

1 Exploring how well UK coach education meets the needs of women sports coaches

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Abstract

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5 Inclusive and equitable processes are important to the development of sports coaching. The aim of

this study was to explore how well UK coach education meets the needs of women sports coaches in

order to make recommendations to further enhance the engagement of, and support for, aspiring

and existing women coaches. The national governing bodies (NGBs) of four sports (Cycling,

Equestrian, Gymnastics and Rowing) volunteered to participate and semi-structured interviews using

the tenants of Appreciative Inquiry (AI) within a Self Determination Theory (SDT) framework were

undertaken with 23 coaches, eight coach educators and five NGB officers.

The data themed into an analytic structure derived from SDT comprising 'Autonomy: Freedom to

coach', 'Coaching competence', and 'Relatedness and belonging'. The coaches perceived potential

benefit from enhanced relatedness and belonging within their sport with the findings suggesting that

NGBs should embrace coach-led decision making in terms of the developmental topics which are

important and should adopt the development of competence, rather than assessing technical

understanding, as the foundational principle of more inclusive coach education. Future research

should investigate the impact of the inclusive practices which are recommended within this

investigation such as the softening of the technocratic focus of formal coach education.

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Key words: Appreciative Inquiry; Coach development; Inclusion; Female; Sports coaching

Introduction

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The UK Coaching Framework (sports coach UK, 2012) is designed to provide the coaching industry in the UK with a common vision to drive the development of excellent coaching practice and places strong emphasis on inclusive and equitable processes being pivotal. The purpose of the UK Coaching Framework is to aid National Governing Bodies of Sport (NGBs) in the construction of their coach education pathways through which individuals will become qualified to coach in a particular sport; a central component of this framework is the desire to ensure a diverse workforce (sports coach UK, 2012). However, recent empirical evidence would seem to indicate that little has changed regarding the under-representation of women since the publication of the Coaching Workforce (North, 2009). In 2009, North (2009) reported that, of the UK's approximately 1.1 million coaches, only 31% were female, compared to a national population proportion of 49%. Two years later, sports coach UK (2011) reported the 31% figure remained unchanged, adding that only 18% of qualified coaches were female. The under-representation of women in coaching is not solely confined to the UK; approximately 21% of coaches within the USA are female which, alarmingly, represents a modest decline since Title IX (Moran-Miller & Flores, 2011). Acosta & Carpenter (2014) reported that, in the USA, around 20% of all head coaches of intercollegiate sport are female. Furthermore, Acosta & Carpenter (2014) reported that in 1972, when Title IX was enacted, 90.0% of female teams were coached by women; by 2014, that figure dropped to 43.4%. The decreasing number of female head coaches in women's sports potentially leads to a dearth of women in decision-making roles and also hinders the perception of autonomy (LaVoi & Dutove, 2012). Furthermore, the under-representation of women coaching in the UK is further emphasized by North (2009) who reported that just 18% of 'qualified' coaches were female illustrating an even greater dearth of female coaches actually undertaking formal education and certification in this field.

The nature and form of coach education has been debated extensively in recent literature (see, for example, Cushion et al., 2010; Piggott, 2012) although examination of this discussion

