coaches have declined the invitation and follow ups?...I am not sure what to do or suggest...Interestingly enough my recent meeting with a 3rd year Kinesiology student at Lakehead suggested a very positive review of the materials, approach and all (PIC) information... This is about the 3rd or 4th external reviewer who has suggested good things; having said that; I note two other external reviews that suggested the modules are too long and that the content was complex...*

> *Organizer (A)*

> *Okay, so we have really poor involvement from Boston coaches, yet we know we have a good product. So do not despair. I will connect with Wellnet and get the data on who is logging in etc. I do not have a solution... I received an email from the Rochester coaches and they are keen...I will cut their e-mail below. Apparently (Organizer C) has 9 coaches, and there is a female coach of novice boys that contacted me and wants to be involved. Despite the frustration of coaches not connecting even after they have signed up, there are still many good things that come from this: i) we are able to show that the curriculum can be effective, that the recruitment of coaches is difficult whether you live in Toronto, Thunder Bay, or Boston; and that the decision makers must be part of this*

project in order to ensure that people get involved...despite that we want to make this a bottom up, groundswell support, what we do know is that if this were to be a mandatory program we would have more success…

Organizer (B)

During the 2008 – 2009 period some VMHCs also appeared to drop out of PIC or, in

some cases, start late. E-correspondence between a facilitator and a PIC Organizer and facilitator

with VMHCs describe these occurrences:

Looks like we lost VMHC 1 (Group 2) for a few weeks, and VMHC 1 (Group 3) until the 22nd. (Hockey Administrator A) suggested adding two new guys... Perhaps we could put them in groups 2 & 3 respectively to fill the void?
I haven't sent out an invite to these two yet, so let me know….

Facilitator (A)

Am I to understand that VMHC 1(Group 2) and VMHC 2 (Group 3) are away or will not be participating at all!? If they are going to play catch up then we should keep them in their assigned groups. Tonight, prior to reading your memo below I assigned (a new participant) and (another new participant) to group three. If VMHC 1 and VMHC 2 are opting out can (Hockey Administrator A) find two additional coaches?

Organizer (A)

Hello Facilitator;

I was included in the program a little late but have caught up. Here is my address and I look forward in getting the book.

VMHC (B)

I assume this is on-line training? If so, is it a fixed schedule in which we must log on and participate in a "webinar" style program. Or do we simply log on when we can and do the sections on our own time, our own schedule? The reason I ask is that the next four weeks are not a good schedule for me…I am out of town three weeks of the next four. If it is self paced learning, then I could likely jump in right away. If I must commit to a scheduled "virtual classroom" schedule then it would be best if I waited for the next session.

VMHC (C)

In a different conversation between an organizer and a facilitator, the topic of VMHCs

falling behind emphasizes the time issues effecting VMHC's experiences with PIC:

Hey (Organizer A),

So for the break week, I'll ask the coaches to catch up on the first 4 modules, and to revisit the discussion board topics 2-4. Do we know how many coaches have been keeping up? If so, I can send individual email to perhaps motivate the coaches by reiterating the Jersey Promotion.

 Facilitator (A)

 I am not aware of how many are keeping up - but would suggest that you encourage all to catch up and as you said revisit the discussion boards.

I am cc'ing (Organizer B) on this - perhaps he can add some info.

I will be updating the site and posting to the blog tomorrow.

Organizer (A)

Further analysis of the time theme suggested that participants in PIC tended to under-

estimate the required commitment to learning in the program in terms of the weekly time

requirement. For example, evidence left by VMHCs identified that time constraints external to

the program negatively influenced their ability to properly participate and engage in PIC. In this

example a VMHC left evidence of falling behind in the program and was attempting to clarify

his need to post on the site's discussion boards:

Hi Facilitator (A);

Just wondering if I should be posting comments in the discussion area. I am quite far behind in the conversation seeing as I have only started to complete the modules. If you feel I should still comment I will. If you feel I should just move on until I catch up to the rest of the group I can do that as well. Please advise.

