Identifying Excellent Coaching Practice along the Sporting Pathway

Authors: Justine Allen, Alison Bell, Alan Lynn, John Taylor, and David Lavallee

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Acknowledgements

Table of Contents

Section **Page**

Executive Summary

Introduction
Recognising that coaches operate within different contexts and with different participant populations is important in determining how coaches work with participants. Identifying examples of excellent coaching practice for each of these populations is a critical step towards enhancing a quality participant pathway and coaching system. The purpose of the project was to identify excellent coaching practice along the participant pathway and identify areas for future research and/or education.

Methods
The Hockey Coach Development Model for Great Britain has identified five participant populations: children 5-11 years, youth 12-18 years, adult participation, performance including talent development, high performance. Three to four coaches and four to five athletes from each of Hockey's 5 participant populations participated in the research.

The participants were coaches (N=16), athletes (N=23), and support staff and parents (N=13) involved in hockey in Scotland. Potential participants were identified and initially contacted through Scottish Hockey. The coaches who participated in the study had on average 18 years coaching experience and 14 years experience coaching a specific coaching environment. All athletes had participated in their sport for a minimum of 3 years (except two participants from the children context who had only participated for 1 year).

The research adopted a qualitative methodology to gain an in-depth understanding of the participants' views on excellent coaching practice. Semi-structured interviews and focus groups were conducted to provide rich, thick description of the participants' views and experiences. Discussions in the interviews and focus groups focused on topics such as the participants' perceptions of excellent coaching practice within and outside training and competition. The coaches were also asked about their learning experiences. The interviews and focus groups were audio recorded and transcribed verbatim. The transcribed data were coded and thematically organised into four higher order themes with 9 lower order themes relating to excellent coaching practice and one higher order theme with 5 lower order themes relating to coaches' learning and development. A summary of excellent coaching practice was developed for each of the five coaching environments on the participant pathway. These summaries were reviewed by the research team and comparisons of excellent coaching practice were made along the participant pathway.

Excellent Coaching Practice Environment Summaries
Four higher order themes emerged from the data each with lower order themes. These higher and lower order themes were:
- *Direction/Emphasis*. This theme captured the coaches understanding and awareness of a broader view of the coaching process and included 2 lower order themes: outcomes and 'the bigger picture'.
- *Social Context*. This theme represented the wider interpersonal context that shapes the coaching process and included 2 lower order themes: group environment and coach-athlete relationships.
- *Management and Organisation*. This theme captured the activities that inform and impact upon the coaches' work with athletes but do not directly involve the athlete. This theme included 2 lower order themes: programme management and session content.
- *Implementation*. This theme reflected the activities and skills when working directly with athletes and captured the interpersonal nature of coaching practice. This theme included 3 lower order themes: working with athletes, delivery, and intervention skills.

Children
Participants indicated that excellent coaching practice for the children's coaching environment:
- is fun, family oriented, inclusive, and develops team work
- is organised, planned, and adapts to the situational demands and individual needs.
- emphasises development and continued involvement in the sport over winning

- emphasises fun, competition, and promotes learning
- guides progression through the player development pathway
- develops rapport and supportive relationships with the athletes
- provides athletes with individual feedback
- involves questioning and listening to promote understanding.

Youth
Participants indicated that excellent coaching practice for the youth coaching environment:
- leads to learning that is fun
- is guided by a clear 'big picture' of athlete progression along the player pathway
- involves balanced expectations
- develops positive coach-athlete relationships where athletes have input and ownership and coaches are enthusiastic, interested, approachable, and fun
- involves planning for sessions, blocks of sessions, the season, and beyond
- is flexible and adaptable to meet athletes' needs and rate of progression
- provides more time and space for performing and learning
- emphasising development and progression of high quality skills and knowledge
- use competition and game-like play for fun and learning
- involves well developed interactive instructional techniques such as explanation, demonstration, discussion, observation, positive constructive feedback, and reflection.

Adult Participation
Participants indicated that excellent coaching practice for the adult participation coaching environment:
- emphasises fun and enjoyment balanced with serious engagement in sport
- provides for a wide range of abilities and commitment
- values the social aspect of participation
- involves planning, commitment to the coaching role and leading by example
- fosters a positive group environment of mutual respect and care for each other
- decisions about training and competition are shared
- understanding the needs of individuals and responding to situations appropriately
- communicates clearly and positively.

Talent Development
Participants indicated that excellent coaching practice for the talent development coaching environment:
- emphasises development and investing for the future over results
- creates a respectful environment and foster athlete empowerment and motivation
- involves coaches who are approachable and inspiring
- preparation of sessions with clear aims, that are competitive, intense and promote learning
- requires the ability to spontaneously restructure one's knowledge to changing situational demands
- involves communication and tailored feedback
- uses questioning to guide learning
- encourages trying new things.

High Performance
Participants indicated that excellent coaching practice for the talent development coaching environment:
- is driven by results and is a decision making 'game'
- demands a high level of programme management skills by the coach
- focuses on providing a positive and challenging learning environment
- expects high levels of commitment from all involved
- demonstrates consistent, positive role modelling
- promotes open, honest relationships
- involves having a range of coaching 'styles' available

- results in clear communication of goals and expectations
- provides high tempo, game-related practices.

Excellent Coaching Practice Comparisons Along the Sporting Pathway
There were many common features of excellent coaching practice along the pathway. These included:
- an emphasis on learning and development
- being guided by a 'bigger picture' that allowed for flexibility
- fostering a positive environment focused on learning and encouragement
- developing quality coach-athlete relationships with relaxed, open two-way interaction
- planning for sessions and longer whilst allowing for adaptation and flexibility
- use of competition and game-like periods
- well developed interactive instructional techniques.

In addition, there were many differences in excellent coaching practice along the pathway. These differences were related to the:
- priorities or emphasis for coaching in each environment (e.g., outcome priorities)
- demands or challenges of coaching environments (e.g., time - adult participation)
- purpose of a particular coaching practice (e.g., adapting session content)
- needs of the individuals (e.g., progression, interpersonal style).

Learning and Development of Excellent Coaching Practice
The learning and development experiences of the coaches included:
- learning from other coaches through informal observation, discussion, and practical experiences, and formal education courses.
- on-going reflection and analysis of their own coaching practice with the aim of improving
- recognising that learning obtained in one coaching context may need to be adapted to be suitable in another context
- bespoke 1-1 support for performance coaches

And were facilitated by:
- a desire to learn and improve
- taking a proactive role in their own personal development
- working with other coaches in the same environment or across environments.

The coaches felt that the development of excellent coaching practice could be enhanced by:
- providing opportunities to learn from quality coaches and mentors
- building interpersonal skills
- more support for their development
- 'on-site' learning opportunities.

Future Case Study Topics
A number of topics for future education provision and research were identified in each coaching environment.
Education needs included:
- CPD features specific to each coaching environment (e.g., working with children)
- Opportunities to learn from quality coaches
- Practical learning experiences
- Encouraging 'bigger picture' thinking

Research areas included:
- Observation of excellent coaching practice 'in situ'
- Examination of decision making in the coaching process
- Examination of the social context of the coaching process
- Understanding transitions from athlete to coach or across coaching environments.

1. Introduction

The development of the UK Coaching Framework and UK Coaching Model and similar models internationally view the participant, coach and their relationship at the centre of a quality participant pathway and coaching system. They also recognise the importance of considering the different contexts in which coaches operate, specifically placing emphasis on consideration of the needs of specific participant populations, in determining how coaches work with participants. Recognising the different participant populations coaches work with and identifying examples of excellent coaching practice for each of these populations are critical steps towards enhancing the quality of coaching and experiences of participants.

The UK Participant Development Model (PDM) focuses thinking on participant need, recognising that participants have differing goals and motives for their engagement in sport which can also vary with their stage of development. The model identifies four generic participant populations: children, participation, performance development, high performance. The PDM is a generic model stakeholders are encouraged to adapt to provide sport-specific direction in relation to policies and practices around participant and coach development. For example, the hockey has identified five participant populations: children 5-11 years, youth 12-18 years, adult participation, performance including talent development, high performance.

The UK PDM also outlines components of potential participant pathways such as participant capabilities (physical, mental, technical, tactical) and personal development outcomes (competence, confidence, connection and caring, character, creativity (5Cs)). For the participation-oriented populations, segments of these components have been developed further, integrating capabilities and outcomes and providing general implications for delivery. With regard to delivery it is identified that there is a need to focus as much on style, how coaches work with participants, as content. Recent research with participation coaches from a range of sports demonstrates that coaches see themselves as responsible for personal development outcomes including the 5Cs (Vella, Oades, & Crowe, 2011). However, this research does not identify how coaches work with participants to achieve these outcomes.

The recognition of participant diversity in the UK Coaching Framework, UK Coaching Model, and UK PDM suggests that one 'set' of coaching behaviours or practices may not be appropriate for all participant populations. To date coaching behaviour research has typically focused on two aspects: 1) observable behaviours of performance-oriented coaches such as instruction, feedback, encouragement, and organisation; and 2) the perceptions of athletes from a wide range of sports about pre-defined categories of leadership style and coaching behaviours. Although providing some insight into the behaviours of coaches, there has been no examination of the coaching practices deemed excellent by athletes and coaches across the participant populations. Furthermore, there has been only limited examination of why certain coaching behaviours are employed. Research is needed that identifies what coaches do and how this meets the needs of participants in differing participant populations. Therefore, it is timely that research is conducted to identify coaching practices that participants and coaches believe demonstrate excellent coaching at each stage of participant development pathways.

The purpose of the project was to identify excellent coaching practice along the participant pathway and identify areas for future research and/or education. The specific aims were:

Coaching behaviours and practices
- To identify examples of practices that participants and coaches believe demonstrate excellent coaching at each stage in the pathway
- To examine whether perceptions about excellent coaching practice differ along the pathway.

Future case study topics
- To develop a list of potential case study topics/themes that can be used to source examples of excellent coaching practice in the future
- To examine the case study preferences of coaches working with the participant populations.

2. Background Research

There is widespread recognition that quality coaching is a critical element in a high performance sport system (e.g., UK Sport) and is also integral for delivering and developing high quality sporting experiences that inspire people of all ages to get involved and develop through sport (e.g., **sport**scotland, sports coach UK). Despite this interest in quality coaching, a clear understanding of what excellence coaching practice is or should look like is yet to be established. Cross (1995) suggested that there is no 'best' model of coaching practice, even for the narrowly focused high performance level which was the focus of his research. Furthermore, he contended that many factors affect the type of coaching process that will be most appropriate at any time. Despite the recognition of the complexity of the coaching process (Lyle, 2002), researchers have continued to examine coaching behaviours and practice. Through this work researchers have described:

- coaching behaviours of successful coaches (e.g., Becker & Wrisberg, 2008; Cushion & Jones, 2001; Gallimore & Tharp, 2004; Smith & Cushion, 2006)
- effective coaching behaviours of expert coaches (e.g., Cote & Sedgwick, 2003; Cross, 1995; Dowdell, 2010)
- characteristics, career development and experiences of expert coaches (e.g., Hardin, 2000; Nash & Sproule, 2009; 2011)

The research examining observable coaching behaviours has demonstrated several key behaviours are common among successful coaches. These behaviours are:

- instruction - including instruction before, during and after specific parts of a session, as well as the use of demonstrations and questioning
- silence - a deliberate coaching strategy to promote learning and allow time for observation, analysis and monitoring performance
- praise – reinforcement of desired actions often linked with fostering a positive coaching environment.

In addition, to examining observable behaviours, Doug and Hastie (1993) indicated that effective coaches also observe, analyse, and synthesise information and modify their coaching to fit the situation and the needs of the athletes involved. Several studies have identified further effective behaviours of expert coaches including: planning, creating a positive training environment, teaching effectively, 'envisioned' excellence, individualisation, establishing positive coach-athlete relationships (Cote & Sedgwick, 2003; Cross, 1995; Dowdell, 2010).

This research has been conducted predominantly in North America and within professional or performance-focused environments. An exception is a small number of studies examining behaviours of football coaches in the UK (e.g., Potrac, Jones, & Armour, 2002; Cushion and Jones, 2001). How relevant these behaviours are to coaches working across a range of coaching environments remains largely unexplored. Furthermore guidelines based on behaviours alone may be limited because it does not consider the context in which the behaviours took place. Therefore, when examining what coaches do it is also useful to examine the coaching environment they work in. Aligning research to a NGB's player development model is one way to clearly link research examining coaching behaviour to the coaching environment and may allow for greater comparisons across sports. In addition to describing what coaches do it is also useful to understand why coaches behave as they do. Therefore, examining coaches' views about coaching philosophies, interpretations of the coaching role, prescribed or desired outcomes, and approaches to working with athletes can provide valuable insight into excellent coaching practice.

A related topic that has been the focus of discussion is coaches' expertise (e.g., Côté and Gilbert, 2009; Schempp & McCullick, 2010). Schempp and McCullick suggest that three elements contribute to the expertise of the coach: *experience*, *knowledge* and *skills*. They contend that expert coaches have extensive experience and knowledge base. As a result expert coaches are able to distinguish between important and unimportant aspects of performance, synthesise information and convey it in meaningful ways for others to comprehend and provide alternative means for presenting information when needed. Furthermore, expert coaches approach situations as opportunities to learn, apply skills and

knowledge, modify and adapt skills to meet challenges. In addition to experience and knowledge, expert coaches also possess highly developed coaching skills. These skills include: planning, decision making, problem solving, communication, and self-monitoring. As a result expert coaches are skilled at recognising similarities across situations and therefore can predict outcomes, make intuitive decisions, solve problems faster and with greater accuracy, and give attention to situations that are not preceding 'as predicted'.

Côté and Gilbert (2009) provide a different conceptualisation of expertise. They distinguish between coaches' expertise, coaching effectiveness, effective coaching, and expert coaches. They first define coaching effectiveness as "the consistent application of integrated professional, interpersonal, and intrapersonal knowledge to improve athletes' competence, confidence, connection, and character in specific coaching contexts" (p.316). In light of this definition of coaching effectiveness, Côté and Gilbert suggest that expertise is about a specific knowledge base coaches acquire. Professional knowledge refers to the 'how to' element of coaching. This is the content and the delivery elements of coaching. Interpersonal knowledge refers to coaches' social interactions, the coach-athlete relationship. Intrapersonal knowledge reflects coaches' ability for introspection and reflection, and their continued pursuit of improvement. Furthermore, an effective coach demonstrates the ability to apply this knowledge in their work with athletes such that learning outcomes are achieved. Where these outcomes are athletes' competence, confidence, connection and character, the coach would be considered to be demonstrating coaching effectiveness. Finally, when a coach demonstrates this effectiveness over an extended period of time they may be consider expert coaches. A strength of Côté and Gilbert's approach is that they recognise the importance of the coaching context in determining coaching effectiveness. Performance demands and athlete developmental level are considered the two most important elements of the coaching context. Effectiveness is applying knowledge in ways that are appropriate to the demands and developmental level of the athletes in a particular coaching domain. The conceptually grounded definition presents a promising direction for research in this area.

Focusing narrowly on research examining excellent coaching practice reveals little published research. In fact, a recent study of ten expert coaches from a range of sports (Nash, Sproule, & Horton, 2011) appears to be the only study with this specific focus. In their study Nash and colleagues found four key features of excellent coaching practice. These were:
- A long-term approach involving planning and a focus on athlete development.
- Practice sessions that closely simulated competition.
- A focus on creating a learning environment that was individualised and the coach was the facilitator.
- An emphasis on high intensity, high quality training.

These findings are a useful step in exploring the nature of excellent coaching practice, however, the coaches in this study were all coaching at a representative level. Therefore, the findings may only be applicable to other performance or perhaps talent development coaching environments. Further research is needed that examines excellent coaching practice across the participant development model.

3. **Hockey Coach Development Model for Great Britain**

In the coach development model five coaching environments have been identified:
- Children 5-11 years. These are children participating in junior club or school hockey activities.
- Youth 12-18 years. These are young people involved in school or club activities that are not linked to the performance player pathway.
- Adult participation. These are individuals over 18 years involved in club sessional hockey for participation purposes.
- Talent development. These are athletes participating in performance player/club environments.
- High performance. These are athletes competing at the elite level.

4. Methods

4.1 Participants

The participants were coaches (N=16), athletes (N=23) and support staff and parents (N=13).