provides only limited insight into the particular perspective of women coaches. A considerable proportion of the recent sports coach education literature adopts the theoretical framework originally proposed by Coombs & Ahmed (1974) which described formal, informal and non-formal educational activities. Formal educational activities include accredited courses such as United Kingdom Coaching Certificate (UKCC) endorsed coaching awards and Higher Education degree programmes (Nelson, Cushion, & Potrac, 2006). The UKCC is an endorsement system administered by sports coach UK in an attempt to provide consistency between the levels of coaching awards offered by national governing bodies (NGBs) (Piggott, 2015). Non-formal educational activities comprise elements such as additional workshops and Continuous Professional Learning (CPL) events, whilst informal activities include reflection, experiential practice and mentoring (Cushion et al., 2010). The value of bespoke learning journeys, which actively engage participants through a range of formal, informal and non-formal opportunities, has been an important theme of contemporary coach education research (Mallett, Trudel, Lyle, & Rynne, 2009). A considerable volume of research has reported that coaching practitioners place little value in formal NGB awards (Cushion, Armour, & Jones, 2003; Nelson et al., 2006; Piggott, 2012, 2015), although there is little evidence linking competencies with such learning opportunities (Cushion et al., 2010; Lyle, Sue, & North, 2010; Nelson et al., 2006; Nelson, Cushion, & Potrac, 2013; Turner & Nelson, 2009) or whether such values and perceptions hold true specifically for women. Irrespective, formal coach education has been reported to be less valued than experiential learning and other informal opportunities with the benefits to elite coaches being particularly questionable (Cushion et al., 2010; Gilbert & Trudel, 1999; Lyle et al., 2010; Mallett et al., 2009; Nelson et al., 2006; Nelson et al., 2013; Turner & Nelson, 2009). In particular, Piggott (2012) found that formal coach education courses which were delivered akin to 'closed circles' of knowledge and providing a prescriptive model of practice to be followed were reported, by coaches of a range of experience and qualification, to be useless. Extending this work, Piggott (2015) proposed a philosophical agenda for reform of coach education suggesting that NGBs adopt an 'Open Society' framework encouraging the democratization of educational

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encounters. An Open Society educational model embraces, amongst many others notions, individual autonomy, the fallibility of institutions, tolerance and critical rationalism (Piggott, 2015) all of which would point towards a greater reliance on informal learning. Informal learning experiences which coaches have been reported to perceive as beneficial to their development include unofficial mentoring (Jones, Harris, & Miles, 2009), knowledge gained as a performer (Jones, Armour, & Potrac, 2003), and acting as an apprentice to a more experienced coach (Cassidy, 2010) amongst many others. Some research has reported that non-formal learning activities have had a positive impact on coach learning (Conroy & Coatsworth, 2006; Kidman & Carlson, 1998), although the rigour and breadth of these studies has been questioned (Cushion et al., 2010). How informal and non-formal coach education is perceived by women is relatively unknown.

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Previous research that has focused on the phenomenon of the under-representation of women in coaching has commonly reported key themes purporting a culture of hegemonic masculinity, covert discrimination, time constraints and an apparent lack of desire from women to seek advancement or high level appointments (Cunningham, Doherty, & Gregg, 2007; Fielding-Lloyd & Meân, 2011; Norman, 2010, 2013; Shaw & Slack, 2002). sports coach UK (2013) conducted a preliminary investigation into the experiences and perceptions of women towards coach education identifying that women highlighted barriers similar to those relating to their involvement in coaching more generally. The sports coach UK (2013) report is similar in both disposition and methodology to much of the research already discussed concerning under-represented groups in coaching (Fielding-Lloyd & Meân, 2011; Lewis, Roberts, & Andrews, 2015; Norman, 2010, 2013; Shaw & Slack, 2002) but also in relation to female athletes (Norman & French, 2013) being primarily focused on the deficiencies of provision and culture. Fielding-Lloyd & Meân (2011) also discovered deficiencies in relation to coach education provision for women within one County Football Association in the UK. Fielding-Lloyd & Meân (2011) and argued that the organization's devolvement of responsibility to individual women coaches to access open-entry (available to all) courses was both discriminatory and victimizing. LaVoi (2016) suggested that a different approach to analyzing the deficiencies of the

current systems and culture is required and, furthermore, are critical of targeted interventions which focus merely on increasing the number of female coaches and the volume of opportunities, arguing such approaches fail to address the underlying, fundamental, issues and thus merely attempt to cover-over the problem rather than addressing the root causes.

