Running Head: Coach Education

Are coach education programmes the most effective method for coach development?

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ABSTRACT

The purpose of this study is to establish whether coaches from a multi-sport context develop most effectively through coach education programmes and whether formal learning is fostering coach effectiveness. A sample of eight qualified male multi-sports' coaches participated with an age range of 24 to 52 years (M = 32.6, ± = 8.9) and 9 to 18 years coaching experience (M = 12.6, ± = 3.8). Qualitative semi structured interviews were employed, lasting approximately 30 to 60 minutes. The data then underwent a thematic analysis process reducing the data into six overarching themes: values of the coach; the coach's role on athlete development; forms of learning; barriers regarding coach education; role of governing bodies; coaches career pathway. The findings of the study indicated coaches access a wide range of sources to enhance their practice, but informal learning was preferred (interacting with other coaches and learning by doing). This resulted from numerous barriers experienced surrounding the delivery, cost and access to coach education programmes preventing coaches from progressing through the pathway. However, coaches in the study feel coach education should be a mandatory process for every coach. The findings have implications for policymakers and sport organisations in developing their coach education structure.

Keywords: coach education programmes; coach effectiveness; sports coaches; multi-sport context; sport organisations

1   Sports coaches have a direct influence on individual's participation, enjoyment,

2   passion and commitment in playing sports throughout their entire lifetime (ScUK, 2015).

3   There are approximately 1.3 million individuals that are actively engaged in the role of a

4   sports coach in the United Kingdom (UK) fostering the development of 7 million children

5   and adults competing at various levels (ScUK, 2015). Sports' coaching is an occupation, but

6   remains distant from becoming an established, regulated profession. Only few studies have

7   addressed the prevailing challenges preventing sports coaching from achieving a

8   professionalised status (Duffy et al., 2011; Gray et al., 2011; Taylor & Garratt, 2010). In

9   particular, sports' coaching has not established an empirically tested knowledge base, ethical

10   code of conduct, rights to practice and self-regulatory process.   Further to this the roles of the

11   coach have become increasingly stratified where sports' coaching has been associated with

12   health, educational and business fields (Nash, Sproule and Horton 2008).

13   Practitioners working in professional industries are required to develop an extensive

14   knowledge base through attaining appropriate levels of education (undergraduate/

15   postgraduate levels). Further to this, once practicing, these individuals are obligated to self-

16   regulate themselves through complying with continuous professional development (CPD)

17   throughout their careers (Armour, 2010). There has been a shift towards a unified body with

18   the establishment of the United Kingdom Coaching Certificate (UKCC). However, this

19   represents a workforce of predominantly volunteers where not all sports comply or have

20   adopted the UKCC framework into their own system, thus creating a clear divide between

21   governing bodies of sport. Standardisation among sports is assumed to create homogeneity

22   between organizations and sports coaches (Foucault, 1991: p.184), as it introduces a clearly

23   defined framework that delineates coaches' stages of learning, but it is clear that sports

24   coaching must address the pressing issues preventing it from achieving a professional status.

1   Collinson (1996) identified a triad of knowledge that can be interpreted from a sports

2   coaching perspective. Collinson's triad of knowledge is underpinned by three forms of

3   knowledge: professional, interpersonal and intrapersonal knowledge. Professional

4   knowledge refers to Abraham and colleagues (2006) '*ologies*': sport specific, pedagogical

5   and sports science knowledge. This is usually conceptualised by a coaches ability of

6   knowing what (declarative) and knowing how (procedural) to operate in the coaching

7   environment. Previous research has indicated that professional forms of knowledge have

8   underpinned current coach education programmes (Gilbert & Trudel, 2006), but this fails to

9   truly acknowledge the interpersonal dynamics of the coaching environment. Interpersonal

10   knowledge refers to the bidirectional relationships that are present in the coaching

11   environment: coach, athlete(s) and the structure (club/ culture). Finally, intrapersonal

12   knowledge refers to the knowledge of oneself and has been heavily cited within the reflective

13   practice literature (Cote & Gilbert, 2009). It is expected that coaches must consistently

14   engage in all three aspects in order to achieve coaching effectiveness (Cote & Gilbert, 2009).