Coaches. Three to four coaches from each of Hockey's 5 participant populations were interviewed (See table 1 for details). All coaches participating in the interviews were experienced in working within a specific participant population (minimum 3 years) and had been recognised by Scottish Hockey for the quality of their coaching practice with specific participant populations. In addition, potential participants were identified for their consistent demonstration of elements of excellent coaching practice that Scottish Hockey considered appropriate to each coaching environment. For example, coaches in the high performance coaching environment were also identified for their performance success. Coaches in the talent development and youth coaching environments were identified for their demonstrated ability to consistently develop players who moved along the player pathway. Coaches in the adult participation coaching environment were identified for their consistent efforts in long-term player retention and development. Coaches in the children coaching environment were identified for their enthusiasm and ability to consistently provide a positive first experience in hockey that fostered the desire to continue to participate in the sport. The coaches who participated in the study had on average 18 years coaching experience and 14 years experience coaching a specific coaching environment.

Table 1. Coaches' demographic information.

Pathway	Gender	Coaching Experience (years)	Coaching in Specific Environment (years)	Highest Coaching Level	Code
Children	Male	16	12	National senior	ChildCoachM1
	Female	20	20	Youth	ChildCoachF1
	Male	8	8	District age group	ChildCoachM2
Youth	Female	30	30	National Senior	YouthCoachF1
	Female	12	12	Regional age group	YouthCoachF2
	Male	20	20	National senior	YouthCoachM1
Adult Participation	Male	35	35	National senior	AdultCoachM1
	Male	14	11	Club NHL2	AdultCoachM2
	Female	12	12	Club NHL2	AdultCoachF1
Talent Development	Male	12	5	National U16	TDCoachM1
	Male	14	3	National U18	TDCoachM2
	Male	16	3	National U18	TDCoachM3
	Male	20	20	National senior	TDCoachM4
High Performance	Male	35	9	National senior	HPCoachM1
	Male	24	15	National senior	HPCoachM2
	Male	20	9	National senior	HPCoachM3

Athletes. The athletes participated in one of 5 focus group interviews. There was one focus group for each participant population from the Scottish Hockey pathway (i.e., children, youth,

adult participation, talent development, high performance). Between 4 and 5 athletes participated in each focus group. All participants had participated in their sport for a minimum of 3 years (except two participants from the children context who had only participated for 1 year). See table 2 for details.

Table 2. Athletes' demographic information.

Pathway	Gender	Playing Experience (years)	Playing Experience in Specific Environment	Code
Children	Female	1		ChildAthleteF1
	Female	1		ChildAthleteF2
	Male	3		ChildAthleteM1
	Male	4		ChildAthleteM2
Youth	Female	4		YouthAthleteF1
	Female	5		YouthAthleteF2
	Female	4		YouthAthleteF3
	Male	3		YouthAthleteM1
	Male	2		YouthAthleteM2
Adult Participation	Male	15	15	AdultAthleteM1
	Male	14	4	AdultAthleteM2
	Male	24	7	AdultAthleteM3
	Male	14	3	AdultAthleteM4
	Male	27	27	AdultAthleteM5
Talent Development	Male	7	1	TDAthleteM1
	Female	3	1	TDAthleteF1
	Female	6	2	TDAthleteF2
	Female	6	2	TDAthleteF3
High Performance	Male	15	9	HPAthleteF1
	Male	10	4	HPAthleteF2
	Male	16	9	HPAthleteM1
	Female	19	8	HPAthleteM2
	Female	13	6	HPAthleteM3

Support Staff and Parents. Four additional focus groups were conducted to enhance the depth of understanding of excellent coaching practice. These focus groups involved:
- tutors and assessors (two focus groups)
- NGB support staff (Managers and mentor) (one focus group)
- parents of athletes in the youngest participant population (i.e., children) (1 focus group).

4.2 Interviews and focus groups

Semi-structured interviews and focus groups were employed to gain an in-depth understanding of the participants' views on excellent coaching practice. The interviews and focus groups were semi-structured to provide rich, thick description of the participants' experiences (Burgess, 1982; Fontana & Frey, 2000). In keeping with a semi-structured interview and qualitative research protocol, the interviews and focus groups were conversational in nature. This process allowed for rapport to be developed between the interviewer and participants and supported the expression of the participants' point of view (Burgess, 1982). Focus groups also allowed conversation and discussion among participants to develop enabling participants to question, comment and interact with each other. The number of athletes in each focus group was kept small to allow for meaningful discussion within the groups and to encourage participation (Madriz, 2000). Discussions in the interviews and focus groups focused on topics such as the participants' perceptions of excellent coaching practice within and outside training and competition and differences for male and female athletes. The coaches were also asked about their learning experiences. Example questions included:
All participants

- What does excellent coaching practice look like?
- Describe an example of excellent coaching practice?
- What happens in an excellent training session?
- What happens outside training or competition that is an important part of excellent coaching practice?
- How does excellent coaching practice differ for male and female athletes?

Coaches only
- How did you develop some of your excellent coaching practice?
- What opportunities would be useful for coaches to develop excellent coaching practice?

Younger athletes
- What do you like most about your coaching sessions?
- What do you like most/least about your coach?
- What has your coach done that has helped you the most/least?
- What would you like your coach to do more/less of?

4.3   Procedure

Approval to conduct the study was granted by the School of Sport Research Ethics Committee, University of Stirling. The interviews and focus groups took place in locations convenient to the participants. They lasted between 20 and 80 minutes. All interviews and focus group were audio recorded and transcribed verbatim. To protect participants' anonymity they were each given a code describing their context, gender, and indicating whether they were a coach or an athlete (see tables 1 and 2).

4.4   Data Analysis and Reporting

The transcripts comprised 194 pages of single-spaced text. The transcribed data were coded and thematically organised using the qualitative research software system NVivo. Initial themes for coding were developed by the Principal Investigator who was familiar with the coaching literature on coaching practice and who had conducted approximately half of the interviews and focus groups and one other member of the research team. These initial themes were reviewed by each member of the research team and refined. The data were coded under 18 first order themes. These were then reviewed and refined by the research team to develop the final four higher order themes with 9 lower order themes relating to excellent coaching practice and one higher order theme with 5 lower order themes relating to coaches' learning and development. Members of the research team each created a summary of excellent coaching practice for one of the five coaching environments on the participant pathway. These summaries were reviewed by the research team and comparisons of excellent coaching practice were made across the five coaching environments. A similar process was followed to describe the coaches' learning and development.

The findings are organised into three sections:
- excellent coaching practice environment summaries
- excellent coaching practice comparisons along the sporting pathway
- learning and development of excellent coaching practice.

5.   Excellent Coaching Practice Environment Summaries

Four higher order themes were developed to assist in organising the volume of data generated on excellent coaching practice. These themes were Direction/Emphasis, Social Context, Management and Organisation, and Implementation. Direction/Emphasis captured the coaches understanding and awareness of a broader view of the coaching process. This theme included 2 lower order themes: outcomes and 'the bigger picture'. The Social Context theme represented the wider interpersonal context that shapes the coaching process. This theme included 2 lower order themes: group environment and coach-athlete relationships. The Management and Organisation theme captured the activities that inform and impact upon the

coaches' work with athletes but do not directly involve the athlete. This theme included 2 lower order themes: programme management and session content. The Implementation theme reflected the activities and skills when working directly with athletes and captured the interpersonal nature of coaching practice. This theme included 3 lower order themes: working with athletes, delivery, and intervention skills. It is important to note that although each theme is presented separately there is overlap and inter-play between them. The themes are summarised in the table 3.

Table 3. Excellent coaching practice emergent themes.

Higher order	Lower Order
Direction/Emphasis The broader view of the coaching process including outcomes and player pathway.	**Outcomes** Outcomes of the coaching process which are important to coaches and athletes.
	'The Bigger Picture' Recognition of the broader view for player development and balancing life and hockey.
Social Context The broader interpersonal context that shapes the coaching process.	**Group Environment** The environment the coach fosters for athletes and wider hockey environment such as club/school.
	Coach-Athlete Relationship Nature and importance of coach-athlete relationships.
Management and Organisation Activities and skills that impact on coaches' work with athletes but do not directly involve the athletes.	**Programme Management** Activities and skills to prepare for working directly with athletes.
	Session Content What coaches include in sessions.
Implementation Activities when working directly with athletes. Reflects the interpersonal nature of coaching practice.	**Working with Athletes** Coaches' general approach to working with athletes.
	Delivery How sessions are delivered.
	Interventions skills Skills and activities when working directly with athletes in training and games sessions such as observing, analysing, providing feedback.

5.1 Children Coaching Environment

All four high order themes were described as important features of excellent coaching practice in the children coaching environment.

5.1.1 Direction/Emphasis

In this higher order theme there were two lower order themes that were important for the children's coaching environment. These were the outcomes that were considered important, and 'the bigger picture' of coaching.

Outcomes. The children involved in the study all indicated that fun was an important outcome of excellent coaching practice. They said that 'having a laugh' during the session was important to them. The coaches echoed this sentiment endorsing that excellent coaching

practice should lead to sessions that were fun for the athletes in order to keep them interested and involved in the sport. One of the coaches stated:

> I think for me the elements that make up good coaching practice is making the sessions fun so what we are aiming to do is engage the youngsters so they will take part in the sport and give what they can to it. (ChildCoachM2)

The coaches believed that getting the whole family involved and selling hockey as a 'family package' was another way to keep the children involved in the sport. The coaches also identified that excellent coaching practice in this context was about developing the athletes rather than about winning. For instance, one of the coaches said:

> Sometimes they are on the winning side and sometimes they are not but actually most of the time the score doesn't matter it is the quality of what they are doing and they are getting the feedback in a positive way. (ChildCoachM2)

However, one of the coaches suggested that developing the will to win was still important. This coach stated:

> I think the will to win is important. Winning for the kids is more important than to the coach, they like to win and I want them to like to win. If we lose that is ok. You can't be a coach who wins at all costs with kids. (ChildCoachM1)

The parents interviewed in the study had a similar view and suggested that the concept of development over winning was important. One of the parents stated:

> I think the way we do it here is good. [Another club] they are more competitive whereas kids from our club they are yeah if we lose we lose but we will try our hardest and they are not up nor down about it. You can see other clubs it is a hardship to lose and even the coaches take it bad. (ChildParentM1)

The parents also believed that developing team work was an important outcome of excellent coaching practice. For example, a parent stated "the kids seem to play more of a team now, they seemed to have grasped that whereas with other clubs they have this one player and that is the team and the others are standing about" (ChildParentF1).

'The Bigger Picture'. The coaches in the children's context believed it was important to know the next steps in the player development pathway in order to provide advice and help to the players on how to progress further. This is reflected in the following statements:

> You need to know the next step on the pathway as in who would they go to next. Maybe getting a coach come down to one of your own sessions so they can see where the next step is. (ChildCoachF1)

> It is your responsibility that child or family know where to go next because if they are not from a hockey background they won't know where their local club is or the next development session is so not to let them drift away. (ChildCoachF1)

In summary, the direction/emphasis theme indicates that excellent coaching practice for the children's coaching environment:
- is fun, family oriented, and develops team work
- focuses on development over winning
- promotes continued involvement in the sport and guides progression through the player development pathway.

5.1.2 Social Context

In this higher order theme there were two lower order themes that were important for the children's coaching environment. These were the group environment and the coach-athlete relationship.

Group Environment. This lower order theme encompasses the environment the coaches try to create for excellent coaching. The coaches agreed that the environment had to be fun and happy and one which emphasises learning. For instance a coach stated "Ideally I want an open happy environment that people are prepared to go out and practice, try things and learn from themselves, listen to input and carry it out" (ChildCoachM1). The coaches also believed that for this context it was important to have the same coach lead the session each week to ensure consistency and because the young age group 'like a familiar face'. This was echoed by the athletes as they indicated that they liked to know the coach. The parents stated that they preferred the hockey environment over other sports because it was friendly, relaxed and all the children were included. This is emphasised by the following comments:

> Another thing I like about the hockey because you are so close to these football grounds, the parents can get involved to encourage and there is a lot of sportsmanship to it. With the football there is cursing and swearing of these parents in the background saying all sorts to their kids whereas here it is a relaxed manner, everyone is friendly and that is something I like. (ChildParentM1)

> I think the coaches are good here and the fact they encourage and make kids welcome whereas in the basketball I think if you weren't as good as they expected you to be then you are left aside. Here they try to bring everyone in. (ChildParentF1)

Coach-Athlete Relationship. This lower order theme captures the importance of the interpersonal aspect of excellent coaching practice. The coaches believed that excellent coaching practice involved getting to know their athletes. A first and crucial step in this process was to learn their names. Following this, it was important to build a rapport with the children, ask them questions, listen to them, and get to know them as individuals. This is reflected in the following responses "I think the element of being able to relate to the individual players and get to know individual players, not as hockey players but as individuals" (ChildCoachF1), "Ask them questions or have a conversation with them" (ChildCoachM1), "I think the one thing that is important is to learn their names. It makes a huge difference" (ChildCoachF1), and "It is fine talking about long term player development but what we need is long term player relationships, they know they can phone, they know they can talk because they know me and the others" (ChildCoachM2). The coaches go onto say that a way to build up these relationships is to have the same coaches and helpers attending on a regular basis.

The athletes in this context identified that they wanted to get to know their coach and they liked coaches who can chat to them both on and off the pitch. For example, a player stated "Not just on the training pitch but when we are walking around the school they are like hi, they talk to you, have a conversation. Even at some tournaments they will see you and come and talk to you" (ChildAthleteM3).

In summary, the social context theme indicates that excellent coaching practice for the children's coaching environment:
- creates an environment emphasises learning and development, is fun, and inclusive
- develops a rapport and a relationship with the athletes.

5.1.3 Management and Organisation

In this higher order theme there were two first order themes that were important for the children's coaching environment. These were the coaches' programme management and the session content.

Programme Management. The coaches agreed that planning and organisation were important elements of excellent coaching practice. The coaches believed that a great deal of planning and organisation was needed for this context to ensure that the sessions were fun, safe and helping to develop the players. One of the coaches suggested that the level and depth of planning may depend on the experience of the coach. For experienced coaches, they may have a general plan for what they aim to work on daily or weekly but they do not need to write down each specific drill. The coach remarked:

> For me with 15 years experience the planning might be today we are going to work on the slap hit and I might make a few key notes to myself about the slap hit but then the individual drills that I will do on that day they don't really need to be written down, they are in my experienced head and it is about plucking the right drills out for the right group at the right time. (ChildCoachM1)

Session Content. The athletes in this context agreed that sessions should be fun and exciting but still focussed on learning. They indicated that they enjoyed learning new skills during the sessions. This is reflected in the following comments: "I like my coach to teach us skills every week so every week we are learning new skills, that makes it fun" (ChildAthleteM1) and "It has to be fun but don't take it so far that you are not learning anything" (ChildAthleteM3). The athletes also indicated that they liked the sessions to involve competitive games. The competitive aspect of the sessions was also identified by the coaches. One coach stated "You need a game element to keep them motivated. A lot of the players love your 2 v 2 ladder so if you win you move up and if you lose you move down" (ChildCoachF1).

Adaptation was also identified by the coaches as an important element of excellent coaching. They believed that coaches should adapt drills regularly to keep the athletes' concentration. As one coach explained:

> Yeah they have a very short attention span so the really young, the primary fives and sixes, it is maybe five minutes a drill and then after that they have lost concentration. Unless you can change the drill, it may have the same theme, but change the drill every four or five minutes they are away with the fairies. (ChildCoachM1)

In addition, coaches should be ready to adapt to the demands of the situation such as if there are more or less players than expected, the session is not going as planned, or to provide opportunities for repetition without feeling repetitive. Responses from the coaches and tutors included:

> in terms of excellent coaching it is being able to adapt quickly to the environment you are working in. (ChildTutorF1)

> Yeah you have to be confident though and not be scared to think oh yeah lets change that. And it is not feeling threatened that you have not done what you were meant to do. (ChildCoachF1)

> If you have made a bad lesson, too advanced or whatever, it is about always being willing to adapt it. (ChildCoachM1)

> I think that is part of the skill of coaching, how you are able to adapt simple objectives but disguise it in a different form. (ChildTutorM2)

In summary, the management and organisation theme indicates that excellent coaching practice for the children coaching environment:
- is organised and planned
- emphasises fun, competition, and promote learning
- adapts to the situational demands and individual needs.

5.1.4 Implementation

In this higher order theme there were three first order themes that were important for the children's coaching environment. These were the working with athletes, delivery, and intervention skills.