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Adopting Bourdieu's concept of habitus, Graham, McKenna, & Fleming (2013) also reported concerns relating to the lack of female-led decision making in sports coaching and analyzed how power and ideologies may be controlled and maintained by masculine establishments. Lewis et al.'s (2015) investigated adopted a Bourdieuian perspective of women coaches' experience of football association coach education concluding the courses they attended were sexist, isolating and pointless. However, both Graham et al.'s (2013) and Lewis et al.'s (2015) research again focus on deficiencies of the culture and systems, as opposed to considering alternative theoretical and methodological perspectives which might more helpfully enable change through empowerment and holistic understanding. Contrastingly, LaVoi & Dutove (2012) addressed the under-representation of women in coaching by considering an Ecological Systems Model comprising four layers of cultural understanding; individual, interpersonal, organizational and sociocultural context. The Ecological Systems Model was chosen in an attempt to depart from the 'deficiencies' approach outlined above and reported that women cited an interest in coaching careers and the stimulation of the job as key reasons why they wanted to coach (LaVoi & Dutove, 2012). Furthering this model, LaVoi (2016) and LaVoi and Burton (2016) respectively added 'intersectionality' and 'multisystems' in an attempt to provides tools for researchers to examine how the complex identities of women coaches interact with their individual environments and social systems to impact their experiences. LaVoi's (Burton & LaVoi, 2016; LaVoi, 2016; LaVoi & Dutove, 2012) aspirational findings and approach contrast with research focused on the deficiencies of systems such as Lewis et al. (2015), Norman (2010, 2013) and Norman & French (2013) highlighting that such a different epistemological and methodological stance might be appropriate for the study of women coaches' engagement with coach education. Methodological approaches which seek to empower participants and provide a more holistic

environmental understanding focused on meaningfulness and relatedness may be more effective in addressing the nuances of the long-standing under-representation of women in coaching (Occhino, Mallett, Rynne, & Carlisle, 2014; Thedin Jakobsson, 2014; Vinson et al., 2015). Furthermore, theoretical underpinnings which offer understandings of the motivational processes impacting women's engagement with sports coaching may be useful to explore. A particularly prominent motivational model in the field of sport over recent years has been Self-Determination Theory (SDT) (Deci & Ryan, 1985).

Engagement with any task is undeniably connected to the individual's motivation. Deci & Ryan (1985) proposed that motivation can be conceived as a continuum spanning amotivation, through non-self-determined extrinsic motivation (non-SDEM), self-determined extrinsic motivation (SDEM) to intrinsic motivation. Deci & Ryan (2002) suggested that intrinsic motivation is the most desirable state and that this concept has been inextricably connected to positive psychological well-being, enhanced engagement and greater longevity of commitment. Psychological well-being, enhanced engagement and greater longevity of commitment are all potentially crucial characteristics in coaching careers where extrinsic rewards (particularly remuneration) are likely to be grossly insufficient for the vast majority of practitioners. For example, North (2009) reported that only 3% of all coaches (including males) in the UK were employed full-time and the vast majority of others delivered only a few hours per week. SDT proposes that humans have three fundamental psychological needs:

- 1. Autonomy being the perceived source of one's own behaviour;
- Competence feeling effective in the social environment; experiencing opportunities to
 express one's capabilities;
 - 3. Relatedness feeling connected to others; being cared for by one's community.

149 (Deci & Ryan, 2002)

Deci & Ryan (2012) and Ryan & Deci (2011) outlined the appropriateness of SDT to help explain sociocultural phenomena from a motivational perspective, although to date, this theoretical framework has not been applied to coach education specifically.