15   There has been a range of theoretical and empirical perspectives relating to coaches'

16   development, but there is ambiguity regarding the nature of the coaching process due to

17   overly simplistic representations of the coaching process (Cushion, 2007), failing to

18   acknowledge the complexity and unpredictability of the coaching environment.

19   Research suggests that coaches access multiple methods to increase their learning and

20   develop their coaching (learning by doing; print/ electronic material, coach education, clinics,

21   CPD, observation of others, interactions and mentoring), but it has been identified that the

22   forms of learning contributing to coach development are not equally valued (Erickson et al.,

23   2008). The education of coaches has received significant attention in recent years due to an

24   increasing expectation of coaching roles at both ends of the coaching spectrum. Therefore, it

25   would be presumed that coach education, the focus of the current study, would be highly

1   desired by sports coaches in the UK. However, a body of literature has indicated that coach

2   education is not the most desired resource for developing coaching knowledge, but informal

3   experiences, such as learning through experience and interaction with other coaches is

4   preferred (Erickson et al., 2008; Gilbert & Trudel, 2006; Cushion et al., 2003; Nelson et al.,

5   2006; Mallett et al., 2008; Gilbert & Trudel, 2001).

6   From the various sources of learning identified, these can be grouped into three

7   overarching sources of coach learning: formal; informal and non-formal. Formal learning,

8   such as coach education has a standardized structure where attendance is compulsory and

9   normally culminates in certification only once the individual meets the desired criteria

10   expected. Informal learning represents a lifelong process where individuals acquire and

11   accumulate knowledge, skills, beliefs and perspectives from everyday experiences and

12   exposure from their surroundings. Research has indicated that sports coaches devote over

13   1,000 hours in informal learning situations and as little as 10 hours in formal coach education

14   (Gilbert et al., 2010). Finally, non-formal learning has been positioned between formal and

15   informal learning as it is structured, systematic and educational but does not culminate in

16   certification. Examples of non-formal learning include: continuous professional development

17   (CPD), clinics, workshops or seminars.

18   The purpose of this study was to contribute to the existing coaching literature by

19   investigating whether coaches develop more effectively through coach education from a

20   multi-sport context. It will consider whether coaches value coach education as a predominant

21   learning source in consideration to the range of sources available (formal/informal/non-

22   formal). By implementing semi-structured interviews and deducing participant

23   interpretations through thematic analysis, this study will allow appropriate conclusions to be

24   drawn from the effectiveness of formal coach education programmes.

1

2   METHODOLOGY

3   Participants

4   From the eight coaches interviewed, various sports were represented: football (n=3),

5   rugby (n=1), swimming (n=1), multi-sports (n=3). The age range between the participants

6   was 24 to 52 years (M = 32.6, ± = 8.9), with 9 to 18 years of coaching experience (M = 12.6,

7   ± = 3.8). Across the sample, the coaches' work demographic was taken into consideration:

8   three of the eight coaches are active sports development officers, two are head coaches, one

9   coach is self-employed, one is an active schools coordinator, and the remaining coach is an

10   assistant sports development officer. In relation to the coaches respective coaching groups,

11   two have worked with elite athletes and hold Level 4 qualifications in their sport. The

12   remaining six coaches varied in their highest level of qualification from level 2 to level 4. All

13   of the coaches had previously studied a sport's specific degree, excluding one coach that

14   obtained a master's degree in sports coaching. The coaches in the study had not previously

15   participated at an elite level, but had experience at recreational levels. Finally, all of the

16   coaches participated at a voluntary basis.

17   Instrumentation

18   Semi-structured interviews were utilized as the method of data collection for the

19   study. This research technique was underpinned through an interpretive research paradigm

20   where participants were prompted to answer each question as honestly as they could with as

21   much information, through open ended questions. Each interview was maintained through a

22   consistent framework that was followed for each interview. The interview structure

23   (Appendix 5), based on Falcao et al. (2012) framework consisted of 12 questions and was

1 divided into three sections: introductory questions; key questions; summary questions;

2 concluding question. The introductory questions were used as an ice-breaker; initiate

3 conversation surrounding participant experiences in coaching sport. The key questions of the

4 study explored and evaluated participant perceptions of coach development and coach

5 learning in relation to their developmental pathway. Two summary questions were included

6 to summarize the overall effectiveness of the coaching courses by establishing whether

7 coaches perceived themselves as a more competent coach as a result of completing the

8 course, and whether they completed the course to fulfil or enhance career objectives. To

9 conclude the interview, a concluding question was used to establish whether the coach has

10 come closer to achieving their main career objective as a result of engaging in coach

11 education.