Working with athletes. This lower order theme captures the coaches' general approach to working with athletes. The coaches believed that in the children's context a large amount of tactics and technical detail were not needed. The priority at this stage was getting them playing and having fun. This is reflected in the following statements: "I don't think tactics or specialist plays or you are a full back or you are right midfield is important either. I just think they need to be on the pitch playing" (ChildCoachM1), "Get them in game first and once they are here you want them to keep them in the sport so you want it to be fun and safe, get them running, get them to socialise, bringing in teaching points as you go but not to overdo it" (ChildCoachF1), and "We all use humour and there is a lot of laughter. I think it is about not pressing the point for too long and getting some light relief into the session" (ChildCoachM2).

Delivery. The coaches believed that questioning and listening was an element of excellent coaching practice. For example one of the coaches stated:

> I am an absolute believer that you have to listen to your students or pupils. The reason I do it so to understand what they are thinking. I need to know what you saw, thought you saw, are thinking so I can understand where you are coming from so I can correct it, change it, agree with it. Quite often they will hit a good shot and I will ask why was that good? (ChildCoachM1)

Questioning was seen as important in order to get the athletes to think for themselves. One of the coaches referred to this as a 'decision rich process' as he believed the athletes need to think about what they are doing and the decisions they are making. Comments from the coaches included:

> If you keep telling them what to do then they end up robots and then if something goes wrong they won't know what to do. Get them to explain what to do, saying how do you adapt to it? (ChildCoachF1)

> Most practices should be decision rich. Let's make a decision, why are you doing that, why did you pass it to that player? You need that from a young age. It is ok starting with a closed practice then say adding in a defender to make it an open practice and now they have decisions to make. That is the biggest issue I have with coaching in this country it is not decision rich. (ChildCoachM1)

> I think it is fine doing a bit of teaching but we try to do is get the kids to start to think for themselves so you might pose them a problem, go away in a small group and see what you can try and do about shooting. (ChildCoachM2)

The parents believed that players should be split up into smaller groups in order to receive more attention and feedback. One of the parents stated: "I think small groups helps, gives them more time with the ball and it is repetition as well that builds the skill. If you just do it a couple of times you won't learn it" (ChildParentF2). This was echoed by one of the coaches as he believed that excellent coaching practice did not just rely on one coach instead a group of helpers/coach leaders are needed to deliver a session. This allows the children to spilt into smaller groups and get more attention. This coach stated:

> The crucial thing is to have enough helpers and people around with a sufficient knowledge that they can translate your plans into practice. On a Saturday we have an average of 40 kids so we would usually have a compliment of four or five adults and four senior secondaries so we can break into five groups and so there are lower numbers to work with. (ChildCoachM2)

Intervention skills. This lower order theme addresses the skills that coaches use when working directly with athletes during training or games. The coaches believed that excellent coaching practice was providing players with individual feedback to correct their errors. For example, a coach stated:

> The only individualisation they get is when it comes to error correction because they all have different errors. For one drill a group may not have their hands together for the hit so they need to do that. Another group may have their hands together but swing the stick way up so they may need to do something different. (ChildCoachM1)

The coaches agreed that the feedback should be positive and constructive in nature. The athletes echoed these sentiments as they suggested that an excellent coach provides feedback individually, helps correct technique, and provides demonstrations to increase their understanding. The athletes agreed that this feedback should be constructive as they did not like it when a coach "shouts at them". For example, one of the athletes stated: "If you are not quite doing something right then he won't shout at you. He will take you to the side and show you what you are doing wrong instead of shouting at you." (ChildAthleteM3)

In summary, the implementation theme indicates that excellent coaching practice for the children coaching environment:
- provides athletes with individual feedback
- involves questioning and listening to promote understanding.

5.2 Youth Coaching Environment

The summary of coaches' and athletes' perceptions of excellent coaching practice in the youth coaching environment is organised into four higher order themes: Direction/Emphasis, Social Context, Management and Organisation, and Implementation. Within each higher order theme there are a number of lower order themes that focus on specific elements of excellent coaching practice.

5.2.1 Direction/Emphasis

This higher order theme represents the focus of the coaches working in this environment and what they emphasised in general. In this higher order theme 2 lower order themes were important for the youth coaching environment these were: outcomes and 'the bigger picture'.

Outcomes. The athletes in the study were unanimous in suggesting that enjoyment was the important outcome of excellent coaching practice. This was so they would be motivated to continue to engage in the sport: "You want to turn up. You don't think I am going to skive… Because you enjoy it. Everything is enjoyable." (YouthAthleteF1). The coaches echoed this sentiment endorsing that excellent coaching practice should lead to sessions that were fun for the athletes, however, they elaborated on this suggesting that they should also lead to learning and improvement for the athletes, that this could involve hard work but that this learning should be fun. One coach explained it this way:

> I think fun, the ability, particularly at the young age, to make whatever the young players are learning fun because that way you are going to keep people in the sport but also the ability to pick out key skills and develop them so youngsters feel like they are making improvement. (YouthCoachF1)

Excellent coaching leading to the development of solid basic skills, confident athletes, and getting the best from the athletes were also seen as important outcomes of excellent coaching practice. These coaches felt that the best coaches should be working with younger athletes to ensure that athletes developed high quality skills early in their playing careers. YouthCoachF1 said:

I mean where should your best coaches be? Your best coaches should be with your beginners because that's where they start developing their skills… we are developing good skills… as early as we can so trying to avoid getting into bad habits and then it is difficult to change.

'The Bigger Picture'. This lower order theme encompasses the broader management and co-ordination that coaches felt was a critical part of excellent coaching practice. For the coaches working in the youth coaching environment this meant having a clear overall programme for development whether that be through a school or club system or across the whole player development pathway. This programme should outline the progressions in skills and abilities but should also be flexible so that coaches were able to adapt to the development needs/stages and progressions speeds of their athletes. YouthCoachF1 explained:

We have a programme which says here are the fundamental skills we want them to do at this age and as they step we will build on it and take it forward… But there is flexibility… you have to have that because I don't know how quickly players are going to develop. If they are moving quicker than planned then we have got to move with them.

An important aspect of this programme was that it enabled coaches to 'see' where their work was heading, what they were aiming for. Knowledge of the skills and principles being delivered at the national level was important for this understanding of the 'bigger picture' of athlete development. One coach stated: "If you spent time with the youth squads, and then you spent time with the seniors and the finished product, when you went back down you knew what you wanted to make at the end." (YouthCoachM1)

Another aspect of 'the bigger picture' theme that was considered to reflect excellent coaching practice was working with athletes to balance expectations over training volumes, and other aspects of their lives such as school work, other sport commitments, and social commitments. One coach explained:

We are constantly battling the volume of what we do because they get pulled in lots of directions… it is unfair to ask them to make these decisions because they just want to keep everyone happy… So you have to look after them and say no you are not going to that session today. (YouthCoachF2)

In summary, the direction/emphasis theme indicates that excellent coaching practice for the youth coaching environment:
- leads to learning that is fun
- is guided by a clear 'big picture' of athlete progression along the player pathway, emphasising early development of high quality skills and knowledge
- involves balanced expectations.

5.2.2 Social Context

In the youth coaching environment this higher order theme captured 1 lower order theme: the importance of coach-athlete relationships within the social context of the coaching process.

Coach-Athlete Relationship. This lower order theme captures the importance of the interpersonal aspect of excellent coaching practice. Youth athletes agreed that the coach needs to be approachable, friendly, and fun. Someone who talked them and got to know them as individuals, someone that they could speak to about anything, who made time for them and genuinely wanted see them to succeed. One athlete explained: "I wanted to perform well, I wanted to do it for [coach] because she does so much for us and you want to do it for her." (YouthAthleteF3).

The coaches agreed that spending time with each athlete, taking an interest in them as people, and encouraging input, ownership and responsibility for their development in hockey were

important features of excellent coaching practice when working in the youth coaching environment. YouthCoachF1 described her approach in this way:

> I think I just work hard to be able to make sure that I spend time with every single person in the team at some point… being able to get the best out of the player and the team because I have tried to spend time with them.

In summary, the social context theme indicates that excellent coaching practice for the youth coaching environment:

- develops positive coach-athlete relationships where athletes have input and ownership and coaches are interested, approachable, and fun.

5.2.3 Management and Organisation

This higher order theme focuses on the activities and skills coaches engage in as they prepare for their work with athletes, however, it does not directly involve the athletes. Important lower order themes for the youth coaching environment were: programme management and session content.

Programme Management. The athletes felt that coaches should 'turn up prepared' and demonstrate that they are putting as much effort in as the athletes are expected to put in. The coaches also indicated that planning and organisation were important skills that contribute to excellent coaching practice. All the coaches discussed having a season (or longer) plan as well as plans for blocks of sessions and individual session plans. Furthermore, a process of reflecting on sessions, games, and the whole season was important to inform their planning. YouthCoachF2 described her management skills in this way:

> I maybe do a block of four weeks of attacking skills and a few weeks of defensive skills so try to treat it in blocks so you are not jumping from one theme to another so you are building up the theme….I would keep the common theme but at the same time address the issues that came out of the weekend [games]. Working with the younger groups I might forget about the issue at the weekend and continue with what I planned and look at it more as a whole… avoid letting one game taking me away from the path that I set out because they are still young and they are just developing their game. As they get older and they have a basis of a good game then I would probably look at it and be more reflective on the games.

All coaches felt this level of planning was important to ensure continuity across sessions and that athletes made progress through the season. As one coach said:

> I would still want to see some of those threads washing through,… the continuity of working on certain things we are not going to panic and fire fight. Otherwise you will finish the year and how much have you moved the group on? (YouthCoachM1)

However, all the coaches were also adamant that flexibility and adaptability during sessions and across sessions was critical to excellent coaching. For example, one coach discussed how he 'built in' flexibility so that he could adapt the session in accordance with how the athletes were responding to the session:

> I think we try to cover less, don't tie yourself down by saying Tuesday has to be hitting but say hitting is going to be something we work on and there are a variety of ways we can do that. Don't be quite so precise on it, we can maybe do something else today if it is not working and come back to it. Especially with kids, you get days that you do all the best work and it just doesn't work so be smart adapt and change or call it quits and have some fun, leave the serious stuff, we have now until Easter to work on it. (YouthCoachM1)

Session Content. When talking about their training sessions athletes agreed that their sessions were fun and never boring and as a result they always looked forward to going to training. Several of the aspects of training that the athletes felt reflected excellent coaching practice were incorporating fitness work into hockey drills rather than doing fitness separately, progressions in the difficulty of the tasks through the session, clear links between games and training both with regard to content and also intensity, and inclusion of competitions that again encouraged them to work as they would in a game. One athlete commented:

> When you bring match play into training, like 2 v 1s, 3 v 2s, that is good. It lets you incorporates all the skills that you have learnt into it without being totally serious. (YouthAthleteF3)

The coaches also reinforced the importance of progression and periods of game-like intensity and pressure. This content is emphasised in the following comments:

> Absolute key is progression. If we do the same thing the whole time then they will just be bored and they won't be bothered so we need to make sure that we keep adding to it and taking that on so they are aware that they are being pushed. (YouthCoachF1)

> I try to avoid information overload. Start off by letting them see what the skill looks like so give them a demonstration so they have an idea of what the whole skill looks like and what they are striving to achieve and then I would break it down into simple parts and ask them to go away and practice these with no pressure on them. Give them time to practice on their own and allow them time to get feedback from themselves, their partner or me. So it a relaxed stage so they don't feel they have to perform, they can just focus on the technique. Once they build it up I would look to put it into a bit more of a pressured situation before I would put them into a game situation. (YouthCoachF2)

> The way to work with that age group is 70 to 80% intensity for a long time and then now and again we turn on the lights and say right for 20 minutes we are going to do this flat out. (YouthCoachM1)

Although progression was considered critical, the coaches also recognised that when working in the youth environment they needed to balance progression and continuing to challenge athletes with spending 'enough time' on basic skills. As one coach commented: "So we need to do things a lot longer with the youth players and the kids want to move on so the challenge is to make it interesting or different or revisiting it." (YouthCoachM1)

In summary, the management and organisation theme indicates that excellent coaching practice for the youth coaching environment:
- involves planning for sessions, blocks of sessions, the season, and beyond
- provides more time and space to perform skills
- emphasises progression in the complexity of skills
- is flexible and adaptable to meet athletes' needs and rate of progression
- develops solid basic skills and decision making.

5.2.4 Implementation

This higher order theme focuses on the direct intervention work with athletes, particularly in training and competition sessions. Important lower order themes for the youth coaching environment were: working with athletes, delivery, and intervention skills.

Working with Athletes. This lower order theme captures the coaches' activities and general approach to working with athletes during training and competition sessions. In different ways each coach believed that excellent coaching practice was about setting the stage for learning

by being enthusiastic, engaged and ensuring that the athletes were not scared to try things. YouthCoachM1 described his view in this way:

> kids need to be in an environment where they think they can flourish... I think it comes down to being engaged with the kids… genuinely engaged and the big thing for me is enthusiasm… you set the tempo, you decide the speed we are driving at and if you can't be bothered then it is not going to go very well. Being physically engaged, in the middle of it, I hate seeing coaches on the edges of the pitches shouting. You have to be in the thick of it and when you are in the thick of it then it is great. The enthusiasm and knowing your players and engaging with them are important. All you have to learn their name and use it three times and they will love you.

The athletes referred to the sort of coaching they did not like. This included coaches who were overly competitive and reacted to athletes' mistakes by not speaking to them, taking them out of the game, or giving physical punishments. They also did not like coaches that shouted a lot or provided mostly negative comments.

The coaches indicated that excellent coaching practice should encourage athletes to have input and take ownership and responsibility for their development and their performance. For example, even the younger athletes in this age group could be involved in setting targets for what they wanted to improve on over the season. One coach explained her approach:

> Our 17 and 18 year olds as adults, it is much easier to sit down with them and set goals and they can take ownership with that whereas the younger age need a lot of guidance on it but it is something that we can still do. (YouthCoachF1)

The coaches worked to create an environment where athletes felt comfortable to ask and answer questions. This was considered critical to ensure they were developing thinking, creative athletes who understood what they were doing and could make decisions in play situations. The coaches often adopted a guiding role in this process allowing time for learning to occur. YouthCoachF2 this example from her experiences:

> If they are used to me doing everything and then they will expect me to do that in a game as well whereas I want them to make decisions… I try to get them to discuss scenarios so what if a team were playing three at the back what do you do? So they know what to do and if it happened in a game I would want them to react to what they see rather than me calling do this… If they have not reacted then I would give them a help. Maybe say what do you do if they are four at the back or how many defenders do they have? So question and answer rather than me instructing them so they know why they are doing it rather than doing what I say… It is difficult as a coach because you recognise something but you need to hold back a little to see if they recognise it for themselves.

The coaches had differing opinions about whether coaches needed to work differently with girls and boys. One coach had primarily worked with girls only so was unable to make comparisons. The other two coaches recognised that girls and boys interact quite differently amongst themselves, however, one of these coaches did not think this changed the way she worked with the athletes:

> It does not make a difference because I still believe that if you are positive with the boys that will continue to develop. It may be that you can be a little bit harder on them but I don't think my coaching style is any different with the boys and the girls. But I do recognise that there are differences in how they interact. (YouthCoachF1)

The other coach was adamant that you needed to work differently with boys and girls. For him the difference was in relation to the amount of information athletes desired. He explained:

…girls need much more information than boys, they need much more of the picture… the girls need it earlier, boys can be just about to step on the pitch and you can give them some information. That would spook female athletes, they would need that before the team meeting… Boys you can tell them straight off, Charlie you are not centre back today and he would say ok, you would never do that with females. (YouthCoachM1)

Delivery. The athletes' comments on delivery focused on coaches not shouting, being able to provide clear explanations and breaking a "skill down into the basics but also make it more complicated" (YouthAthleteF2). The coaches described that using a variety of delivery methods was a feature of excellent coaching practice. For example, they used:

- explanations, demonstrations, interactive board work, and discussions
- provided information in short, focused pieces
- created drills that had clear links to game play
- provided time and space for learning to occur
- used competitions and game-like play for fun, challenge and to promote learning
- individualised their delivery
- checked for understanding and learning.