VMHC (D)

Evidence of the process of sharing knowledge between coaches in a supportive virtual

environment was also not discovered. Oddly enough even coach to coach dialogue was not found

on the discussion boards. Instead VMHCs posted comments and appeared to wait for the

facilitator's response or acknowledgement of their posting. For example, consider the following

two posts, which occurred one day apart from another, and to which there were no further

postings:

> *Playing time is critical to all players. It sounds like Mike would be on the bench watching how other players responded. Any player who constantly takes penalties and does not respond to words of advice from the coach is hurting the team and setting a bad example for the other players on the team. Taking away playing time or even not allowing him to dress for games might be one of the final alternatives available.*

> *VMHC (E)*

> *The previous post brings up a good point…that Mike would be creating a negative playing environment. I notice that Module 2 introduces an approach called 'Practice Playing' which involves games and questioning to establish positive reinforcement and safe execution. What do you coaches think about using 'Practice Playing' approach for Mike?"*

> *Facilitator (A)*

VMHCs appeared to resist to sharing information and knowledge with other coaches

despite being provided a positive and facilitated environment to do so. This led to e-

correspondence between organizers and facilitators lamenting this situation. Specifically,

organizers and facilitators expressed disappointment that VMHCs were not able to share best

practices with one another on the discussion boards. Instead, VMHCs tended to provide either no

response or guarded responses rather than attempting to apply PIC's "new" concepts and

techniques. In providing no response, it is possible that VMHC's may have been attending the

discussion boards to observe what other coaches were posting rather than participating. This

presumption is supported by Bloom (2002a) and Wright, Trudel and Culver's (2007)

characterization of amateur coaches who prefer to observe and to meet other coaches face-to-

face and Misener and Danylchuk's (2009) assertion that coaches prefer an uncomplicated

process of learning.

Emerging Theme #2 "Salesmanship to Promote Participation and Module Completion"

Organizers and facilitators responded to the problem of limited participation by

discussing additional steps to be taken and on how to best guide and support VMHCs. Their

conversations, deposited in e-correspondence demonstrated a common emergent theme of selling

the PIC program. When coding for this theme (i.e., salesmanship/selling) a repeating pattern was

identified in the data. The following email string provides an illustration of this pattern, one of

facilitators and organizers ideas on how to re-package and sell PIC to get participants more

active on the site;

> *Perhaps a telephone call is in order to help encourage the coaches to get started, or at
> least get feedback as to why they are not participating? Maybe send the modules to the
> coaches on a disc in the mail? I'm not sure what your budget is, but perhaps offer a
> financial incentive for completing each module? Maybe consolidate those 9 coaches into
> a single group to try and generate some discussion?*

> *Facilitator (A)*

> *Possibly a conference or individual calls with the coaches may get them more engaged
> and committed to the program. I know when I did these online programs with Health
> Canada, we usually started with a teleconference to start it off...*

> *Organizer (D)*

> *A conference call or individual call is needed. For one thing it will tell us why the
> coaches aren't engaging given that they said they were interested. We can also find out if
> they know about the incentives...I am not sure that they are aware of the Jersey for the
> raffle, but that would be one thing that I think should get them interested.*

> *Organizer (B)*

In other e-correspondence examples, it is evident that VMHCs also acted to assist with

selling the program, and even volunteered to guide other VMHCs who may have been

experiencing technical difficulty on the site. In the example below, a facilitator responds to this

provided assistance:

> *Hi Coach,*
>
> *Thanks for helping out, I'm looking forward to our discussions with the Rochester group. Today, I'm sending out an intro to the coaches with instructions on how to log in. For this first week, we need the coaches to do 3 things: 1) Register and make sure they can log in, 2) Introduce themselves on the discussion board, and 3) Fill out the 3 questionnaires in the "Coach's Profile" section.*
>
> *In the past, we found the coaches hesitant to engage on the (discussion) boards, so I'm glad you're here to help. The idea is to have to coaches spend a week completing a Module, then apply it to their team the following week while engaging with the other coaches on the discussion board. It works out that Discussion Board Topic 2 should be answered using theory learning in Module 1, Topic 3 uses Module 2 theory, etc.,... Each discussion board topic is centered around a situation related to the Modules. The idea is for the coaches to use each topic question as a stepping-stone to help direct that week's discussion. It might get a bit confusing keeping track of which topics corresponds to which modules once we get back from the break week (week 4), but we're adding dates beside each topic heading to help keep everyone on track.*

> *Facilitator (B)*

Analysis of whom the VMHCs were, module content questions, scenario questions and

discussion postings suggest that VMHCs may have not preferred the orderly and planned

learning process presented in PIC. In fact, most participants, either by their limited responses, or

by their inability to keep up in PIC, appeared to not easily adopt the proposed PIC process of

learning (i.e., participate in weekly on-line learning, apply the concepts proposed with VMHC's

teams and then share observations and self-reflection on the results in facilitated discussion). For

example in one discussion string on the discussion boards, VMHCs posted:

> *I would like to teach kids to progress to new drills and make them better players.*
>
> *VMHC (F)*

Teaching the Players to be aware of their location on the ice, (on the) boards and keeping (their) heads up when they take a hit into the boards on the ice."