12 Procedure

13   Once ethical approval was granted from the university's ethical board, the recruitment

14 process was initiated. This process consisted of sending emails to head coaches and sport

15 development officers locally in Dundee. A purposeful sampling technique was used to

16 recruit coaches where the coaches that were contacted consisted of high and low level

17 qualification. The recruitment email consisted of a general outline describing the nature of

18 the study with some background information of the researcher. If contact was returned, a

19 second email was sent to participants to organise an interview meeting, alongside an

20 information sheet. The interviews were conducted in the most convenient location for each

21 participant; participants working environment. In preparation for every interview, the

22 researcher ensured written consent, a note pad, digital recorder and interview structure was

23 readily available. During the interview, the coaches were prompted to reflect on their

24 experiences as a sports coach whilst taking into consideration the sources of learning they

1   engaged in to develop their coaching. Every participant was encouraged to give as much

2   information as possible, but if responses lacked depth, a probing technique was used to

3   prompt further discussion. This was also used to reduce ambiguity in the context of

4   participant's interpretations of participant experiences. Interviews were recorded and

5   transcribed verbatim and lasted approximately 25 to 65 minutes.

6   Data Analysis

7   The eight interviews were transcribed verbatim. The data then underwent a thematic

8   analytical process including: similarities and differences, coding, categorizing and constant

9   comparison completing the familiarization of the data (Jones et al., 2014). A reduction of

10 categories was formed and coded using a colour coded representation of the different themes

11 that emerged from the analysis. The themes and sub themes were further analysed and

12 compared to assess the integrity of themes and to remove any form of researcher bias or

13 overlaps in the data. To maintain reliability of the data, inter-rater reliability was employed

14 to reduce the level of subjectivity of the researcher's interpretation of the data, increasing the

15 validity of the research findings. According to Flick (2009) validity must be constantly

16 maintained throughout the entire research process and this was assured by having a

17 substantive understanding of the research theory of coaching science research, mastery of

18 theoretical underpinnings related to coaching and having a reflexive stance of the

19 epistemological issues behind the theory.

1   RESULTS

2   In consideration to the purpose of the study six themes were identified: virtues of the

3   coach; the coach's role on athlete development; forms of learning; barriers to coach

4   education; role of governing bodies; coaches career pathway.

5   Virtues of the coach

6   There are many aspects that contribute to the values of the coach as two coaches

7   reiterated, "It's a wide remit". Similarly, another coach disclosed, "If you try and put what

8   coaching is on bits of paper, you are not going to do it". However, from this study, three

9   overarching sub-themes were generated by the eight coaches: positivity, communication and

10   patience.

11   Positivity.

12   All eight coaches incorporate positive coaching into their coaching sessions. In

13   particular, one coach identified a new policy reinforcing positive coaching, "The older

14   coaches who go back shouting and balling and tooting at them [children]… through the new

15   project Positive Coaching Scotland we are trying to eradicate that out of the game".

16   Similarly, another coach stated the importance of positive coaching, "Even if you're having

17   the worst day ever, you kinda got to put your game face on and you have got to be like all

18   happy, enthusiastic". One coach rewards their athletes through positivity, "If they do say

19   please and thank you, nice manners thanks for that, high five…trying to be positive".

20   Communication

21   Communication was identified as a key virtue by the coaches in this study. In

22   particular, one coach disclosed, "It's a tree with a load of branches… ability to give them that

23   information, impart that information to them… facts, short, sharp, accurate facts". Another

1   coach indicated that coaches must be knowledgeable in order to communicate effectively,

2   "You need the knowledge to go deliver, but you also need the method of delivering that

3   knowledge".