A number of studies utilising SDT do exist directly focussing on coaching practice more generally. For example, Allen & Shaw (2009) examined the organizational support perceived by eight female high performance coaches in two different sports in New Zealand. Allen & Shaw (2009) found that the women coaches did feel supported by their respective organisations to a sufficient extent to enable the perception of enhanced autonomy support and the development of competence, but did not find evidence concerning the promotion of relatedness. In later work concerning the social values of two sports organisations from the perspective of women coaches, they found that only one of the two facilitated conditions likely to lead to basic need satisfaction (Allen & Shaw, 2013). In broader coaching-related research in Australia, McLean & Mallett (2012) investigated the motivations of 13 coaches (four women) across 10 different sports. The authors reported both intrinsic motivation and self-determined forms of extrinsic motivation were vital aspects for coaches to facilitate a performer's optimal functioning (McLean & Mallett, 2012). Several other studies have featured SDT as a theoretical foundation from which to examine sports coaching (e.g. Cowan, Taylor, McEwan, & Baker, 2012; Felton & Jowett, 2013; Froyen & Pensgaard, 2014; Hollembeak & Amorose, 2005; Jachini, 2013; Jachini, Amorose, & Anderson-Butcher, 2010; Mallett, 2005; McLean, Mallett, & Newcombe, 2012; Occhino et al., 2014; Webster et al., 2013) reinforcing the appropriateness of utilising this framework in coaching-related research. The aim of this project was to explore how well UK coach education meets the needs of women coaches in order to identify ways in which to enhance participation, improve continuing support and promote the engagement of women in sports coaching.

Methodology

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A pragmatic methodological approach was determined drawn from Appreciative Inquiry (Cooperrider & Whitney, 2005). Appreciative Inquiry was founded as a change management

concept and has increasingly been cited as a highly impactful research technique for educational organisations seeking to enhance particular aspects of their practice (Doveston & Keenaghan, 2006; Kadi-Hanifi et al., 2014; Shuayb, Sharp, Judkins, & Hetherington, 2009). The evaluation used the first two 'D's of the 4D Appreciative Inquiry approach: Discovery and Dream. The Discovery phase is concerned with the identification of the organisational processes that work well with a particular focus on highlighting the elements of practice which work best (Doveston & Keenaghan, 2006). The Dream phase is concerned with envisioning how processes and practice could flourish in the future (Cooperrider & Whitney, 2005). Relating to the present study, this process concerned identifying factors within the Discovery phase which could applied, extended or replicated by the coach educators and NGB officers within the Dream phase. The final two phases of the 4D approach (design and destiny) are concerned with the planning and implementation of the Dream phase and were not within the scope of this investigation or the agreements negotiated within the respective NGBs.

The overarching premise of Appreciative Inquiry is the focus on the positive and aspirational elements of the environment and potential of the area under investigation. At the heart of Appreciation Inquiry is a commitment to the believe of the potential of the unconditional positive question (Cooperrider & Whitney, 2005). It is this commitment which provides Appreciative Inquiry the ability to engage, enthuse, energise and enhance learning communities (Kadi-Hanifi et al., 2014). Furthermore, it is also a means of avoiding the negative, deficit-led, approach of many investigations into systems which are inequitable or discriminatory (Kadi-Hanifi et al., 2014). As such, the employment of an Appreciative Inquiry approach with women coaches, coach educators and NGB officers was highly appropriate to understand the positives of how the coaches had developed their practice and, from this, to explore the dreams of how coach education systems could be enacted to promote more women to be engaged and feel supported.

Participants

Following institutional ethical approval, an invitation from sports coach UK to all UK NGB to participate was sent and resulted in officers from British Cycling, the British Equestrian Federation, British Gymnastics and British Rowing volunteering their organisation's involvement. Stakeholders within coach education were purposefully sampled and recruited to participate in the interviews by consulting the respective NGBs and the research team's own networks. Additionally, NGBs were invited to distribute to their female coaches electronic invitations to participate in the project via their websites and social media.