VMHC (G)

In response, one of the Facilitators responded with the following:

Please remember to sign your name after your post! Nevertheless, the previous comments make a good point; Joey needs to be aware of his surroundings. Module 3 talks about the 'Power Position'...How have you guys handled players like Joey?

Facilitator (B)

The above noted facilitator's response attempted to re-direct the VMHC to first post

according to the specified PIC protocol, followed by a reminder to the VMHCs about the PIC

content and an attempt to direct them towards the scenario questions. Of the few PIC participants

that were on task, discussion board dialogue provided some indication of their experiences with

PIC. Although a consistent theme could not be identified, some evidence of VHMC's using self-

reflective strategies appeared. For example:

I would set up drills to teach Mike how not to hit a player into the Boards and show him the proper way to check a player.

VMHC (H)

Nice post, I noticed that Module 2 contrast traditional coaching methods to Practice Playing methods...the last coach posting appears to offer coach centred drills about controlling, directing and fixing. While Practice Playing focuses on games and questions to help players take ownership of their development...what do you guys think about that?

Facilitator (B)

I would first make sure he's clear on the rule with regards to checking from behind and have him explain to me why he is continuing with the blatant disregard for the safety of other players. I would instruct him that his poor behavior is becoming intolerable as it reflects on him, the team and the coaching staff. At this point I would inform him with his parents that if it happens again I would be forced to take disciplinary action such as benching him.

VMHC (I)

VMHC experiences in the application of the PIC module concepts with their respective

teams were found to be the most inconsistently posted discussion topic on the PIC discussion

boards despite the repeated prompts, on-line cueing and e-correspondence reminders provided.

Some VMHC postings did however suggest a positive learning experience resulting from PIC:

> *I have learned more on coaching in the Play it Cool modules this past month…I think I am better prepared in the areas of preventing injuries that happen in practices and to teach the kids how to protect themselves and prevent injuries before they happen.*
>
> *VMHC (J)*
>
> *I think Play It Cool have given me some great tips this past month. As a coach I am better prepared to prepare the kids on how to protect themselves and prevent injuries.*
>
> *VMHC (K)*

Emerging Theme #3 Technical Issues

Analysis of the email correspondence indicated that technical issues also influenced

participant experiences in PIC. These issues included learning module log in complexity, basic

navigation problems, and software incompatibility. It is possible that due to time pressures,

VMHCs who had technical issues quickly chose to drop out of PIC without notice. The below

noted examples, however suggest some resilience on the part of VMHCs when it came to

technical obstacles:

> *The (LMS) system will not let me view anything due to passwords being incorrect.*
>
> *VMHC (L)*
>
> *Where do I get the Link2ID and Password? I'm part of (The Boston Group) initiative (see attached). Thanks for your help.*
>
> *VMHC (M)*
>
> *I am having a Problem with the Activate your course area. It is looking for a Link2id I used my name and password but I get nowhere.*
>
> *VMHC (N)*

Organizers sought remedies to the technical issues encountered by VMHCs by having on-line help available to participants and a detailed follow up process on identified questions and problems. Despite these procedural steps, technical issues repeatedly appeared and were documented in the email correspondence with all the PIC participant groups' regardless of geographic area of origin, or other demographic characteristics.

CHAPTER V

DISCUSSION and CONCLUSION

Ice hockey is a popular sport in Canada and the United States. Adequately trained and educated coaches are however under-represented in the large population involved in youth ice hockey in North America. In this study two distinct volunteer minor hockey coach (VMHC) groups were investigated, one from Canada and another from the United States. VMHCs from these locations participated in PIC, an on-line CEP. Their experiences in the PIC program were captured through the archived data they left while attending the website. The VMHCs studied, as well as PIC organizers and facilitators also left important evidence in emails that allowed the researcher to retrieve, interpret and ultimately describe VMHC's experiences with the PIC program.