4   Patience

5   The coaches in the study raised the importance of the virtue, patience in coaching, "I

6   have never said to a child, you know that was murder it's kinda like, hey that was a good

7   effort". Similarly, another coach stated, "as long you can promote enthusiasm and fun in a

8   caring way, caring and understanding towards the children".

9   The coaches' role on athlete development

10   All of the coaches in the study perceived the coaches role of high importance where

11   the coach acts as the main facilitator and barrier to athlete participation in sport. Two sub

12   themes were identified within the theme 'The coaches' role on athlete development':

13   Importance of the coach on athlete development and dropout in sport.

14   Importance of the coach on athlete development

15   The coaches in the study raised the importance of the coach on athlete development,

16   "They need to have the player at the centre and they should be a master of instantaneous

17   response". One coach underlined the role of the coach as he explained that coaches should

18   not take the credit for the success of their athletes,

19   "We can do all the preparation we want, we don't get in there, we don't do the long

20   jump, we don't run the race for them, score the goal that makes them champions… I

21   put the little building blocks in place, that's my job"

1   Another coach mentioned that coaches' develop by the same principles of athletes,

2   "We are training our knowledge and our brain to be better or be physically sharper… it's a

3   shame about everything else down". Similarly, another coach mentioned their governing

4   body are trying to create, "a double go coach… success through effort…motivating players to

5   have a bit of intrinsic motivation…teaching them life skills that are transferrable into

6   everyday life". Furthermore, one coach explained, "Coaches try to coach what's on the bit of

7   paper not what's actually happening".

8   Drop-out in Sport

9   One coach reinforced the coaches role through sport, "Inspire the children to take part

10   in sport and make sport fun [coach]…as you develop into your teens a coach is really there to

11   impart knowledge and to improve people's games". However, too much pressure on athletic

12   performance may lead to 'drop-out' as one coach disclosed, "Falls back to the coach".

13   Another coach stated the importance of coaches' being aware of athletic training zones, "You

14   can't push a body and a person a hundred per cent all the time". Finally, one coach

15   reinforced equality to sports participation at all levels, "You want to give that 1 per cent the

16   best chance but the other 99 per cent you have to look after those guys as well".

17   Forms of learning

18   All of the coaches within the study identified two main types of learning that coaches

19   can access to enhance their level of coaching: formal learning; informal learning. Formal

20   learning such as coach education had been previously accessed by all of the coaches and was

21   a requirement for participants to have in order to take part within the study.

22   Formal learning

1   All eight coaches in the study reinforced the importance of formal learning; one coach

2   disclosed, "We have got to have these licensed, generic coaching courses so we have a

3   professionalism and identity". Similarly, another coach stated, "Gives you the tools to put in

4   your toolbox [coach education]". One coach identified numerous benefits of coach

5   education, "The qualifications give you ideas; they prompt you to think… you get to see

6   other people in practice and it gives you an idea of good and bad practice". Two coaches

7   explained they have integrated formal learning into their own coaching, "That's [coach

8   education] given me a bit of a framework of what I think is good practice and I have taken

9   wee bits of it and put it in my mould, made it relevant for myself". Finally, coaches

10   explained the importance of coaching courses,

11   "You need to get folk on an introductory course, you have got to get them clued up,

12   get them safe you know, they have got to be doing safe practice… then from there

13   look at educating them on how to do stuff…take that help before you turn up for

14   courses"

15   Informal learning

16   The coaches in the study identified numerous forms of informal learning as one coach

17   disclosed, "Going out and watching people and learning and looking on YouTube for drills,

18   buying books, and asking people". Two of the eight coaches expressed the need for coaches

19   to be flexible with their learning, "You need to be open and receptive… soak up as much as

20   you can". Mentoring programmes were also identified, "learning from experienced coaches

21   who have been there, done that". However, one coach stated, "[mentoring] certainly works,

22   but the key question is, is it the right mentor". Furthermore, this participant stated that it is

23   vital to access formal and informal learning,

1   "You couldn't specifically say I am a good coach now I have been on these coach

2   education courses… just because you have got lots of coaching hours doesn't

3   necessarily make you a good coach, they need to go hand in hand with each other."

4   Barriers to coach education

5   Three prominent barriers were identified to undertaking coach education courses:

6   course structure, cost and access to courses.