Several of these features of delivery are illustrated in the following quotes:

It might be that I get an older player to come along and have a demonstration. So I might say this is one of our Scottish players or best players in the school and they come along and do a demonstration of a fancy skill they can do and that can inspire the other kids. (YouthCoachF1)

We almost want to do things over a longer area, tight skills is more senior level, you have less time and space as you get better. A bigger area they have more time to do things, if they mis-trap they have 3 or 4 paces to get control of it. I think too many people working with youth cone off area and make pitches too small. (YouthCoachM1)

One of the problems we have is doing a skill in isolation, say a 2 on 2 and we say how we want you to beat these 2 players is by this and then we put down 4 cones and they do it up and down the pitch and they do it perfectly. Then we go play a game and firstly they don't realise because it is not coned off so they don't recognise now is the time to do it. (YouthCoachM1)

Also putting them into fun games so maybe some conditioned games where they have to do certain things or sometimes we do team races or relays if we are focussing on a certain skill so to get that element of competition. (YouthCoachF1)

I would say that they have to get it wrong first, don't step in, let this become really obvious and then correct it. Plus part way through the process hopefully they will correct it themselves and surely self correction is better… Particularly at youth level we need to give them a lot more time before we correct them. (YouthCoachM1)

Intervention Skills. This theme describes the skills coaches use in their work with athletes, during training and competition sessions. The athletes felt coaches needed to be able to provide clear explanations, notice when they did something well, and when something needed improvement coaches should provide encouragement, constructive feedback, and opportunities to discuss and work on it so that they could learn. This is illustrated in the following quotes from two of the athletes:

He explains it really well and everyone knows what they are doing. He will show us what to do and he will show us an example. (YouthAthleteM1)

When you are on the pitch and you do something wrong but the next time you do something good and the coach says really well done, that means so much. (YouthAthleteF1)

The coaches described clear instructional processes, a focus on reinforcing good things and what athletes needed to do rather than what was wrong. A number of the intervention skills that are important for excellent coaching practice were summarised by one coach in this way:

Excellent practice is being able to observe, pick out things for each individual, give them key points, get them to work on it and then at the end of it give them feedback that they have done something well so that they are motivated, they are desperate to come back because they are learning. YouthCoachF1

The coaches also discussed the importance of observation as part of reflection-in-action which enabled them to adapt sessions as they went. One coach said: "sometimes it is really worthwhile to step back from the session and observe it… Sometimes if you are right in the middle of it you can't really see what is going on." (YouthCoachF2). Another coach identified what he was observing during this process and what he would do:

Firstly, you are watching the technical execution and you can see when things are physically breaking down or not working and then you can adapt time and space to make it easier. The other thing that maybe comes with experience is the physical demeanour, body language and attitude of players, calling positive, encouraging each other as opposed to slouchy shoulders or you go next… If it was technical you would try to adapt before changing because it may be the layout, you may just need to take a pass out or something so with a tweak we can make it fly. If it is attitude then we need to think what is wrong with the group, have we done too much over the weekend, have we given them a break, has someone had a fight in the changing room. At that age they love playing hockey, they just want to play so it has to be something to make them not want to do it so when you pick up those vibes then your man management comes in to work out what the hell has happened. (YouthCoachM1)

In summary, the implementation theme indicates that excellent coaching practice for the youth coaching environment:
- encourages athletes to take ownership of their development
- conveys enthusiasm and a genuine desire for athletes to be the best they can be
- involves well developed interactive instructional techniques such as explanation, demonstration, discussion, observation, positive constructive feedback, and reflection
- provided time and space for performing and learning
- use competition and game-like play for fun and learning.

5.3   Adult Participation Coaching Environment

This section presents a summary and analysis of the interviewees' responses about coaching practice in the adult context. All four higher order themes were described as important features of excellent coaching practice in the adult participation coaching environment. These were: Direction/Emphasis, Social Context, Management and Organisation, and Implementation.

5.3.1 Direction/Emphasis

This higher order theme represents the focus of the coaches working in this environment. In this coaching environment 2 lower order themes were important elements of excellent coaching practice. These were: outcomes and 'the bigger picture'.

Outcomes. The coaches and athletes emphasised the nature and importance of the environment in which adult sport should take place. The main outcomes for adult participants were 'enjoyment' and 'fun', although there was also a desire for a serious commitment to participation in sport at the adult level. There was a desire for hard training sessions and expectation of 100 per cent commitment. Importantly there needed to be a balance between serious engagement in the sport and fun. For example, there is an accepted rule that athletes should not go out on Friday evenings (before a match), the implication being that they will be more able to compete for the team on match day. The coaches are considered important to creating and maintaining the appropriate balance:

> It has to be an environment where people enjoy themselves. We are all amateur sports people, we are all doing the sport because we enjoy it and you would want everyone to enjoy it whether it was training or a match. …I find its about trying to make sure you are serious when it needs to be serious and then when things happen which are potentially humorous that you can enjoy that moment… (AdultCoachM1)

'The Bigger Picture'. The adult context was identified as being challenging for the coaches to plan sessions as they have to cater for a range of sporting abilities across a large number of adult athletes. One athlete indicated that:

> We have five men's team and four women's so there is a massive range of abilities. So you could potentially have 100 odd people there. It is very hard for the coaches to be able to plan a session for so many abilities. (AdultAthleteFG1)

A coach described the challenge in this way:

> at club, you have to deal with people with different ambitions and different levels of motivation and commitment and that presents one of the major difficulties to the job. (AdultCoachM1)

However, the role of the coaches is made easier by the first team athletes assisting with training sessions. This also helps with the overall club environment with athletes supporting each other. There was a desire from one coach for the same system of playing to be adopted across all age groups. This would make the transition easier for athletes when the move within the pathway.

For one coach, working with other coaches and creating opportunities for prospective or junior coaches to develop were important to a healthy club with a sustainable long-term future. The club provides financial support and coaching opportunities for younger coaches:

> We encourage them as a club by paying some of the costs for them to go on coaching courses, we try to provide as much coaching opportunities as we can and that is quite easy in a club our size, there are lots of opportunities to coach. (AdultCoachM2)

These opportunities include allowing new coaches to run training sessions and coach a team during matches. This process involved a more senior coach mentoring the younger coach, with the explicit aim of brining on coaches to sustain the club:

> They are my sustainability. When I pass this mortal coil or whatever, the club needs to be sustainable and we need younger coaches picking that up. (AdultCoachM2)

In the adult context, one coach explained that due to the lack of contact time with players, he was not able to provide each player with individual feedback on everything they do: "I don't have the time, to spot every player's weakness and strength", therefore athletes need to take responsibility for their own personal development. The coach explained that he tries to provide the player with skills for self-analysis so that the players can take responsibility for their development.

In summary, the direction/emphasis within the adult participation environment should be one where:

- fun and enjoyment is most important, but it is balanced against a desire for a serious engagement in sport
- provide for a wide range of abilities and commitment.

5.3.2 Social Context

This higher order theme captures the broader social context that is an important aspect of the coaching process. In this coaching environment 2 lower order themes were important elements of excellent coaching practice. These were: group environment and coach-athlete relationships.

Group Environment. Coaches and athletes expressed a desire for there to be a 'healthy', 'family oriented' and 'happy' environment that was encouraging, nurturing, inclusive and equitable. These requirements possibly stem for the fact that participation in sport at this level was considered a 'hobby'. Consequently, the social element was identified as being important for the adult context. One coach commented:

> It is allowing them to create that positive atmosphere. This year we are not doing so well as a club in terms of outcomes… however I have never been in a squad that has had such camaraderie, such fun, such a tight knit squad. The banter is great and the atmosphere within the training ground and outside is fantastic. (AdultCoachF1)

A athlete in another club commented that his first involvement with the club was at a social event - this was considered appropriate and allowed him to get to know other athletes before taking part in their first training session. A coach explained that there should not be a blame culture within teams or within the club - there was a desire for teams taking responsibility for outcomes (coaches and athletes). One way a positive group environment was fostered was by encouraging other athletes to comment positively on each other's performances:

> Very often after a game I will say have a chat with the person next to you when you are cooling down, tell them what you think they did well so it is not just coming from me… I get the younger players to tell the older players something they recognised or admired about what that person did on the pitch. Equally I expect the more experienced players to be able to give feedback to the youngsters and say that was great. It has to come from the whole squad. (AdultCoachF1)

Coach-Athlete Relationships. The coach-athlete relationships were regarded as very important to creating the right environment and ensuring that athletes progress and continue to stay involved in the sport. Coaches and athletes identified an extensive list of interpersonal skills and attributes that coaches could possess, including being: adaptable, good listeners, consistent, encouraging, honest, nurturing and humorous. AdultCoachM1 commented: "I genuinely believe that to get the best out of people is to encourage them." The list highlighted the challenge facing those taking on the responsibilities as a coach, although there was no expectation that coaches would satisfy all these qualities. As one coach commented: "I don't think there is anybody who is the perfect coach, I don't think there is such a thing" (AdultCoachF1).

It was considered important that the athletes and coaches were able to talk with each other and for the coaches to allow the athletes the opportunity to suggest alternative approaches during training and competition. A good coach-athlete relationship was described as one where there was mutual trust between the coaches and athletes, where the athletes were comfortable in approaching coaches to discuss issues that affected or were important to them. However, there were indications that the athletes respect decisions made by their coach:

…there is some times in training where you don't agree with him [the coach] or you are not doing a fun drill… [but] At the end of the day he knows what he is doing, he has done it for years, the drills he is doing are good. (AdultAthleteM)

One coach expressed her concern for the welfare of the players:

caring about how they feel, not necessarily how the play on the pitch, but how they feel, that they don't go home on their own feeling upset, because it can be a lonely old place when things aren't going well. (AdultCoachF1)

A coach mentioned that building relationships with athletes at club level was harder than building relationships in high performance squads because they have less time with the athletes, but acknowledged that the pressures of working with club athletes was not as great as working with high performance athletes. This was supported by the other male coach.

In summary, the social context within the adult participation environment should be one where:
- the social aspect of participation is valued
- a positive group environment is fostered
- coaches and athletes have mutual respect and care for each other.

5.3.3 Management and Organisation

This higher order theme focuses on the activities and skills to prepare for working with athletes. Important lower order themes for the adult participation coaching environment were: programme management and session content.

Programme Management. The coaches all engaged in planning and organisation activities that prepared them for their work with the athletes. For example the athletes described the preparation work their coach did:

[Coach] does a lot of homework so to speak, he has all his hockey DVDs and manuals, he does a lot of work in the background so that he takes it to the Tuesday nights or Thursday nights so he has it all sorted so he knows from day one what he wants to achieve with that team because he has spent the summer working on it. It is a never ending job for him.

Another coach described the importance of preparation in this way:

I think preparation is important. I work on what I have recognised is potential areas we can improve on from the Saturday and like many coaches I spend a lot of Saturday nights awake reanalysing the game and thinking what we need to be doing on the pitch to improve so that we can get better and score more goals. (AdultCoachF1)

Other preparation activities coaches engaged included:
- The athletes commented on the 'playbook', which provides the squad with goals for the season, different formations and what to do in certain situations, such as attacking and defending corners.

- The coach collects statistics (e.g. possession count) from every game and those get fed back into training "so we can get an idea if we are not passing the ball enough and whether that is impacting the result in a good or bad way" (AdultAthleteFG1).

- Athletes received from their coach at the end of the season a self-assessment form they have to complete. This allows the coach to compare their own assessment with the athletes which is then discussed with the athletes individually. This was valued by the athletes because it helps with their progression and assists the athletes in preparing for the next season.

These examples of coaching practice highlight how prepared and committed one coach was to working with adult athletes, although these points were made by first team athletes and this level of commitment and analysis may not be required or expected by athletes in the 2nd, 3rd or 4th teams in the club.

AdultCoachM1 highlighted the challenges for planning when working with adult club participants:

> Things tend to change a lot at club and also I am not sure the worth in planning too far ahead. I think you can do it to an extent where you have a philosophy where you want to go to a high level but in clubs things change dramatically, new players come along, old players drop out... but you do need to have an idea of where you are going.

Another coach explained that he and the team captain were involved in selecting the team for match days (a club selection policy). The opportunity to include more athletes in decision making was limited, simply because they are not together enough during the week to make this possible. Consequently the decision on how to play against another team is the decision of the coach:

> That tactical decision has to come from me because they are amateurs and getting them together is difficult. If this was a professional organisation or if I was GB coach then maybe we could make these decisions together but these guys don't have the time that I have to think about the game. (AdultCoachM2)

Session Content. There was recognition that coaching sessions needed to be varied to maintain athletes' interest: "You can't keep doing the same drills because they will get boring" (AdultAthletesFG1). The use of variety was reinforced by AdultCoachM2: "I don't do the same sessions each week, variety is important, it may be the same skill you want to work on but do it a different way, quite often that is what I do." There was also recognition that practices need to be developmental to ensure that learning outcomes are achieved:

> So maybe on a Saturday we have realised we have not defended that well so on Tuesday we may do a one on one drill and then move onto a 3 v 2 then a 5 v 4 then it becomes a full pitch drill so progressing from a really basic skill between two players to moving it onto a big drill and that is a good session when you can see the basic drill being moved on. (AdultAthletesFG1)

The importance is to build up the practices so that the athletes can translate these into a game. For one coach it was important that whatever they do in training it "has to be game based… because there is no point teaching someone how to do something if they can't do it in the heat of battle." (AdultCoachM2).

In addition, one club had attempted to adopt a system whereby all teams play the same system. This allows greater ease of transition between sections as athletes move through the pathway.

In summary, management and organisation within the adult participation environment should be one where:
- coaches are committed to the role and plan in advance of the season and individual sessions
- athletes can contribute to decisions about training and competition, but the coach may need to take responsibility for some decisions.
- coaches lead by example and are on time, prepared, suitably dressed and use appropriate language.

5.3.4 Implementation

This higher order theme focuses on the direct intervention work with athletes, particularly in training and competition sessions. Important lower order themes for the adult participation coaching environment were: working with athletes, delivery, and intervention skills.

Working with Athletes. One coach emphasised the need to include all athletes, regardless of ability which relates to the desire to create an environment that is inclusive and equitable. The coach would like all the athletes feel as if they are a part of the club and squad they are in and that they will all get playing time on the pitch regardless of ability.

The coach also expressed a desire for the athletes to 'have a go' at different things, making it clear that effort will be praised even if things did not go right:

> If they put the effort and practice in then fantastic. It is getting them to understand to give it a go and if it doesn't work it doesn't work and I am not going to come down on you if you gave it a go and it didn't work. (AdultCoachF1)

Being consistent in their approach to coaching and dealing with athletes is also important.

> I think from the players' perspective there is nothing worse than not knowing what you face from day to day in terms of the personality of the coach. I think there is nothing worse than dealing with people who are up and down… So I think you have to be consistent from that point of view. I think also if you want people to know what they are aiming for and if every week you are asking for something different then they don't know where they stand. I think consistency in nearly every aspect is important. (AdultCoachM1)

AdultCoachM1 also highlighted the importance of being able to read situations and being able to respond in the most appropriate way. This includes understanding the personalities of individuals:

> …there are some people who will react well to being encouraged, given positive comments and there are some where a verbal kick up the backside will work and it is through time learning which ones that work for and even in different contexts one will work with the same players sometimes but at other times it may not. It is trying to read situations and decide when to blow your stack and when to stay cool for instance.

However, another coach suggested a different tack: "…you can never shout or swear because it doesn't achieve anything" (AdultCoachF1). The other male coach emphasised the need for good "man management" skills, particularly with men. The coach explained that are times when players may act aggressively and shout at the coach and in these circumstances "you have to find a way of handling that kind of situation that can quickly blossom into something negative" (AdultCoachM2).

Although there was recognition by the coach that their statement was a broad generalisation, they felt that women were more open to being coached "they listen better, they are prepared to try things... men are a bit more closed to that, especially at a higher levels..." (AdultCoachM1). However, their assessment indicates that this was not always necessarily a positive thing – they felt that sometimes females relied too much on coaching, particularly at club level:

> …if things are going badly they desperately look for the magic answer or tactic rather than taking responsibility and saying 'I am on the pitch I hope the coach can help but it is up to me'. …I think with men are more prepared to battle it out and look for their own solutions. (AdultCoachM1)

It was also this coach's view that females take disagreements more personally than males. In general males forget disagreements once the tournament or match is over, whereas he commented that "I have had disagreements with a [female] player and then they haven't spoken to me for three years" (AdultCoachM1).

Delivery. Senior team athletes are involved in the coaching of athletes in the younger age groups. This has the benefits of allowing more experienced athletes to share their skills and expertise with younger athletes and also allowing younger athletes to meet and get to know the senior athletes. It is anticipated that this makes the transition from the youth teams into the adult teams easier for the young athletes because they already know some of the senior athletes.

In addition coaches were identified as important role models, especially for younger athletes. Although the interviews and group discussion were focussed on coaching practice in the adult context, it was clear that coaches of adult squads were still considered role models within the club more broadly and they should act appropriately. One coach commented that a coaching role model should be about "…being on time, prepared, suitably dressed, use appropriate language and so on" (AdultCoachF1).