The VMHCs studied, like many amateur sport coaches in the greater sporting community, appear to provide some evidence of their disinterest in participating in formal CEPs (Bloom et al., 1995; Misener & Danylchuk, 2009, Wright et al., 2007). Specifically, the VMHCs who participated in PIC tended to not completely participate in the program and, because of this, their experience with PIC was compromised (e.g., limited discussions of scenario questions and description of how the modules influenced their players was found on the discussion boards). Researchers like Bloom, (2002) suggest that for most coaches, practical experiences through observation and face to face interaction seem to be more important (to them) than formal coach education experiences. Ice hockey coaches also seem to prefer a learn-by-doing approach rather than a more academic process to learning how to coach (Wright et al., 2007). The evidence identified and analyzed in this study appears to indirectly provide some possible support for these assumptions.

As noted above, coach preferences are factors that influenced participation numbers in traditional CEPs in the past. For example, Misener and Danylchuk (2009), citing a 2000 Sport Alliance of Ontario survey, found that only 18 percent of community level coaches in Ontario were NCCP certified. Furthermore, Varagas-Tonsing (2007) suggests that most volunteer coaches are not trained and are not interested in being trained. Varagas-Tonsing (2007) also indicated that for those who gave an outward appearance of acceptance of CEPs, privately disagreed with and rejected official coach training. Based on this research and coach registration information, it is possible to conclude that most volunteer coaches are not trained and most will not participate in training. VMHC participation in PIC could fall into this characterization of coaches. For example, VMHCs may have been contemplating training but when actually faced with completing the program, they appeared to not fully engage in PIC. However, the exact reasons for the attrition in this study are probably multifactoral in nature and cannot be wholly explained by this study.

Hockey Canada, Hockey USA and other sporting groups appear to be venturing into web-based coach education and training (e.g., The Respect in Sport Abuse and Harassment Prevention and Awareness Program). They are looking to new mediums of learning to address geographic, scheduling and cost issues that relate to low participation numbers in CEPs. But, whether web-based solutions can best meet the educational needs of VMHCs is not known. In this study of PIC, it appeared that a formal and structured coaching education program that was web-based did not provide ideal experiences for the majority of the VMHCs who participated nor did it stimulate their interest in further educating themselves. However, to be fair, it must be noted that some (i.e., n = 4) of the 15 VMHCs did enjoy their experiences and gained from their involvement in the program.

Summary of Findings from Play It Cool

VMHCs, the participants of this PIC study were mostly male, middle-aged, Peewee and Bantam A-AA coaches with limited playing experience, limited coaching education, training and certification. Their low level of training and education was coupled with limited coaching tenure and, in terms of playing the game, the majority of VMHCs had limited experience. Despite these shortfalls, the VMHCs studied coached in programs that were regarded as competitive. The descriptors of the PIC VMHCs appear to match Hockey Canada's description of the general coach population in youth hockey and interestingly enough the NCCP's portrayal of amateur sport coaches in Canada (Misener & Danylchuk, 2009). However, caution should be exercised in generalizing the findings of this study beyond the group studied due to the nature of the recruitment strategy utilized and the uniqueness of the small group of coaches who participated in PIC.

VMHCs' general lack of participation and the poor completion of the PIC program were problematic for the organizers and the facilitators. The evidence deposited by individual participants related to involvement and program completion represented a large part of the email correspondence analyzed. The large sample of VMHCs that was anticipated to register for PIC based on recruitment for the study shrank to a small group of 15 VMHCs. These 15 VMHC participated to varying degrees and left pieces of evidence on the site that described their experiences with PIC.

When the VMHCs, organizer and facilitator data were organized, sorted, and analyzed using thematic coding, three themes emerged. First, "time" conditions, and second "salesmanship" and third "technical difficulties". Salesmanship was linked for the most part to the organizers and facilitators of PIC as they attempted to motivate and entice participation in

PIC. Time factors external to the program surfaced in e-correspondence as a theme that

influenced all sources of evidence (i.e., organizers, facilitators and VMHCs). This may be due to

VMHCs, as novice coaches, struggling with managing education as a priority during the hockey

season. The technical difficulties experienced, moreover, most likely played an important role

for some in their decisions to discontinue participation.