7   Course structure

8   In relation to course structure, coaches felt that the courses were quite limited in

9   content, "I have got to do management, various bits of paperwork and that sort of thing. The

10   coaching courses don't really prepare you for that sort of thing". Similarly, another coach

11   disclosed, "There are so many different aspects you have to cover [in coach education]…you

12   have got a limited amount of time presenting these coach education courses". To counter this

13   point, another coach explained, "The tutor basically controlled you, didn't really get the

14   chance to develop your own style of coaching". Similarly, another coach distinguished

15   variances between assessment criteria, "People pass it too easily, they are almost giving away

16   these courses like sweeties". Additionally, "Assessments should be across every single level;

17   it's not just a case of turn up and get your badge". However, another coach explained, "It's

18   such a fine line because once someone knows it's a test you're not confident, then you will

19   not go, so you don't want to discourage people".

20   Cost

21   Five of the eight coaches disclosed cost as a barrier to undertaking coach, "The cost

22   for some of the courses is outrageous". Similarly, another coach stated, "I think cost is, as

23   you go up the levels is something that probably puts a lot of people off". However, another

1   coach countered this viewpoint, "The only way to grow the game is by people going out and

2   coaching the game, so it's a double edged sword again. If you don't have the coaches, you

3   don't have the people participating". One coach stated there are ways around costs, "At

4   quality mark clubs you get it for half price". Similarly, another coach mentioned, "The

5   universities and colleges are quite good to find courses and pots of money to put on free

6   coaching qualifications for students or for senior pupils or for teachers".

7   Access to courses

8   Four of the eight coaches explained access to courses was problematic, "The timing

9   for some courses; some are at the weekend… Sometimes the courses are at an area that

10   people can't get to easily". However, another coach stated, "Courses are there, they run

11   courses maybe midweek or over the weekend, they run them over two weekends, they

12   provide options for people to go". Furthermore this coach explained, "They [courses] are

13   certainly available online, you can look at everything, where the venues are..."

14   The role of National Governing Bodies

15   All of the coaches in the study believe that the NGBs have a significant role in

16   shaping coach education courses. Two sub-themes were identified from the theme 'The role

17   of NGBs': structure of the courses and self-regulation.

18   Self-regulation

19   One coach felt that coaches are not prompted to improve themselves, "It wasn't I'll do

20   the absolute minimum and sit on my backside which is what a lot of people do". Similarly,

21   "My first aid was due for renewal after 3 years; you know they were able to achieve it… I

22   don't see why the governing bodies can't do it". However another coach indicated regulation

23   is becoming introduced, "We have now introduced CCD [football pathway] which is

1   continued coach development… If they have not gone on a course within 4 years I think, or 3

2   years, then they are going to lose their certificate". One coach mentioned regulation within

3   their NGB,

4   We have evolved our resources going from it was a video to a DVD in a booklet, we

5   now have a CD-ROM in a booklet which gives you the opportunity to download

6   future application forms for future courses

7   Coaches' career pathway

8   In relation to the coaches' career pathway, two sub-themes were identified: higher

9   education and accrediting coaches.

10   Higher education

11   All of the coaches in the study attended higher education through a college or

12   university. Some coaches stressed the importance of higher and further education, "There

13   should be some form of introduction…most coaches' get that through college or University,

14   other coaches and volunteers don't get introduced to that". Similarly, another coach

15   expressed the significance towards their coaching career, "That 2, 3 years [of University] was

16   the biggest, the most significant development of my coaching career so far". Furthermore,

17   another coach distinguished the difference between coaching courses and higher education,

18   "It would take 6 days to do the course at FAW [Wales Football Association]; we could spend

19   up to 3 months doing it [at University]". However, another coach explained a degree is not

20   conclusive, "Going through a degree doesn't make you a good coach and playing the game

21   doesn't mean you can actually coach the game".