The adult athletes commented positively on a number of specific coaching practices their coach uses throughout the year. This included:

- The athletes appreciated a targeted approach by the coach during training sessions. If considered necessary the coach will call in only those they want to make the coaching points to, but will stop the whole session if the coaching point needs to be made to everyone. This minimised unnecessary stoppages to training sessions as well as allowing for individualised feedback and discussion.

- The coach sometimes works with athletes on an individual basis. Statistics are sometimes collected on one individual and the coach uses these to help that athlete identify what they need to work on, thus contributing to overall performance of the team.

Intervention skills. The use of encouragement and providing positive feedback are considered important in the adult coaching context such as letting athletes know what they had done well during a game. One coach explained that providing positive feedback was developed from her own experience as an athlete where she never received any feedback from her own coach. This was considered a deficiency in that coach's practice, she thought:

> They all constantly require reassurance. If it means 50 times they have been on the ball and 49 have not been a good first touch or not a good pass you don't mention it but that one pass they do make is good then you reinforced that immediately because it is positive feedback that will create the positive player. I also do that with the team, whatever happens we will come in at the end and look at the positive things. (AdultCoachF1)

Techniques are also used to manage situations that could lead to tensions between the coaches and athletes. AdultCoachM2 explained that when a player is substituted he will not speak to the player until the player has picked up their water bottle and walked to the bottom corner and back. This was identified as advantageous because it allows the player to get the lactate out of their body and to slow down thus avoiding any flash point. This was a tip the coach picked up form watching a Spanish coach at an international competition.

The use of questioning was an intervention skill identified by the coaches to enhance player understanding:

> I ask them questions and get them to answer questions such as what happens if you run there. If they answer a lot of the questions I ask them then I think it will go into their memory and stay there rather than me dictating. I don't want them

to become robots, I want them to adapt to things happening on the pitch at that time. (AdultCoachF1)

> There are a number of ways, the traditional way is to set something up, explain it, let them run through, bring them back in, get feedback but you have already set it up correctly and given them all the instructions. I don't always do it that way, what I do is say here is a 5 on 3 drill, we are attacking that goal, off you go. I let them do it and then I pull them in… I would say right what do you think? Why was it better? (AdultCoachM2)

The ability to analyse situations and make decisions about how to adapt was considered an important aspect of excellent coaching practice. AdultCoachM1 commented: "the live analysis of what's going on and how to change and how to adapt to that." Another coach explained that: "it is thinking on your feet. You are never going to get a session where all your players are there all the time. You have set up a right hand drill and you are missing your right mid." (AdultCoachF1).

In summary, implementation within the adult participation environment should be one where coaches:
- understand the needs of individual athletes and can respond to situations appropriately
- communicate clearly and positively with athletes and other coaches
- involve the athletes in the learning process
- adapt to changes in situations quickly.

5.4 Talent Development Coaching Environment

The summary of coaches' and athletes' perceptions of excellent coaching practice in the talent development coaching environment is organised into four higher order themes: direction/emphasis, social context, management and organisation, and implementation. Within each higher order theme there are a number of lower order themes that focus on specific elements of excellent coaching practice.

5.4.1 Direction/Emphasis

Within this higher order theme, there were 2 lower order themes that were important for the talent development coaching environment. These were the outcomes that were considered important and 'the bigger picture'.

Outcomes. The coaches believed that excellent coaching practice in the talent development context should be about developing players and performance. They emphasised that performance was more important than results. One of the coaches stated "if we focus purely on results then it is to the detriment of the players' development" (TDCoachM1). The coaches also identified that they wanted to develop players who were happy, enthusiastic and hard working. The athletes believed that an important outcome of excellent coaching practice was fun and enjoyment. Enjoyment for them was when they felt they were improving and developing. One the athletes stated "It is enjoyable when you feel like you are doing something, like you are getting somewhere" (TDAthleteF3).

'The Bigger Picture'. The coaches in this context believed it was important to adopt a broader view that they were developing players over the longer term. Coaches felt that focusing on results was at the detriment of player development, so emphasised their approach as being performance driven. This was an investment for the future, as noted by two of the coaches:

> I think we see the bigger picture more because we see that what we do really counts at senior level. (TDCoachM1)

Results are important to us but at the same time it is important that [U18 coach] gets kids ready to come up to the U18s and us to pass kids onto the under 21s. We can do that without necessarily winning all the time. (TDCoachM2)

In summary, the direction/emphasis theme indicates that excellent coaching practice for the talent development environment focuses on:
- development over results
- investing for the future.

5.4.2 Social Context
This higher order theme combined the group environment and coach-athlete relationship.

Group environment and Coach-Athlete Relationship. Coaches felt that they are in a position within this context to create the perfect environment for the cultivation of successful coach-athlete relationships. Being confident in their ability led them to have a significant influence on athletes' attention to coaching instruction, athletes' acquisition of specific skills, and the nature of how coach-athlete relationship are developed. Coaches felt it was essential to create a respectful environment where players feel empowered:

Excellent coaching in my eyes would be empowering the player with the freedom to express themselves and learn in a decision rich environment. Rather than be boxed in and when they have to make their own decisions they are not confident or comfortable in that decision making environment. (TDCoachM3)

The coaches also identified that they had to approachable, motivating and inspiring. This is emphasised by the following comments:

I think also a coach needs to be approachable. The best coaches I have had are the ones I can go up too and ask questions about my technical development or elements of the game. I can have a conversation with them and I come away from the conversation thinking I now understand. (TDCoachM1)

We are all role models for the kids, we are trying to inspire, coach them. They look up to us, we might not realise it but they do. (TDCoachM4)

The athletes echoed these sentiments as they believed that an excellent coach should be approachable and motivating.

In summary, the social context theme indicates that excellent coaching practice for the talent development environment:
- creates a respectful environment
- relationships foster empowerment, motivation
- coaches are approachable and inspiring.

5.4.3 Management and Organisation

The management and organisation theme captures the skills and activities that coaches' engage in to prepare for their work with athletes. Both coaches and athletes highlighted similar management skills, including being organised in terms of good planning. For example one coach simply stated: "Being organised in terms of good planning. Being clear and concise, making sure your sessions run smoothly. Being organised for sessions" (TDCoachM3).

Cognitive flexibility (the ability to spontaneously restructure one's knowledge to changing situational demands) emerged as being a particularly important skill enabling coaches to adapt sessions. TDCoachM2 commented that: "It is more about adaptability than recognition. Need to adapt all the time." TDCoachM1 had a similar view:

I think it depends on what you aspire for your team to be. The players you have will determine the coaching style you have and the way the team play. (TDCoachM1)

In summary, the management and organisation theme indicates that excellent coaching practice for the talent development environment:
- prepares sessions with clear aims
- requires the ability to spontaneously restructure one's knowledge to changing situational demands.

5.4.4 Implementation

The implementation theme captures the skills and activities that are directly related to working with athletes in training and competition settings. Implementation comprised of 2 lower order themes: delivery and intervention skills.

Delivery. The delivery of sessions worked in concert with planned content of a session such that players had a clear understanding. Coaches tailored their communication to each individual in order to get the best out of players. This is emphasised by the comments below:

> Clear and concise in what you plan to get out of the session, there is a rapport between the coach and the players and ability to communicate to the player so it meets their individual needs in terms of whether it needs to be visual or verbal. (TDCoachM2)

> I think it helps that the players have an understanding of what they are about to go into in terms of in the session so they know what the session is about, what the key things they are learning. A good coach explains and the players know what they need to do. (TDCoachM3)

The coaches believed the use of questioning was important in order to check for learning and to help players think for themselves. For example, one of the coached stated:

> So asking the players what went well and what do you think we can improve on. Let the players have the confidence to talk, let them have a conversation. If they are deviating then you can bring it back in. Then they have done it in through their thinking rather than be dictated to (TDCoachM3).

This comment was followed by TDCoachM4 adding "lead them to discovery".

The athletes identified that they liked the questioning approach as it helped increase their understanding. In regards to content, the athletes wanted competitive and intense sessions where they felt they were learning. They also believed that adaptation was important in that drills should be altered or changed regularly. One of the athletes stated "once you have done it you want to either adapt it or change to something new so it is not getting repetitive" (TDAthleteF2).

Intervention skills. The intervention skills of the coach were important with regard to implementation within this environment. Understanding the technical side and being able to provide technical feedback is important with talent development. The coaches believed that this feedback should be delivered in a way that suits the players. For example, one of the coaches stated:

> I think feedback is quite important. If you know the kids or adults you are coaching and you are able to deliver appropriately. Some people like a bollicking, some people don't. So it having the ability to speak to a certain person in a relevant way I think is vital. (TDCoachM4)

Some of the athletes felt that there are differences between what females want from a coach compared to males regarding feedback:

> I don't think there is much of a difference but sometimes coaches feel they can't shout at us as much in case he upset us. I think we can take shouting but not constantly. (TDAthleteF2)

Coaches employed a range of intervention skills that encouraged players to take on challenges and take risks: "Some sports have got far too coached. Rugby, the guys are afraid to make mistakes." (TDCoachM2). This coach also noted the benefits of taking risks:

> So you were talking about not afraid to make mistakes but not afraid to try something, say you are 1 nil down with 10 minutes to go, right you two defenders off you come, five forwards here we go. (TDCoachM2)

In summary, the implementation theme indicates that excellent coaching practice for the talent development environment:
- provides sessions that are competitive, intense and promote learning
- involves communication and feedback being tailored in sessions
- uses questioning to guide learning
- encourages trying new things.

5.5   High Performance Coaching Environment

The summary of coaches' and athletes' perceptions of excellent coaching practice in the high performance coaching environment is organised into four higher order themes: Direction/Emphasis, Social Context, Management and Organisation, and Implementation. Within each higher order theme there are a number of lower order themes that are focus on specific elements of excellent coaching practice.

5.5.1 Direction/Emphasis

Within this higher order theme, there were 2 lower order themes that were important for the high performance coaching environment. These were the outcomes of the coaching process that were considered important and 'the bigger picture', including achieving a balance between hockey and other aspects of their lives.

Outcomes. The lower order theme of Outcomes represents the focus of the coaches working in the high performance environment. Characterised unanimously as "results driven" this quote from HPCoachM2 sums up the prevailing attitude: "We are in a results driven business, success is measured on that." However, there was recognition that other factors do influence excellent coaching practice, neatly summed up by HPCoachM3 who talked about creating a positive environment:

> They enjoy what they are doing. That their training is enjoyable and challenging and there is a learning outcome, that is they become better players as result of it. Every time they come to training they need to want to be at training, they want to challenge themselves and they want to do better.

This was further reinforced by a comment about coaching approaches, also by HPCoach3:

> They have to think for themselves, you can only give them so much. You can't tell them every move to make when the game starts. Need to try to replicate your training to be as a close to games as possible. You give them structure but there is scope for them to do what they want within that structure. But they have to take responsibility for that.

In commenting on what excellent coaching practice looks like to them, the players were clear that some key elements had to be in place:

I think an environment where the players are always learning so I think some coaches think that they are coaching but it is maybe not in the way that players are continuing to improve and learn. So I think it is important to be in an environment where you are continually developing so you are getting team stuff, tactical stuff and you feel like you are progressing. (HPAthleteF1)

This was further supported by another player who commented that;

I think it is as well being pushed at every training session so you are learning but you are also getting worked hard. I don't really like sessions where you have not done much or you have not learnt much. I feel like I need to have done something in the session, either improved something, learnt something or just worked hard so you may not have learnt anything but you have worked hard. (HPAthleteF2)

The view of the players was that whilst being a player was a necessity for becoming a coach, it wasn't essential that the high performance coach had been a successful high performance player:

I think as a coach [name of coach] is respected, he has maybe not played at a really high level as a player but the coaching he has done he has done well at. I think coaching at this level, you don't need to have been the best player but you need to have had a flavour of the performance environment at some level. (HPAthleteF1)

'The Bigger Picture'. The high performance coaches in this environment agreed that the parallels between sport and business were appropriate to describe the coaches' role:

If you go back to your analogy if you are a CEO of a company, that company needs to have a clear direction and all the staff are to be pulling in the same direction. So that is the starting point and then it is making sure that everyone is on board, that everyone is delivering what they should deliver at the right time and at the end of the day you have a product that the players buy into. (HPCoachM1)

All of the coaches felt that they had a co-ordinating role to manage and orchestrate the delivery of high quality programmes for the players, encapsulated by this statement: "You are setting out a programme so that everything is planned so that all your service providers know their role within that programme and what they have to deliver" (HPCoachM2).

The players agreed and went even further with their recognition of the wide scope of coaching responsibilities:

Yeah the off pitch stuff is key so means when you are on the pitch you are able to focus on what needs to be done rather than having these issues hanging over. (HPAthleteM1)

I do firmly believe [name of coach] created the high performance culture as in everybody was held accountable, your pass percentages was up there, your attendance for weights was shown, everything was done across the board, there wasn't a chance to hide. (HPAthleteM3)

In summary, the direction/emphasis higher order theme indicates that excellent coaching practice for the high performance environment:
- is driven by results
- focuses on a challenging learning environment
- recognises the central role of the coach in managing performance.

5.5.2 Social Context

This higher order theme framed by the broader interpersonal context that shapes the coaching process combined group environment and coach-athlete relationships.

Group Environment. Coaches felt that they had a strong part to play in leading the creation of an appropriate environment:

> I think initially you would try to give a very clear direction and then try to encourage the whole squad to buy into that direction. Providing a direction that the players agree to go down and then help them. (HPCoach1)

However, they all identified that this was not solely their responsibility:

> I think the squad have to create a positive environment, you can guide it but I don't think you can create it. You rely on the players to do that a lot more as well. They demand from each other and they are not constantly spoon-fed. They take ownership it is their programme. They set the tone for everything. It is hard to put it into words how you deliver that because there is lots going on and if something wasn't working then you would try to address that but equally you would want them to address it as well. (HPCoach2)

There was clear recognition that the coach acts as a beacon for player commitment:

> I think part of it is and this might become down to the experience part but try to make them aware of the type of mindset they need if they want to be successful. It's back to the ownership if you want, saying if you want to be successful you have to be able to do the following things, you need the following type of lifestyle, and asking are you willing to do this? It is not insisting that they do it but letting them know that behaviour is more likely to lead to success. (HPCoach1)

The players supported these thoughts and added some further beliefs of their own:

> I think it has to do with respect. In the past the players didn't respect the coach and therefore the players didn't really respect each other and we then didn't work as a team. A lot of people respect [Coach] and how he acts so that helps us and helps us to work together as a team. (HPAthleteF2)

> Compared to someone who puts themself on a pedestal and has created this air around them that they are the coach and there has to be a distance between them and the players. [Coach] is probably the extreme of that and is not like that at all. He is easy to get on with and you want to play for the team, for him and for the team, to have the whole squad feeling like that is probably quite unique. (HPAthleteF1)

Coach-Athlete Relationship. The coaches very clearly set their stall out with a call for consistency in behaviour as the mainstay of this theme:

> I think if you provide consistent behaviour so if you can be seen to be able to differentiate between when you have to be the boss and when you can afford to be more relaxed. As long as your behaviour is consistent then its easier. (HPCoach1)

> I think you are right in what you are saying but it doesn't mean that the player will understand it because one minute you are on my case and the next minute you are all pally. Sometimes they find that hard. You have to be consistent that is right but you can't guarantee how they are going to react. (HPCoach2)

The players had a similar understanding of the theme:

I think your coach has to be approachable and you should be able to speak to them about feedback or anything. With some coaches you feel nervous around them and asking them stuff but you need to feel relaxed and you can approach them. (HPAthleteF2)

Yeah need a rapport with them. I guess because we are a team sport it is maybe different. If it was an individual sport with a coach and an individual athlete they might be different, it is a lot more tense and pressured because it is just the two of you. Whereas with a team it is much different, there is so many of us that banter is a massive part of it, that is what gels you and if you didn't have a laugh then it would be hard to keep going. If the coach can fit into that then that is a huge advantage whereas an individual coach may be like well I don't what that relationship with the player because their relationship is quite different. (HPAthleteM1)

In summary, the social context higher order theme indicates that excellent coaching practice for the high performance environment:
- is the creation of a positive environment
- expects high levels of commitment from all involved
- demonstrates consistent, positive role modelling
- promotes open, honest relationships.

5.5.3 Management and Organisation

The management and organisation higher order theme captures the skills and activities that impact on coaches' work with athletes but do not directly involve the athletes. It covered two lower order themes: programme management and session content.