Evidence from discussion board archives indicated that the majority of VMHCs left no

record of their experiences. While it is difficult to ascertain the reasons behind this, the lack of

evidence may speak to several factors. For example, VMHCs may not have seen the value of PIC

as an important CEP, nor appreciated the educational process advocated by the program. Another

possibility is that the coaches may have preferred to not share their common experiences with

other coaches. Some research suggests that this response is not an atypical reaction from minor

hockey coaches. For example, Wright et al. (2007) suggested that limited collaboration between

ice hockey coaches is a function of the competitive nature of ice hockey culture. The PIC

research cannot confirm or refute this assumption but merely report that VMHCs did not

collaborate with one another. VMHCs may have also preferred to skim over on-line content,

sample the supplied information, and observe other coaches' postings rather than studying,

reflecting on and applying content. In other words, it was possible that some of the VMHCs may

have preferred retrieving information from PIC rather than engaging in the material and with

fellow coaches.

Finally, the VMHCs who participated in this study did not leave evidence that they

adapted or changed their coaching methods based on PIC's lessons. Nor did the use of the

Internet and the web-based delivery platform of PIC appear to act as a connection point to

engage VMHCs in learning. However, of the four VMHC who left evidence of positive

experiences two coaches appeared to be contemplating some change to their coaching approach.

This could be interpreted as evidence that learning may have taken place with these coaches. The

research completed was also not able to address whether access obstacles, like geographic

isolation, influenced on-line education delivery to VMHCs. However, the data deposited by

VMHC does indicate that time factors, coupled with technological user problems negatively

influenced VMHC experiences with PIC regardless of where the VMHC were located.

Conclusions

The results of this study present some important findings for others, such as sport

administrators and curriculum designers, to consider in the future development of coaching

education programs. The analyzed data suggest that the web-based CEP known as Play It Cool

may not have created an ideal learning experiences for all VMHCs. This may be due to factors

beyond the control of the PIC content developers (e.g., the excessive time demands already being

experienced by VMHCs relative to their work or home lives, technical problems with the

learning platform and/or the users' inability to use or unfamiliarity with web-based technology).

It is noted that the most people's familiarity with web-based education is anticipated to improve

as this method of training and education becomes more conventional. As a result the

technological challenges experienced by VMHC in this version could be a temporary problem

that may or may not be observable in future versions of PIC or other on-line CEP. Another

possible explanation for the less than ideal experiences of VMHC in this version of PIC may be

that VMHCs prefer informal training methods or a more direct learn by doing, coach-to-coach

process of learning. In another vein, perhaps individuals knowledgeable in web-based design

and pedagogy could improve the overall composition and delivery of the Play It Cool program,

making it more time efficient and interesting for VMHCs.

In an effort to move forward with web-based CEPS, it is recommended that future versions of PIC take into account the findings of this study. For example, the redesign of PIC may include more direct learning opportunities for VMHCs like task assignments with other coaches. Assignments and reporting of this type may encourage direct application of content and leverage VMHCs' interest in informal learning methods. Future PIC versions might also consider using a mentorship model and expert contributors who are well recognized in the hockey community. Perhaps the use of live forums or webinars with question and answer features enabled as an added feature to the PIC website could be possible. These scheduled webinars would not be asynchronous but could be archived for those unable to attend live events.

The organizers and researchers involved in PIC have deliberated extensively on how best to reach the grassroots hockey community in order to better understand minor hockey coach's needs. The results of this study and the diversity of the VMHCs in terms of their location (Ontario, Canada, Boston, Massachusetts, and Rochester, Minnesota) suggest that coaches have similar perceptions, needs and challenges regardless of where they coach. Some researchers have recommended that formal CEPs should be mandatory (Cushion, Armour, & Jones, 2003). Many MHAs have, in fact, implemented rules mandating a minimum level of coach education "on the bench" amongst minor hockey coaching staffs. However, it appears based on this qualitative analysis that VMHCs may not completely participate in mandatory programs, let alone actively participate in them. Hockey in Canada and the United States hold prominent places in their respective countries. Additionally, each country has demonstrated success on the international scene. Despite these factors, it appears the sport would benefit from an evaluation of its coach education programs, especially as it relates to coach preparation and CEP's mode of delivery.

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