22   Accrediting coaches

1   All the coaches previously volunteered before they reached the role they were in now.

2   One coach explained, "Volunteers is the bottom level of the pyramid, but it's the biggest

3   level". Another coach mentioned an accreditation programme for volunteer coaches, "We do

4   a quality mark programme with 89 clubs… the volunteers need to be accredited to a certain

5   level of qualification". One coach explained that change needs to occur within the football

6   structure,

7   We have been talking a long time about grass roots in this country… and that's the

8   ones where the least time is invested, it's only when you go up the pathway up to the

9   elite spectrum that you start to focus more hours at that particular level, yet you need

10   better coaches at that level, but there is less players at the top so it's almost turning

11   that pyramid on its head so you have got an inverted triangle that's got more resources

12   should go to the bottom.

13   Another coach mentioned the importance of getting qualifications,

14   I have sat with head teachers trying to get in a school and do taster sessions and the

15   first thing they might say to you can you prove your credentials, so I have got a

16   folio…and then straight away they are thinking this guy does actually have a bit of

17   experience, he is well qualified.

18   Furthermore, one coach mentioned, "If you go for any job… you can have all the

19   experience that you want, but if you have not got a bit of paper saying you have been on this

20   course it's worthless". Another coach stated that there are now requirements to access

21   particular job positions, "If you wanted to get into a pro initiative club you need a licence;

22   club development management posts you have to have a licence… if you don't have a licence

23   you don't get on".

1   DISCUSSION

2   The purpose of this study was to establish whether coaches develop more effectively

3   through coach education programmes. This was achieved through qualitative, semi

4   structured interviews of qualified sports coaches. The data underwent thematic analysis and

5   six themes and sub themes emerged from the eight interviews: values of the coach; coaches

6   role on athlete development; importance of the coach on athlete development; forms of

7   learning; barriers to coach education; the role of NGBs; coaches career pathway.

8   Virtues of a coach

9   Three distinctive virtues were identified within the theme virtues of a coach:

10   positivity, communication and patience.

11   Positivity

12   Creating a positive environment was used to gain trust and encourage positive traits

13   underpinned by national policy (PCS), consistent with Sullivan's et al. (2012) qualitative

14   questionnaires of 172 youth sport coaches. Similarly, coaches' indicated negative coaching

15   behaviours are detrimental to fostering a positive coaching environment. This is reinforced

16   by coaching literature that suggests athlete's motivation levels are decreased through negative

17   reinforcement and expletive criticism, decreasing coaching effectiveness (Vargas-Tonsing et

18   al., 2004).

19   Communication

20   Coaches in the study stated the importance of communication as a virtue of coach

21   development. However, Cote & Gilbert (2009) explained coach development is

22   predominantly focused on developing coaches' professional knowledge: sport

23   specific/science knowledge. They (Cote & Gilbert, 2009) believe coaches must integrate a

1   mixture of interpersonal and intrapersonal knowledge to be able to communicate effectively

2   as the coaching environment requires high levels of communication between key agents

3   (athletes/coaches/parents). Therefore, it is anticipated that coach education must diverge

4   from its traditional teaching approach towards Sfard (1998) participational metaphor.

5   Patience

6   Findings revealed that effort should be valued more than outcome, reflecting a

7   mastery climate that fosters athlete's competencies, enjoyment and involvement in sport

8   (Weiss et al., 2009). Similarly, the coaching role requires coaches' to develop mental

9   preparation, performance strategies, goal setting and promoting effort and perseverance

10   (Gould & Carson, 2011).

11   Forms of learning

12   Coaches identified various sources of learning underpinned through two forms of

13   learning: formal/informal learning.

14   Formal learning

15   The coaches in the study stated the importance of coach education programmes in

16   sustaining and enhancing the quality of sports coaching, consistent with Cushion et al.

17   (2003). Aforementioned, coaches have a direct influence on athlete involvement and

18   development in sport and therefore, it is of particular importance that coaches receive

19   adequate training (Cote & Gilbert, 2009). Coach education develops a framework that a

20   coach can integrate into their own coaching, but due to the simplistic nature of the framework

21   coaches often feel isolated and resort to developing their own heuristic model. However,

22   Sullivan & Campbell's (2005) study shows that coaches who participated in a coach

23   education programme had greater levels of coaching efficacy, in contrast to the control group

1   of coaches who had not undertaken any form of coach education. Furthermore, coaches have

2   access to experts in their field as a result of attending coach education courses (Mallett et al.,

3   2009).