Programme Management. Both coaches and athletes highlighted the importance of management skills, including season planning, competition scheduling and organisation of training.

> …they share with you the year schedule as far as they know, so when you are getting down time, when the tournaments are, what the training schedule looks like so you know month to month you know what is coming up so I would imagine because they are able to put that into plans they can say that we are working on x, y and z here and when we get to this phase we will work on this. (HPAthleteF1)

> I think it might be getting questioned if you weren't getting results or you didn't have an individualised strength and conditioning programme. If players know all that support is available and someone is full time in that role but you are not seeing the outcomes of that so things are really slack, they turn up to sessions really unprepared, with [CoachA] and [CoachB] you always think they have thought about the sessions, they have planned, they have spoken to each other before so they are not standing at the side saying what will we do now. You can see he has a notebook full of drills and he knows what he is doing well in advance. It is one of these things if you are doing well people don't noticed these things. (HPAthleteF2)

Session Content. The players were very sure of what constituted excellent coaching practice with regard to session content. Specifically picking up on the modern trend of coaching game-related practices:

> I think the underlying message is that players get more out of game like contested activities. There are all different practices that you will go over the programme, you might have two months on 2 v 1s or two months on 5 v 5 defensive work. I think in my opinion it has got more competitive and you are

playing with but also competing with the guys for places....It is part of good training because it ups everyone's quality and focus. (HPAthleteM2)

We have played a lot of games, a lot of 3 v 3s and 4 v 4s, I think the sessions where we started doing more structural based games so maybe you have a back four and you have two gates either side of the 25 and you have three forwards pressing and as soon as you clear it out the gates it is a 5 on 4 so it is a 4 v 3 working it out like you would get pressed in a game and then you do a 5 v 4 counter attack. I find them particularly beneficial because in those practices you have to be thinking. The 3 v 3s and 4 v 4s are great because you do learn patterns but I find the game specific ones better. (HPAthleteM3)

In summary, the management and organisation theme indicates that excellent coaching practice for the high performance environment:
- demands a high level of programme management skills by the coach
- provides high tempo, game-related practices.

5.5.4 Implementation

The higher order theme of implementation covers the skills and activities that are directly related to working with athletes in training and competition settings. It also captures the interpersonal nature of coaching practice. Implementation comprised of 3 lower order themes: working with athletes, delivery, and intervention skills.

Working with Athletes. It was apparent from the responses that this was something of a simple message to encapsulate, as evidenced by these similar male and female athlete responses:

The key thing is the coach is now have a clear goal or image about what they want in terms of communication and so on, quite often they will get us to sign into that or buy into prior to starting into any programme. They will say here is the plan, it is going to be 10 months of hard training and varied levels commitment, we need players to buy into it. (HPAthleteM1)

And…

I think it is down to (their) personality. We have had a few [team] coaches and it has been hard work, there has been an atmosphere, they are fine with some but not with others. You felt you were in one camp or the other and that is not good for the team either. Whereas with [Coach] it is not like that, it is quite unique as everyone gets on well and that is helped by the fact the management team all get on well and you can get on with them. (HPAthleteF1)

Delivery. There was harmony between the responses of coaches and athletes with regard to how excellent coaching practice sessions were effectively delivered. A key element of this was making good decisions:

They might have the same aim, they may stick at something continually for a long period of time but they have to recognise when it is not working or not working as well as they want it too and be prepared to change. So interpersonal skills, recognising how people are reacting and constantly trying to find ways to get the best out of their players. (HPCoach1)

This was also characterised by one coach as:

In terms of delivery you have to listen to your players as well. To begin with I don't think the players were understanding what I was saying or meaning and now I slow down. So in team talks or briefings I make sure I pause and that came from the players. You have to take that on board and deliver in a different way. It is important to deliver in a way that your athletes take the information on board. In the past, coaches talked for about an hour before the game, players

switch off after twenty minutes. Making sure you deliver the right information in the right timescale. (HPCoach3)

Intervention Skills. The intervention skills of the coach were important in the high performance environment. One athlete commented:

> There is an element of reality in everything as well, how do you want feedback do you want it positively or negatively and the boys in the team are like yeah I like positive feedback while a few are like no I want to be told I am shit so I can pick it up. When we are running corners, people who are not involved are told to try and put them off because that is the sorts of things you get distracted with in a game so there is this fun element where you think rights lets put them off! There was reality in it, he knew you could train as hard as you want but when you get out there you have to be street smart and that is the way he went with sessions. (HPAthleteM3)

Another picked up on the need to give players time to self-correct before providing input:

> I suppose sometimes with [Coach] when you do something wrong he comes straight up and tells you. The first thing you do, it is the first time you have done the drill and he comes and gives you input… Yeah technical straight away and sometimes you are thinking let me have a few shots of it first.   (HPAthleteF2)

The range of intervention skills was further illustrated by an insightful observation by a Support Staff member:

> Good coaches should be able to demonstrate a variety of ways of achieving their objectives and that all a coaching style is. There is a time to cuddle and a time to kick; there is time to be the dictator. There are times when even the players want the coach to be decisive they want him to make decisions. There are times when you follow people because they have expertise and it comes back to this knowledge. If the coach has expertise then you trust him to solve the problem at half time and it is not a time for a pleasant chat. Where there are other times when the laissez faire style works. We are in a practice and one of the players says they have an idea for what they can do at this short corner, fine take it, you don't have to be the fountain of all knowledge. The wider the spectrum of styles, the more sophisticated and the more well-equipped coach you are. (HPSupportStaff1)

In summary, the implementation theme indicates that excellent coaching practice for the high performance environment:
- is a decision making 'game'
- results in clear communication of goals and expectations
- dictates that to be effective the coach should have a range of styles available.

6   Excellent Coaching Practice Comparisons Along the Sporting Pathway

In examining excellent coaching process along the participant pathway it has become clear that there are both similarities and differences in the coaching practice in each coaching environment. To identify some the main comparisons each theme is addressed separately.

6.1 Direction/Emphasis along the pathway

The direction/emphasis theme captures the coaches' understanding and awareness of the broader nature of the coaching process. The main findings are summarised in Table 4. It was clear from the data that across the five coaching environments these coaches emphasised learning and development as the main outcome of excellent coaching practice. Other outcomes were also important, however, these varied in priority in different coaching environments. Fun

and enjoyment was an important outcome across the pathway, however, what was fun or enjoyable was defined differently. For children, just playing the game and socialising was fun, for youth learning new skills was fun, for adult participants, fun was about the social element balanced with serious competition, for talent development enjoyment was about seeing improvement in abilities, and for high performance being challenged physically and mentally and continuing to learn was enjoyable. Outcomes related to continued participation and being family oriented were important for the children and adult participation environments. In the youth environment developing quality fundamental skills was also an important outcome of excellent coaching practice.

The coaches across the pathway had a clear 'bigger picture' of what they were working towards, however, the focus and emphasis differed between some environments. For children, youth and talent development coaching environments, knowledge of the participant pathway and appropriate development of sport skills guided coaches' work with athletes. In the two adult environments (i.e., adult participation and high performance), the focus was on a session or longer programme that were individualised for a team's or individual athlete's progression, often related to competitions. However, the scope of these programmes for adults differed due, at least in part, to the limited contact and wide range of abilities within the adult participation environment compared with the high performance environment. The management of service providers in the high performance environment was an additional feature that influenced the 'bigger picture' for this coaching environment.

6.2 Social Context along the pathway

The social context theme captures the broader interpersonal context that shapes the coaching process. The main findings along the pathway are summarised in table 5. Across the five coaching environments the coaches felt excellent coaching practice should create a positive group environment that fostered learning and effort and was encouraging and happy. For children, a fun relaxed environment where there was continuity in the leaders involved were important features of excellent coaching practice. Being inclusive of participants with a range of abilities was an important part of the group environment for both children and adult participation coaching environments. Developing quality coach-athlete relationships was an important feature of excellent coaching across all the coaching environments. Features such as being approachable, fostering mutual respect, ownership and responsibility, engaging in conversation, being open, honest, and relaxed were noted by many of the coaches. There was no clear pattern of difference across the environments. However, for children and youth, coaches noted that getting to know athletes as individuals not just athletes was important for excellent coaching practice and they were proactive in this practice by showing interest, making time for athletes, being friendly, open and engaging athletes in conversation.

6.3 Management and Organisation along the pathway

The management and organisation theme captures the activities and skills that impact on coaches' work with athletes but does not directly involve the athletes. The main findings are summarised in Table 6. A feature of excellent coaching practice that was consistent across all coaching environments was the importance of planning, not just of individual sessions but over blocks of sessions, the season or longer programmes. The important role of planning was further reflected in the session content where having a clear aim for the session was a feature of excellent coaching practice. Despite this recognition of the need for planning, the ability and confidence to be flexible and adapt sessions/programmes to meet the needs of the athletes and changing situational demands was as important, if not more so. This flexibility and ability to adapt quickly had slightly different purposes across the coaching environments. For children, the adaptations might assist with maintaining attention. For youth, it might be adjusting to their speed of learning. For adults it might help maintain interest. For talent development is might provide skill learning in a range of situations to promote flexibility in skill execution. For high performance it might serve to provide opportunities to challenge themselves mentally and physically.

For all but the youngest coaching environment, periods of time under game-like conditions or competitions to simulate the pressures and intensity of games and facilitate the transfer of learning from training to games was an important feature of excellent coaching practice. For children, the use of games and competitions was more about fun, developing interest in the sport, and opportunities for teachable moments without overloading the athletes with information.

For the children, youth, and talent development coaching environments, session content that emphasised development and learning over competitive results was an important feature of excellent coaching practice. In contrast, in the adult and high performance environments clear links between games and training were important. Athletes felt it was important to see how what they were doing in training prepared them for games. Linking training to games was also important for youth and talent development environments, however, performance issues in games had less direct impact on subsequent training. Plans for development remained the focus.

One other aspect of excellent coaching practice that was important for children and youth coaching environments was the type of opportunities for learning that were built into the session content. In particular, allowing athletes in these environments more time and space to execute skills and providing clear progression of activities to extend them as they developed were important. However, the progression was also balanced with spending 'enough' time on the fundamentals to ensure that athletes developed high quality basic skills and knowledge.

6.4 Implementation

The implementation theme captures the activities when working directly with athletes and reflects the interpersonal nature of coaching practice. The main findings are summarised in table 7. Unsurprisingly, well developed interactive instructional techniques were identified by many of the coaches along the pathway as critical to excellent coaching practice. Individualising instructional techniques when practical/possible. Clear communication using a variety of methods to cater for a range of learning styles such as explanations, demonstrations, discussion, and diagrams were noted but a number of the coaches. Techniques to engage athletes and foster (and check for) understanding such as the use of open questions, guided discovery, problem solving and even just allowing time for self-correction were considered indicative of excellent coaching practice by many of the coaches along the pathway. Observing, analysing, and responding to athletes' performances in a positive and constructive manner were also features of well developed instructional techniques that contributed to excellent coaching practice. In addition, being positive and leading by example were also notable features of excellent coaching practice along the pathway.

Other features of excellent coaching practice differed along the pathway. For the children, youth, and talent development coaching environments being enthusiastic and setting the tone was also important. In contrast, in the adult and high performance environments, coaches' expected and encouraged more involvement from the athletes in setting the tone. For children the use of small groups and effective co-ordination of helpers increased opportunities for athletes to be actively involved (i.e., 'on task') and contributed to excellent coaching practice for this environment. For adult and high performance environments, minimising stoppages in training was important. Athletes wanted to 'get into' the session and felt they could often self-correct without intervention from coaches. For children and youth environments, noticing the 'good' performance was also important for excellent coaching. This practice was also mentioned by a coach in the adult participation environment.

6.5 Summary

There were many common features of excellent coaching practice along the pathway. These included:
- Emphasis on learning and development
- Guided by a 'bigger picture' that allowed for flexibility
- Fostering a positive environment focused on learning and encouragement

- Developing quality coach-athlete relationships with relaxed, open two-way interaction
- Planning for sessions and longer whilst allowing for adaptation and flexibility
- Use of competition and game-like periods
- Well developed interactive instructional techniques

In addition, there were many differences in excellent coaching practice along the pathway. These differences were related to the:
- priorities or emphasis for coaching in each environment (e.g., outcome priorities)
- demands or challenges of coaching environments (e.g., time - adult participation)
- purpose of a particular coaching practice (e.g., adapting session content)
- needs of the individuals (e.g., progression, interpersonal style)

Table 4. Summary of excellent coaching practice along the participant pathway: Direction/Emphasis theme.

	Children	Youth	Adult Participation	Talent Development	High Performance
Outcomes	• Fun. • Development over winning. • Family oriented. • Develops team work.	• Enjoyment and learning. • High quality fundamental skills. • Confident athletes. • Some hard work	• Balance fun and serious engagement. • Foster continued involvement.	• Developing athletes over results. • Enjoyment comes from improvement. • Hard work.	• 'Results driven'. • Learning, decision making, and hard work. • Enjoyment.
'The Bigger Picture'	• Promotes continued involvement in the sport. • Guides progression through the player development pathway.	• Guided by a clear programme for development that is flexible to meet athletes' needs. • Knowledge of the skills, abilities, requirements along the player pathway. • Balanced expectations.	• Cater for wide range of abilities. • Develop new coaches for sustainability.	• Part of the process of long term athlete development.	• Provide structure and clear direction but foster athlete decision making, 'buy in', and responsibility. • Coach manages performance programme.

Table 5. Summary of excellent coaching practice along the participant pathway: Social Context theme.

	Children	Youth	Adult Participation	Talent Development	High Performance
Group Environment	• Fun and relaxed. • Consistent leaders. • Promotes effort and learning. • Encouraging and inclusive.	• Interest in the individual. • Friendly, approachable, make time for individuals. • Encourage athletes' input and self-responsibility.	• Family-oriented. • Happy, encouraging, and inclusive.	• Mutual respect. • Empowers athletes to make decisions and take ownership.	• Creates a positive learning environment. • Reinforces athletes' ownership and responsibility for a quality environment. • Foster desire for continually challenging oneself to improve.
Coach-athlete relationship	• Know athletes as individuals. • Show interest, learn names, engage in conversations, build rapport. • Foster long-term connection.		• Coaches and athletes have mutual respect for each other. • Athlete input is encouraged. • Coach is approachable.	• Approachable and inspiring. • Role models.	• Expects high levels of commitment from all. • Consistent, positive role modelling. • Promotes open, honest, relaxed interactions.

Table 6. Summary of excellent coaching practice along the participant pathway: Management and Organisation theme.

	Children	Youth	Adult Participation	Talent Development	High Performance
Programme Management	• Sessions are planned and organised for fun, safety, and development. • Plans are general and flexible.	• Planning for sessions, blocks of sessions, the season, and beyond. • Programme of development over game-related issues. • Demonstrate effort. • Reflection to improve.	• Coaches are committed to the role. • Plan in advance of the season and sessions. • Develop resources (e.g., playbook)	• Planning and organised. • Clear programme.	• Planned and structured programme, competitions, and sessions. • Overview shared with athletes.
Session Content	• Sessions are adapted to maintain concentration and respond to players needs. • Fun, involve competitions and game play and promote learning.	• Flexible to meet athletes' needs and rate of progression. • Focus on basic skills and decision making. • More time and space for skills performance. • Progression in the complexity of skills. • Periods of competition & game-like intensity.	• Varied content to maintain interest. • Clear link between training and games. • Use of statistics to develop content. • Periods of game-related activities.	• Clear session aims. • Adapt session to meet athletes' needs and situational demands. • Periods of competition and game intensity practice. • Variation in drills on a same topic.	• Obviously well prepared. • The provision of high tempo, game-related practices. • Challenges athletes' mentally and physically.

Table 7. Summary of excellent coaching practice along the participant pathway: Implementation theme.