Twenty three female coaches were recruited through the purposive sampling strategy (eight from cycling; four from equestrian; seven from gymnastics; nine from rowing) and these coaches represented the full range of qualifications, from unqualified up to the respective NGB's highest level of award. Eight coach educators were recruited including six women (two from equestrian and rowing; one each from cycling and gymnastics) and two males (both from cycling). Five NGB officers working in coach development were recruited, two of whom were female (from gymnastics and rowing) with one male officer from equestrian and two male officers from cycling (see Table 1). The participants represent a sub-sample of the broader Supporting and Promoting Inclusive Coach Education (SPICE) project concerning under-represented groups in coaching (Vinson et al., 2015). The data and analysis presented herein are entirely original.

Pseudonym	Sport	Highest (UK) qualification or role	Experience ^a (years)
June	Cycling	Breeze Ride Leadership Award	2
Karen	Cycling	Level 2 – Road and Time Trial	11
lvy	Cycling	Level 2	2
Brenda	Cycling	Level 2	10
Kevin	Cycling	Coach educator	23
Peter	Cycling	Coach educator	27
Zoe	Cycling	Coach educator	12
Geoff	Cycling	NGB officer	7
Alexander	Cycling	NGB officer	5
Jill	Equestrian	None	3
Veronica	Equestrian	Level 2 – Generic riding	7
Ellie	Equestrian	None	2
Sophie	Equestrian	Level 3 – Show jumping	20
Pamela	Equestrian	Coach educator	20
Josie	Equestrian	Coach educator	15
Anthony	Equestrian	NGB officer	4
Jenny	Gymnastics	Level 1 – Rhythmic	1
Pavlina	Gymnastics	Level 2 – Rhythmic	13
Tina	Gymnastics	Level 2 - Trampolining	6
Trish	Gymnastics	Level 3 – General and trampolining	10
Isobel	Gymnastics	Level 2 – Rhythmic	2
Paula	Gymnastics	Level 4 - Women's artistic	20
Grace	Gymnastics	Level 2 – Acrobatics	17
Karly	Gymnastics	Coach educator	31
Elizabeth	Gymnastics	NGB officer	12
Gemma	Rowing	None	7
Clara	Rowing	None	1
Kate	Rowing	Level 2	8
Lucy	Rowing	Level 2	3
Catherine	Rowing	Level 2	4
Hayley	Rowing	Level 2	7
Jemima	Rowing	Level 3	3
Adriana	Rowing	None	6
Justine	Rowing	Coach educator	26
Margaret	Rowing	Coach educator	9
Xena	Rowing	NGB officer	11

^a Relates to years of coaching and coach educating (coaches; coach educators) or years working for NGB in a coaching-related role (NGB officers)

Procedure

Individual interviews took place in-person, via Skype or on the telephone, depending on the availability and preference of the interviewee. Interviews lasted between 42 and 70 minutes for the NGB officers and between 31 and 51 minutes for the remaining participants. The interview schedule

was informed by Appreciative Inquiry in order to seek positives and to investigate how to improve the situation for female coaches from where it was at present. For example, participants were asked to identify the inspirational and excellent elements of practice evident within their coach education experience (see Appendix I). All interviews were recorded (with the permission of the interviewee) and were transcribed verbatim. Owing to particular learning needs, three coaches felt their views would be better represented in the written form and so were provided with a written copy of the interview questions to which they responded via email which is commensurate with recommendations made by Ison (2009). Email respondents were issued with the same questions as the interview respondents and follow-up emails were sent to 'prompt' for further information in a similar manner to the participants who were interviewed verbally. The results of the analysis of the data from all coach interviews informed the interviews with the coach educators and NGB officers. This 'informing' process comprised common perspectives drawn from coaches with the 'Discovery' phase being offered to coach educators and NGB officers to elicit their perspectives within the 'Dream' phase of the investigation. For example, the common reference by coaches to the excellent practice of mentors led to a specific question in this area being directed to coach educators and NGB officers.