4   Informal learning

5   All eight coaches disclosed informal learning as their most preferred method of

6   learning, consistent with previous literature (Erickson et al., 2007; Erickson et al. 2008;

7   Nelson et al., 2006; Trudel et al., 2010; Wright et al., 2007). The coaches engaged in

8   mentoring, CPD, reading books and using the Internet to develop their coaching knowledge.

9   Similarly, Farrell & van de Braam (2012) suggested is a responsibility of the modern day

10   coach to engage in informal learning. Moreover, coaches expressed the importance to

11   interact with other coaches, reinforcing the need to be open and receptive to learning

12   (Erickson et al., 2008). However, Lemyre et al. (2007) study indicated that coaches are

13   unlikely to interact with other teams at recreational levels due to the competitive nature and

14   pressure of winning.

15   Coaches' role on athlete development

16   Two sub themes emerged from the theme coach's role on athlete development:

17   importance of the coach on athlete development and dropout in sport.

18   Importance of the coach on athlete development

19   The role of the coach on athlete development was reported significantly by coaches in

20   laying the foundations for their athletes where the players are at the centre of every session,

21   with performance goals addressed in training sessions. This is reinforced by creating a social

22   environment that reflects children's aspirations to participation, allowing athletes to achieve

23   sport related goals (Bailey et al., 2013). Moreover, coaches explained the desire to coach

1   what you see rather than on the session plan, thus facilitating a democratic coaching style,

2   contrasting autocratic coaching styles (Cushion & Jones, 2001). However, Potrac et al.

3   (2007) stated instructional feedback allows coaches to have control over their athletes and of

4   the training session and therefore variances in coaching styles were apparent in this current

5   study.

6   Dropout in sport

7   The findings indicate coaches have a significant role in shaping a child's involvement

8   in sport, through the coaches role frame in delivering fun coaching sessions (Keathley et al.,

9   2013; Russell & Limle, 2013). Similarly, previous research indicates participation in sport at

10 an early age promotes longevity in sport participation in later life (Backmand et al., 2010).

11 Coaches identified indicators of dropout of sport. In particular, athletic burnout was

12 identified as a significant contributor towards dropout in sport, resulting from severe

13 fluctuations in psychological and physiological performance (Kentta et al., 2001). Similarly,

14 athletic burnout was identified as the most significant predictor of dropout in college athletes

15 (Holmberg and Sheridan, 2013). Lemyre, Treasure and Roberts (2006) study found that

16 devaluation was most significantly correlated to psychological factors where exhaustion was

17 most significantly correlated towards physiological factors.

18 Barriers to coach education

19   Two subthemes were identified from the theme barriers to coach education: course

20 structure, cost and access to courses.

21 Course structure

22   The structure of coach education was perceived as being dogmatic in its structure,

23 supporting Vella et al. (2013, p426) study that suggests coaches are indoctrinated by coach

1   educators, developing only closed skills. Vella et al. (2013, p.426) indicate that coaches need

2   to develop open skills, where coach educators allow coaches to contribute to the learning

3   process, demonstrating competence and creativity in learning. There were differences

4   disclosed between assessments and attendance based courses between various NGBs and this

5   was reinforced by one coach explained some NGBs are passing coaches too easily on coach

6   education courses. Similarly, the courses are often too short in duration and one to one

7   interaction with the tutor is limited; therefore, these programmes may be ambiguous for some

8   learners (Mallett et al., 2009). Moreover, coach education is performance improvement

9   focused where coaches are overloaded with information in a very small time frame (Vargas-

10   Tonsing, 2007). This may have detrimental effects on coach development as one coach

11   believed coach education courses are limited in developing the array of skills required by

12   coaches; administration and management. Therefore, it may be presumed that coaches are

13   not fully prepared entering their coaching roles at recreational levels of the game.

14   Cost and access to courses

15   Another two prominent barriers were reported by coaches in the current study: cost

16   and access to courses. In particular, one coach in the study explained that the cost for courses

17   is outrageous, consistent with Armstrong & Weidner's (2011) study that identified the cost of

18   coach education and travel to courses as the two most dominant barriers in accessing coach

19   education. Findings (Armstrong & Weidner's, 2011) revealed that female coaches perceived

20   cost and travel distance as significant barriers in comparison to male coaches. This is an

21   interesting contrast to this present study as cost and travel were two of the most dominant

22   themes that emerged as barriers for the male coaches.