	Children	**Youth**	**Adult Participation**	**Talent Development**	**High Performance**
Approaches to coaching athletes	• Focus on playing over tactical or technical detail, or specialist roles. • Provide teaching points at teachable moments.	• Enthusiastic, positive, and a genuine desire for athletes to do well. • Encourage athletes input and ownership. • Keep competition in perspective.	• Coaches lead by example (e.g., on time, prepared, dress, language, positive). • Understand and adapt to athletes' needs. • Consistent behaviour.		• Clear communication of goals and expectations • Leading and following at 'right' times. • Empowers athletes to take responsibility. • United coaching team.
Delivery	• Understand athletes' view. • Small groups and co-ordinate helpers to increase time 'on task'. • Foster understanding and decision making through questioning, problem solving, guided discovery. • Use humour to keep sessions 'light'.	• Engaged and involved. • Clear explanations. • Variety of methods. • Breakdown information and skills. And extend. • Allow time for learning and self-correction.	• Clear communication with athletes and other coaches. • Targeted approach to minimise stoppages. • Athletes involved in coaching at lower levels as role models and to ease player progression.	• Individualised communication and delivery to match athletes learning styles. • Questioning and discovery learning to foster understanding.	• Uses a range of styles and methods. • Responsive to athlete input.
Intervention skills	• Positive and constructive interaction. • Individual feedback. • Focus on technique	• Notice the 'good'. • Encouragement and feedback to improve. • Reflect and adapt.	• Encourage athlete self-analysis. • Positive feedback & encouragement.	• Clear technical feedback. • Instil confidence to take risks and adapt to changing demands.	• Individualised feedback. • Recognise and adapt to demands.

7 Learning and Development of Excellent Coaching Practice

In addition to describing athletes' and coaches' perceptions of excellent coaching practice, it is also useful to gain insight into how coaches learn and develop excellent coaching practice. In this section we present the coaches' views on their learning and development. Each coaching environment is presented separately. A number of themes emerged from the data, however, not all themes were discussed by coaches in all environments. The themes were: knowledge, development experiences, approach to self-development, working environment, desired opportunities.

Table 8. Learning and development experiences emergent themes.

Theme	Description
Knowledge	Sport knowledge base and transferable knowledge due to other life experiences and education.
Development experiences	The ways in which coaches have learned about coaching and developed coaching practices.
Approach to self-development	Views on self-development and processes of self-development.
Working environment	Experiences within specific coaching environments, schools, or clubs.
Desired opportunities	Additional development opportunities.

7.1 Children Coaching Environment

In the children coaching environment two themes emerged as important in the development of excellent coaching practice. These were development experiences and desired opportunities.

Development Experiences. This theme focuses on how coaches have learnt excellent coaching practices. One way of learning that appeared important to the coaches was learning from other coaches, both from hockey and other sports. The coaches valued:
- observing other coaches,
- having discussions
- sharing ideas
- reading
- reflecting on trial and error.

For example, a coach stated "As much as possible go and watch coaches, what do they do, how do they work? Steal their ideas, if you see something that is good then use it. Listen, read, observe, ask questions" (ChildrenCoachM1). Another method of learning was learning through experience and self evaluating their own practice. For example, one of the coaches stated:

> The word experience, how do you get that? Well unfortunately that might be through doing several bad practices in order to develop your practices or to do an excellent practice. You know yourself when you come out of a session, when you are buzzing and everything you wanted to get across has happened. A good portion of the time you are thinking that was ok and that was ok but as long as you keep thinking about it and trying to improve. (ChildrenCoachF1)

Desired Opportunities. The coaches identified several opportunities that would help them develop their practices further. Firstly, the coaches wanted access to better quality coaches in order to see what they were doing and learn from them. The coaches also thought mentoring would be beneficial. For example, a coach stated "I think the mentoring aspect plays a very significant role. It might be the case that the coach doesn't know they do a certain trait. Somebody on the side saying why don't you try it this way might help" (ChildCoachF1). Lastly, one of the coaches believed that coach education courses should cover how to build up a rapport with the athletes. This coach remarked "Body language and being able to communicate. We don't cover this in the courses" (ChildrenCoachF1).

In summary, the learning and development experiences of these coaches included:
- learning from other coaches through observation and discussion
- reflecting on their own coaching practice
- a desire for opportunities to learn from quality coaches, mentors, and building interpersonal skills.

7.2 Youth Coaching Environment

For coaches working in the youth coaching environment learning and development was captured by four themes: knowledge, development experiences, approaches to self-development, and work environment.

Knowledge. Two of the coaches were teachers and felt that this background provided them with useful skills that transferred to coaching. One coach commented:

> As a teacher developing pupils in PE, developing their performance, analysing their performance are skills you need when you are coaching. As a teacher getting the best out of your class, getting the best out of each individual pupil, making sure they progress and that is coaching as well. YouthCoachF1

Athletes recognised and valued coaches' knowledge base and experience. They indicated that this was an important aspect of the coaches' background that influenced their confidence and trust in the coach. The coaches did not specifically mention the importance of a knowledge base but they all clearly had developed this through their time as athletes and coaches. One coach mentioned writing down all the drills she had done in training when she was an athlete and using this as a resource for her coaching.

Development Experiences. All the coaches mentioned learning from coach education courses and workshops, however, the two most important sources of learning and development were through informal interactions with other coaches and practical experiences of coaching. Sometimes these two were combined when coaches had worked with other, sometimes more experienced, coaches. The following quotes illustrate their experiences:

> I learnt a lot from going to the level one, two and three coaching courses but I actually don't think you learn about your coaching until you are out there doing it. I think you learn a lot from the people you coach with. I am not saying I didn't learn a lot from these courses and I did but I think I have learnt far more from making mistakes. (YouthCoachF1)

> In theory you could cover the same sorts of things inside but when you do it on the pitch and see the guy do it right and understand it then it is fantastic. (YouthCoachM1)

Approach to Self-development. The coaches all demonstrated an openness to learning and opportunities for development. However, learning and development was not a passive process, the coaches were actively engaged. They engaged in formal and informal opportunities and continually reflected on their coaching practice. The following quotes reveal coaches approaches:

I learn off other people all the time, different ideas, reflect on the approaches I like and try to replicate that… It is about not getting stale, challenging yourself. If you stick with the same thing you would get bored and that would reflect in the players… Being resourceful, going on the internet, you can learn off anybody. Bouncing ideas off people… it is about being open to ideas even though it is something which is not quite so familiar. (YouthCoachF2)

If you think about a lot of your pivotal moments in your coaching career… [a] 'door' has been there but you have to choose to walk through it. (YouthCoachM1)

So there will be times when I have gone through my coaching and thought I am not getting it right with this team so it is more by doing that I think I have developed. (YouthCoachF1)

Working Environment. The coaches felt that being part of a collaborative, reflective working environment was an important aspect of excellent coaching practice. This environment was characterised by regularly working with other coaches, good communication between coaches, sharing ideas, and learning from others. Of particular importance was experience working with different coaches, athletes in different age groups, both genders, different ability levels, including national level squads. These activities enabled coaches to continue to learn and develop their coaching practice. It also enabled them to 'see the end product', to understand the pathway, the principles, skills, and standards for the athletes to aspire to and to inspire the coaches. At a more specific level this collaborative working environment enabled coaches to convey consistent messages to athletes and collaborate with others coaches of the same athlete(s) in identifying and working on specific areas of importance for individual athletes. This could be hockey-specific improvements or balancing expectations and demands in the athletes' lives. YouthCoachF1 described her work environment in this way:

Another thing that is important when you are in a school or a club or a district is there has to be good communication between the coaches. That ability to share ideas, that ability to say what I am trying to develop is we are slow on getting in on rebounds so let's look and lets all talk together. I think regardless of the level of the coaches you can always learn from each other… I think we do it quite well here because quite often what we do is put two coaches on one team and then for another term we change the coaches so you the opportunity to work with other people. Then we might after a session or a match all get together and say what went well, what didn't. I am always looking to say how did it go? What sorts of things are you needing to work on? YouthCoachF1

In summary, the learning and development experiences of these coaches included:
* practical experiences
* informal discussions with and observations of other coaches
* formal coach education courses.

And were facilitated by:
* a desire to learn and improve
* engaging in reflective practice
* working with other coaches in the same environment or across environments.

7.3   Adult Participation Coaching Environment

It was evident that coaches sought to develop their coaching knowledge and skills in a variety of ways and this was recognised by the athletes. The themes discussed were knowledge, development experiences, and approaches to self-development.

Knowledge. One coach commented that there was a need to draw on skills and techniques from other sport support roles: "You have to be a complete and utter psychologist to be a

coach…" (AdultCoachF1). A senior club coach commented on learning from other coaches and from other sports for things such as nutrition, mental control and strength and conditioning. Approaches to developing strength and conditioning in their athletes had been obtained from a coach working with a shot putter. Opportunities to gather knowledge from other sources is also encouraged within the club. For example, a club member who is studying at university is undertaking a study of the benefits of footwork on sprint speed and turning speed.

The senior coach acknowledged that it was his "job to find out as much as I can" about all aspects of coaching but commented that if he did not know the answer to questions he should be able to give athletes direction on who to speak to.

Development Experiences. Coaches were influenced by their own coaches when they were playing:

> I was coached by one person who I admire, fantastic coach, coached me both internationally and club but the one thing I learnt from him was he expected us to understand ourselves much better than we did. (AdultCoachF1)

However, there is a drawback in learning from a coach in one coaching context then delivering in another. For example, this coach was borrowing coaching practices from a high performance coach, but was delivering in a club context and they did not appreciate that the club athletes were not as committed as the performance athletes, that they had a different set of priorities:

> To begin with I was not a good coach because I couldn't understand why they were chatting about what they were doing at the weekend because it wasn't in my psyche as a coach… (AdultCoachF1)

Through reflecting on this experience the coach recognised the need to adapt her approach to be appropriate to the adult participation environment. She went on to comment: "I have taken a wee while to mellow but now I respect actually there are other things that are important."

Approaches to Self-Development. Coaches indicated a desire to learn more about being an effective coach and identified a range of ways in which to improve their knowledge and practice. Talking to other coaches, watching other coaches, searching the internet, reading, attending courses/CPD and viewing DVDs were some of the ways in which they sought to develop. The coaches' desire to improve was recognised and appreciated by athletes. One athlete commented on the commitment of their coach:

> [The coach] does a lot of homework so to speak, he has all his hockey DVDs and manuals, he does a lot of work in the background so that he takes it to the Tuesday nights or Thursday nights so he has it all sorted so he knows from day one what he wants to achieve with that team because he has spent the summer working on it. It is a never ending job for him. (AdultAthleteM)

AdultCoachM2 explained that even though he had several decades worth of experience, there was still a need to keep learning:

> I am doing some CPD at the moment to remind myself where I am and to remind myself that I don't know everything. That can happen when you coach a long time - you think you know everything. (AdultCoachM2)

The coaches also explained how they were often thinking about their sport away from training or games?

> I spend a lot of Saturday nights awake reanalysing the game and thinking what we need to be doing on the pitch to improve so that we can get better and score more goals. (AdultCoachF1)

The coaches explained that seeking to improve as a coach was important, although this did not necessarily mean taking part in coach education training.

I probably didn't ever do any formal qualifications but I did a lot of reading for my own benefit. I think talking to people as well. Probably the most I learnt about coaching is interpreting how other people have coached and watching what I believed has work. (AdultCoachF1)

While coaches' knowledge and understanding of sport was considered important to their role, the ability to interact and communicate with others was considered equally important:

I think you can have tons of knowledge but if you can't get on well with the people you are dealing with then it is almost a waste of space or you can have a fantastic relationship with people but not be able to give them anything. So I think it has to be both. (AdultCoachM1)

In summary, learning and development experiences within the adult participation environment were:
- taking a proactive role in their own personal development using a range of sources to increase their knowledge and improve their skills
- Continually reflected and analysed practice with the aim of improving
- recognised that learning obtained in one coaching context may need to be adapted to be suitable in another context.

7.4   Talent Development Coaching Environment

In terms of learning and development, the coaches who engaged in excellent coaching practice with developing athletes were able to transfer their experience, knowledge and skills across different situations. Diverse, but specific examples were used and athletes were given the opportunity to develop their own representations of information in order to learn and develop further.

Coaches developed their knowledge in this environment in various ways, including learning technical knowledge through experience, learning from their participation as athletes, learning from coaches in other sports and learning from senior coaches in their sport:

Yeah chatting to other coaches and be exposed to a higher level of play, it makes you start thinking. (TDCoachM1)

I can learn from other teachers showing a basketball drill for example. You take things from everywhere. If you are not willing to learn from anyone then you are not going to get anywhere. (TDCoachM2)

You also have to learn from other sports and other coaches that are role models. If you just look at hockey only you will never come up with anything new unless you look at other sports. (TDCoachM1)

Coaches in this environment felt they needed more support in terms of their own development, specifically in new areas being developed. They felt that at times it could be intimidating to have to keep up with all the latest developments all the time.

In summary, the learning and development experiences for the talent development environment highlighted how coaches:
- transfer their experience, knowledge and skills across different situations
- develop their knowledge in a number of specific ways
- believe they require more support in terms of development.

7.5   High Performance Coaching Environment

Coach, HPCoachM3, has recently been working with the German national team coach as his mentor. The benefits from this relationship are clear in this quote about how to access 'schemata' in making decisions:

> For me to listen to him, chat to him, email him when I have had to make decisions, decisions I sweated over especially in the lead up to Delhi. As soon as I spoke to him he made the decision in 30 seconds. It was probably were I was going to go anyway but took him 30 seconds to tell me what he would do.

Although not yet able to access this level of support, HPCoachM2 spoke positively about this kind of learning opportunity:

> I would like to shadow a world renowned coach. Not shadow but see what they are doing. You question yourself sometimes but its almost like you need reinforcement, seeing someone else working in that environment with high level players, makes you think, it is a learning process. You can go on all these workshops but to actually watch somebody is a real life situation. You can't replace that.

The value of seeing theory in practice was also recognised by HPCoachM2:

> Yeah you go on a course, you learn about a particular area whether it is mindset or some sort of psychology or whatever. You then go away with [coach] and realise that he is applying some of the stuff you have seen in theory.

Two of the coaches are part of a UK-wide coach development initiative designed to support performance coaches 'in situ' with mentors and 1:1 evidence-based assistance. The value and impact of this is apparent to HPCoachM3:

> Continue to develop yourself, whether it be things like this or we are on programmes. You watch videos, you speak to other coaches. You have to be continually wanting to improve yourself. You have to be open so not just taking information in but giving it out as well. You can't ask your players to continually push themselves if you are not doing the same yourself. I have a coach mentor which is fine because they can push you on but I have to continually push 20 players. I don't have 20 people pushing me so I have to drive that myself. To be honest it is a difficult process, if you are not used to doing that. When I was younger it was I have got to do this but I don't really want to. Now its got to the point that I have got to do this but I actually want to do it.

In summary, the learning theme for the high performance environment highlighted the:
- need for coach mentoring
- benefit of bespoke 1-1 support for performance coaches
- value of 'on-site' learning
- desire for continued development.

8.   Future Case Study Topics

Recommendations for future case study topics are presented separately for each coaching environment. Although presented separately many of the recommendations may apply to some or all of the other coaching environments.

8.1   Children Coaching Environment

Recommendations for coach education/development:
- More coach education courses available for children's coaches

- From novice children's coaches to advanced children's coaches.
  - Courses specifically looking at how to build rapport with athletes.
- Opportunities to learn from quality coaches.
- Mentoring.

Recommendations for future research:
- More detailed analysis of what makes an excellent coach in this environment
  - Including observation of excellent coaches in practice.
  - Identifying what an excellent session and programme look like for children.
- Research on how to build effective relationships with players and/or how to engage players from an early age.

8.2   Youth Coaching Environment

Recommendations for coach education/development:
- Strategies for encouraging bigger picture thinking in youth development.
- Mentoring experiences with a practical focus.
- Developing coaching development communities within schools/clubs/regions.

Recommendations for future research:
- Examining the process of developing flexible and adaptable coaching practice.
- Understanding coaches' decision making processes in training and competition settings.
- Examining how to develop reflective practice in developing coaches.
- Understanding coaches' mindset in relation to their coaching practice.

8.3   Adult Coaching Environment

Recommendations for coach education/development:
The coaches identified two areas where support opportunities would be welcomed:
- One coach indicated that they never really know what the athletes think of them. It might be of value to coaches to be made aware of tools and techniques for obtaining athletes' honest views and opinions.
- One coach liked "forum type situations" where there are opportunities for coaches from a broad range of sports can get together to discuss approaches to coaching. These opportunities should also include other support staff such as physiotherapists and psychologists. Opportunities should be made available to coaches where this type of interaction and sharing can tale place.

Recommendations for future research:
The interviews and group discussion with coaches and athletes from an adult coaching environment raised the following questions that might be appropriate for further investigation:
- How should the transition from athlete to coach be managed?
- How do coaches adapt their coaching styles and practices when they move from one environment to another (e.g. from high performance to adult)?
- How do athletes successfully make the transition from one environment to another? How does this transition affect commitment and enjoyment of athletes' involvement in sport? What role do coaches play in facilitating/supporting transitions?

8.4   Talent Development Coaching Environment

Recommendations for coach education/development:
- Identifying and providing support for coaches in the talent development environment.
- Fostering 'bigger picture' thinking in relation to athlete development.
- Facilitating opportunities to learn from other coaches in the talent development environment.

Future research suggestions include how coaches can develop life skills in developing players, the junior to senior transition and retaining talent (i.e., keeping players in the system). The

career transition model proposed by Wylleman and Lavallee (2011), whose grounding is in the talent development literature (e.g., Bloom, 1985; Côté, 1999), could inform this research. The model captures the interactive and reciprocal influence of athletic development with other areas of the athlete's life. It is argued that a young individual's athletic development will be influenced by, and have an influence on, psychological, psychosocial and academic dynamics.

8.5   High Performance Coaching Environment

Recommendations for coach education/development:
Individually, this report should have highlighted a number of characteristics, which impact on coaches' capacity and willingness to change. Reflecting these ideas, most educators now recognise that, ideally, improving self-knowledge is the way forward, especially at higher levels of ability (e.g. Hernez-Broome & Hughes, 2004). Interestingly, this seems to be accepted as the norm in some sporting environments (e.g. Golf - Schempp, Jones & McCullick, 2007) but not in others. We recommend:
- More CPD for performance coaches with a strong emphasis on practice-based learning to effect behaviour change.
- Bespoke learning programmes for performance coaches reflecting their needs and not the 'mass-market' approach so common in large-scale coach education.
- Performance coach development being based on improving coaches' capacity to make better decisions
- Learning from the very best coaches (those who exhibit excellent coaching practice).

Recommendations for future research:
We see a substantial need for empirical examination into several features of high performance coaching. The output from much of this work will be equally valid for any of the other four environments. We recommend:
- Conduct extensive research into decision making in coaching at the macro, meso and micro levels of planning and practice.
- Fundamental work examining the social context of coaching and coach development. Such investigations should generate clear working agendas for culture change in NGBs.
- Examination of the 'new' phenomenon of performance management/direction. The impact of this work will have implications for the management of coaches and their working environment.

9.   Discussion

The purpose of the research was to identify excellent coaching practice along the sporting pathway and to identifying areas for future cases studies. Collaborating with a NGB that had an existing player development model enabled us to clearly identify 5 participant populations or coaching environments on which to base the investigation. Not only had the NGB identified these coaching environments they were also clear on the focus for coaching in each of these environments. This enabled the NGB to use environment specific criteria to identify coaches who exhibited excellent coaching practice for a specific coaching environment. The criteria adopted by the NGB were largely consistent with the outcomes considered by the coaches to be important for excellent coaching practice in their environment. There was a general emphasis on learning along the pathway. In addition, coaches in the high performance coaching environment identified performance success as the most important outcome. Coaches in the talent development and youth coaching contexts identified ensuring players developed and experienced a fun learning environment. Coaches in the adult participation coaching environment identified social as well as competitive outcomes. Coaches in the youth coaching environment identified development of quality fundamental skills and knowledge outcomes. Coaches in the children coaching environment identified fun and learning as important outcomes for this environment.

The outcomes described by the coaches and athletes can also be compared with the athlete outcomes described by Côté and Gilbert's (2009) in their definition of coaching effectiveness. They proposed that effective coaching should lead to competence, confidence, connection, and character. Coaches in all 5 coaching environments emphasised competence through their

outcomes related to athletes' learning and development of hockey. Coaches in the youth, talent development and high performance environments emphasised responsibility and athletes' taking ownership of their actions, learning, and development. Athletes in the adult participation implicitly referred to responsibility through their commitment to act as role models to younger athletes. These outcomes correspond with Côté and Gilbert's notion of character. Connection comprises the social element of sport and was emphasised in the children and adult participation environments. Finally, confidence was important to the coaches in the youth coaching environment. Côté and Gilbert suggest that effective coaching involves all four outcomes. Our research did not specifically seek to identify whether the coaches in the study were focused on all these outcomes. However, our findings indicate that the emphasis on certain outcomes varies depending on the coaching environment.

Another element of effective coaching is professional knowledge (Côté & Gilbert, 2009). A high level of knowledge was evident in the descriptions provided by the coaches in relation to player progression, session content, and delivery methods and skills. Many of these descriptions identify the integration of knowledge and experience (Schempp & McCullick, 2010) and demonstrate the complex nature of the coaching process (Lyle, 2002). Perhaps none more so than the repeated reference to excellent coaching practice requiring flexibility and the ability to adapt quickly to current conditions. How coaches learn these skills and the nature of the process is not well understood. However, one area of that may prove useful in developing this understanding is reflection, particularly reflection-in-action (Gilbert & Trudel, 2006).

In addition to professional knowledge, Côté and Gilbert (2009) argued that interpersonal and intrapersonal knowledges are also critical to become an expert coach. Coaches along the pathway discussed the importance of coach-athlete relationships and positive group environments. Furthermore their discussions revealed some insight to their approaches to developing quality relationships. The younger the athletes the more proactive the coaches were establishing these environments and relationships. With other athletes the coaches were still actively involved in the fostering a positive social context, however, they expected and encouraged greater involvement of the athletes in 'setting the tone'. Although, the methods employed maybe different in different coaching environments the social interaction element appears important across the sporting pathway. This supports those who contend that coaching is indeed a social process (e.g., Jones, Armour & Potrac, 2002, 2003).

Coaching has come to be increasingly acknowledged as a social activity (Jones, Potrac, Cushion & Ronglan, 2011), the argument for which has been further refined through empirical and theoretical study (e.g. Jones, Glintmeyer & McKenzie, 2006). In questioning top-level international coaches about the nature and essence of what they do, Jones, Armour & Potrac (2004) found their responses almost unequivocally supported the social nature of the coaching process:

> Unless you understand [athletes] as people, the best coaching book in the world isn't going to help. It all comes down to how well they really want to do for you…to the relationship you have with your players (p. 28)

> The art of coaching is about recognising the situation, recognising the people and responding to the people you are working with (p.18)

> A big thing is the manner you put things across…Really, it's the ability to handle men, that's the big thing, to handle people (p.19/20)

> Coaching to me is about reading the individual. People, people, people. That's what it boils down to in the end (p.92/93).

Our findings support this view and add to the growing evidence of coaching as a fluid, complex system of social interaction and adaptation. Furthermore, these findings support the view that the participant, the coach and their relationship is at the heart of a quality participant pathway (e.g., UK Coaching Framework, UK Coaching Model, UK Participant Development Model).

As well as interpersonal knowledge, coaches in this study also recognised the importance of intrapersonal knowledge as part of excellent coaching practice. The coaches expressed a

willingness to continue to learn and develop and many were proactive in seeking opportunities to learn. Furthermore, many of the coaches relayed examples of engagement in introspection and reflection to improve their coaching. Therefore, when this evidence is combined with the NGB's criteria for participation in the study we can see that the coaches in this study demonstrated many of the elements associated with coaching effectiveness and being expert coaches.

One key question to be addressed in the study of expertise is whether experts differ in the nature of what they do (for example, they utilize different search patterns or make judgments in different ways), or merely in the magnitude (i.e. they just do "it" better, faster and/or more frequently). There is a growing recognition of, and support for, the importance of decision making (DM) as the crucial component of expertise in a cognitive-behavioural activity such as coaching (Abrahams, Collins & Martindale, 2006; Vergeer & Lyle, 2009). Some consideration is also appropriate with parallel research in teaching, where work in the examination of knowledge bases identified by Turner-Bissett (1999) is pertinent to this study. On the basis of this and other evidence we would contest that coaching is, indeed, a DM skill (Abraham & Collins, 2011). Certainly, various other investigations into the knowledge base of expert coaches (e.g. Côté, Salmela, Trudel, Baria, & Russell, 1995) suggest that a very broad library of possibilities and options is available to a high performance coach. It is our contention that selecting the 'best option' from this broad menu is a feature of 'excellent coaching practice' in the high performance domain, as evidenced by this quote from Vergeer & Lyle, 2009):

> *"decision makers often face uncertainty, in the form of inadequate understanding of the problem, lack of information, or the inability to differentiate between equally (un-)attractive alternatives. A common tactic in response to uncertainty is to delay the decision. The fact that the most experienced coaches were more likely to do the opposite—by invoking the decision rule of making the decision earlier (than the night before the competition)—is an indication that these coaches have learned to reduce uncertainty at an earlier stage of the decision process, by what Lipshitz and Strauss (1997) called "controlling the sources of variability which reduce predictability" (p. 153). This may be linked to the fact that they pay greater attention to the consequences of the decision, and are consistent with the ability to take a more managerial approach, where the concern is less with the immediate presenting characteristics and short-term consequences of the situation and more with the underlying issues and longer-term consequences.*
> *(Vergeer & Lyle, 2009: p444)*

Although it was not the explicit purpose of our research it is surprising (and somewhat disappointing) that our research has not revealed at least some data to further our understanding of coaches' decision making. However, it is clear that this is an important distinguishing feature of experts. Coaches in this study referred to flexibility and the ability to adapt as a critical feature of excellent coaching practice. Learning more about coaches' decision making may also provide insight into the flexibility and adaptation processes that coaches in this study appear so comfortable with.

Through this project we have successfully identified elements of excellent coaching practice along the sporting pathway for one sport. In conducting a study with this breadth entails some limitations. For example only a small number of coaches were interviewed within each environment. Furthermore, several of the coaches had coaches across a number of coaching environments during their careers. For most this was seen as an advantage particularly in relation to understanding the 'bigger picture' of athlete participation and development in their sport. However, whilst 'good' coaches are likely to have opportunities to work in a range of coaching environments, these experiences and opportunities along the pathway may also blur the differences in excellent coaching practice in one environment compared with another. In addition, this study interviewed coaches currently working in one sport in Scotland. However, the inclusion of additional expert coaches (current or former from within or outside Scotland) may have been useful in furthering our understanding of the practices of coaches working at the pinnacle of the sport internationally.

10. Conclusion

This research sought to identify examples of practices that participants and coaches believe demonstrate excellent coaching practice at each stage in the sporting pathway. Through our work with the participants in this study we have demonstrated examples of excellent coaching practice and organised these into four themes: direction, social context, management and implementation. Many of the features of excellent coaching practice we identified were similar along the sporting pathway. These included an emphasis on learning, being guided by a 'bigger picture, planning, being flexible and adapting to changing demands, fostering a positive social and learning environment, employing quality interactive instructional techniques and using game-related activities. There were also differences in excellent coaching practice that reflected recognition of the demands of specific coaching environments and adapted to the needs of the athletes within those environments. These differences were evident in the priority given to certain outcomes and how coaching practices were adapted in different coaching environments. The recognition of differences in excellent coaching practice along the sporting pathway supports the recent developments in models and frameworks for sport (UK Coaching Framework, Participant Development Model, Coach Development Model). These models and frameworks place emphasis on consideration of the needs of specific participant populations and the different contexts in which coaches operate in determining how coaches work with participants. The research presented in this report is the first to examine excellent coaching practice along the participant pathway and provides valuable insight into both the similarities and differences in coaching practice. Through this project many questions have been raised and several directions for future coach education provision and research have been identified. Clearly there is significant scope for further research both within specific coaching environments and along the sporting pathway. Future research should seek to further develop our understanding of excellent coaching practice, the educational needs of new, developing, and experienced coaches, and provide information to shape resources to support coaches continued development in each coaching environment.

11. References

Abraham, A., Collins, & Martindale, R. (2006). The Coaching Schematic: Validation through expert coach consensus. *Journal of Sport Sciences*, 24(6), 549-564.

Abraham, A. & Collins, D. (2011). Taking the Next Step: Ways Forward for Coaching Science. *Quest*, 63 (4), 336-384

Becker, A. J., & Wrisberg, C. A. (2008). Effective coaching in action: Observations of legendary collegiate basketball coach Pat Summitt. *The Sport Psychologist, 22*, 197-211.

Burgess, R. G. (Ed.). (1982). *Field research: A sourcebook and field manual*. London: Allen & Unwin.

Côté, J. & Gilbert, W. (2009). An integrative definition of coaching effectiveness and expertise. International Journal of Sports Science and Coaching, 4(3), 307-323.

Côté, J., Salmela, J., Trudel, P., Baria, A., & Russell, S. (1995). The coaching model: A grounded assessment of expert gymnastic coaches' knowledge. *Journal of Sport and Exercise Psychology*, 17, 1-17.

Côté, J. & Sedgwick (2003). Effective behaviours of expert rowing coaches: A qualitative investigation of Canadian athletes and coaches. International Sports Journal, 7(1), 62-77.

Cross, N. (1995). Coaching effectiveness in hockey: A Scottish perspective. Scottish Journal of Physical Education, 23(1), 27-39.

Cushion, C. & Jones, R. L. (2001). A systematic observation of professional top-level youth soccer coaches. Journal of Sport Behaviour, 24, 354-376.

Douge, B. & Hastie, P. (1993). Coach effectiveness. Sport Science Review, 2(2), 14-29.

Dowdell (2010). Characteristics of effective gymnastics coaching. Science of Gymnastics, 2(1), 15-24.

Fontana, A. & Frey, J. H. (2000). From structured questions to negotiated text. In N. K. Denzin, & Y. S. Lincoln, (Eds.), *Handbook of qualitative research* (2 ed., 645-672). Thousand Oaks, CA: Sage.

Gallimore, R., & Tharp, R. (2004). What a coach can teach a teacher, 1975-2004: Reflections and reanalysis of John Wooden's teaching practices. *The Sport Psychologist, 18*, 119-137.

Gilbert, W., & Trudel, P. (2006). The coach as a reflective practitioner. In R.L. Jones (Ed.), *The sports coach as educator*. London: Routledge, 113-127.

Hardin (2000). Coaching expertise in high school athletics: Characteristics of expert high school coaches. Applied Research in Coaching and Athletics, 15, 24-38.

Hernez-Broome, G. & Hughes, R.L. (2004). *Leadership development: past, present and future*. Human Resource Planning, 27, 24-32.

Jones, R. L., Armour, K. M., & Potrac, P. (2002). Understanding the coaching process: A framework for social analysis, Quest, 54 (1), 34-48.

Jones, R. L., Armour, K. M., & Potrac, P. (2003). Constructing expert knowledge: A case study of a top-level professional soccer coach. Sport, Education, and Society, 8, 213-229.

Jones, R., Armour, K., & Potrac, P. (2004). *Sports coaching cultures: From practice to theory.* London: Routledge.

Jones, R.L., Glintmeyer, N., & McKenzie, A. (2005). Slim bodies, eating disorders and the coach-athlete relationship. *International Review for the Sociology of Sport*, 40, 377–391.

Jones, R.L., Potrac, P., Cushion, C. & Tore Ronglan, L. (2011). *The Sociology of Sports Coaching*. London: Routledge

Lyle, J. (2002). *Sports coaching concepts: A framework for coaching behaviour*. London: Routledge.

Madriz, E. Focus groups in feminist research. In N. K. Denzin and Y. S. Lincoln (eds.), *Handbook of qualitative research,* Thousand Oaks, CA: Sage, 2000.

Nash, C., & Sproule, J. (2009). Insights into experiences: reflections of an expert and novice coach. International Journal of Sports Science and Coaching, 6(1), 149-161.

Nash, C., & Sproule, J. (2009). Career development of expert coaches. International Journal of Sports Science and Coaching, 4(1), 121-138.

Nash, C., Sproule, J., & Horton, P. (2011). Excellence in coaching: The art and skill of elite practitioners. Research Quarterly for Exercise and Sport, 82(2), 229-238.

Schempp, P., Jones, E.M. & McCullick, B., (2007). How the best get better: An analysis of self-monitoring strategies used by expert golf instructors. *International Journal of Sport Science and Coaching*, 1(1), 25-35.

Schempp, P.G., & McCullick, B. (2010). Coaches' expertise. In J. Lyle & C. Cushion (Ed.). *Sports Coaching: Professionalisation and practice* (pp.221-231). London: Elsevier.

Smith, M., & Cushion, C. (2006). An investigation of the in-game behaviours of professional, top-level youth soccer coaches. *Journal of Sports Sciences, 24*(4), 355-366.

Vella, S., Oades, L., & Crowe, T. (2011). The role of the coach in facilitating positive youth development: Moving from theory to practice. Journal of Applied Sport Psychology, 23(1), 33-49.

Vergeer, I., & Lyle, J. (2009). Coaching experience: Examining its role in coaches' decision making. International Journal of Sport & Exercise Psychology, 7(4), 431-450.