23   The role of NGBs

1   Two sub-themes emerged from the theme the role of NGBs: structure of courses and

2   self-regulation.

3   Self-regulation for coaches and NGBs

4   Coaches disclosed the role of their NGBs in self-regulation through continuous

5   regulation and evolving their course content. This was reinforced by Majid et al. (2012) that

6   investigated six international and national coach education programmes and found that sport

7   organizations should be evaluating their programmes on a regular basis to ensure coaches are

8   learning and developing most effectively. In terms of regulating coaches it was observed that

9   only some sport organizations have regulation policies in place, such as CPD where coaches

10   are expected to renew their level of certification in order to practice, but it is clear most

11   NGBs do not enforce this. Therefore, questions arise to whether mechanisms should be in

12   place for all sport coaches to maintain regulation as in order to obtain a professional status,

13   regulation must be introduced at every stage of coach development (Duffy et al., 2011).

14   Coach's career pathway

15   Two subthemes emerged from the theme coaches' career pathway: higher level

16   education and accrediting coaches.

17   Higher education

18   Coaches in this study perceived higher education as a significant contributor towards

19   their development. In particular, one coach stated it was a milestone in their coaching career

20   so far. According to Dos Santos et al. (2010) the effect of higher education on coaching

21   knowledge indicates coaches that undertake higher education benefit more than those that do

22   not access it as the academic environment promotes higher cultural levels and develops a

23   more extensive sport science knowledge base (Demers et al., 2006). All eight coaches in this

1   present study attained sport specific degrees but coaching science research indicates that most

2   coaches do not get introduced to higher level education and therefore, this increases the

3   requirement for coach education (Nash & Sproule, 2009). Although going through higher

4   education has shown to be beneficial to the coaches in this study, it is apparent that it is not

5   enforced for all coaches to engage in this process.

6   Accrediting coaches

7   Coaches in the study mentioned how their sports organizations have mechanisms in

8   place to accredit all of their coaches (volunteer, part-time, full-time); coach education. One

9   coach in the study indicated the need for qualifications is necessary for career progression in

10 sports related fields. All eight coaches stressed the importance of volunteer coaches in

11 coaching, and this may be linked to previous engagements as a volunteer coach. As a result it

12 is suggested that more resources are required at the bottom of the pyramid of the novice to

13 elite spectrum, as more children at the bottom are participating at this level under volunteer

14 coaches, suggesting that grassroots is the biggest area of development. Sports coach UK

15 supports this finding as the survey conducted in 2008 identified that 76% of coaches in the

16 UK are volunteer coaches, 29% are part time coaches and 3% are full time coaches (ScUK

17 UK, 2011). Strategies need to be put in place to incur a cultural change, providing greater

18 opportunities for volunteer coaches, supported through a national shift in coaching (Feltz et

19 al., 2009).

20 CONCLUSION

21   The purpose of this study was to establish whether coaches develop more effectively

22 through coach education and this was achieved through qualitative, semi-structured

23 interviews. To analyse the data, thematic analysis was employed resulting in six themes

1 emerging in the data: values of the coach; the coach's role on athlete development; forms of

2 learning; barriers to coach education; role of NGBs; coaches career pathway.

3   The findings of the study suggest that coaches engage in two types of learning: formal

4 and informal. The coaches preferred to access informal learning more frequently than formal

5 learning and this was achieved by interacting with other coaches and learning through trial

6 and error. This research advocated every coach (volunteer, part time and full time) should

7 engage within coach education reinforcing the coaches' role on children's involvement and

8 development in sport (Backmand et al., 2010). Findings from Mallett et al. (2009) study

9 indicate all learning opportunities should be valued equally as they contribute to the cyclical

10 cycle of coach development. However, in consideration to the findings (Mallett et al., 2009),

11 formal learning is significantly underrepresented and this may be linked towards the trend of

12 informal learning. This study postulates coach education should be valued as a significant

13 learning endeavour similar to that of informal learning, but it is believed that systematic

14 changes in the governance of sports will allow progress to be achieved (Cushion et al., 2010).

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