Data handling and analysis

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Each interview was transcribed verbatim producing 238 single-spaced pages of transcript. Miles et al.'s (2013) three-stage content analysis procedures were followed in an inductive and then deductive manner. Firstly, the lead author identified meaning units from within the verbatim transcripts. Meaning units were words or phrases used by the participants that were considered to be potentially important and were subsequently coded relating to key terms identified within the raw data. Secondly, themes were derived inductively through systematic review of each of the codes and meaning units. Subsequently, the first author consulted with the rest of the authorship team to check the accuracy and confirm agreement of the thematic structure. Finally, the authorship team then collaboratively sorted the themes deductively into the *a priori* framework of

autonomy, competence and relatedness (Miles et al., 2013). All processes were managed using the standard tools and features of Microsoft Word.

Results and Discussion

The data analysis processes produced 1,356 meaning units which were analysed and placed into eleven sub-themes (see Table 2). The eleven sub-themes were then allocated to one of the three *a priori* categories of autonomy, competence and relatedness. The thematic analysis of the coaches' interview data confirmed the suitability of the three overarching SDT themes, the titles of which were very slightly modified to better reflect the participants' perspectives – 'autonomy: freedom to coach'; 'coaching competence'; 'belonging and relatedness'. This section discusses each of the three key themes in turn and in so doing highlights the sub-themes that were placed within each theme. Coach pseudonyms and qualifications are presented alongside each quotation.

265 Table 2: Overarching Self Determination Theory themes and emergent sub-themes

Autonomy: Freedom to coach	Coaching competence	Relatedness and belonging
Positive dispositions and	Informal learning – mentoring,	'To give something back' –
personal development	observing and co-working.	commitment to the sport, clubs
(18, 5, 2)	(12, 6, 3)	and athletes
For dear for a traffic track	Lafe and Leavisian and a starting	(10, 6, 3)
Freedom from institutional	Informal learning – experiential	
barriers	development and information	Coach-athlete relationships
(11, 2, 4)	seeking	(9, 1, 1)
	(11, 1, 1)	
A culture of supporting		Coach-NGB relationships
freedom and decision making	Learning and non-formal coach	(16, 6, 5)
(9, 5, 2)	education	
	(8, 2, 4)	
	Learning and formal coach	
	education	
	(9, 6, 5)	
	Gender and the coach	
	education environment	
	(16, 8, 5)	

N.B. Numbers in parentheses refer to the number of coaches, coach educators and NGB officers respectively who contributed meaning units to that particular theme

Autonomy: Freedom to coach

The first sub-theme within this category referred to the *positive dispositions and personal* development of the women coaches in terms of their personal drive to develop their coaching practice. The overwhelming consensus from the coaches was that they wanted to improve through a committed investment in their coaching practice and also in coach education. One coach said:

Seeing others develop is what inspires me to continue coaching, and the thirst for knowledge does too. I continue to read and question what I know to develop my understanding further, and I enjoy the challenges of additional qualifications as an access to more information. In 2014 I was delighted to have the opportunity to start to develop my practice as a coach educator as I know from experience the importance of having a good coach that inspires you to want to continue in your sport.

(Jemima, Level 3 rowing coach)

Jemima's drive in her pursuit of personal development was similar to most of the other coaches who also felt that coaching was a fulfilling, challenging, practice which both facilitated, and demanded, their personal development. Common to all the coaches' perceptions was that the power to determine aspects of personal development lay with the coach themselves. A number of coaches believed that the freedom and drive to develop their coaching practice was a medium for a more holistic conception of personal growth. Numerous coaches appeared to have been captured by an infectious positivity which seemed to pervade the culture of coach education. These findings are consistent with Allen & Shaw (2009) and Allen & Shaw (2013) in that institutional support promoting the perception of autonomy was evident for the women coaches; this was also deemed important by the coach educators and NGB officers. Such evidence provides strong support for SDT as a legitimate theoretical perspective from which to further our understanding of coaching (Mallett, 2005) and the culture of coach education. Furthermore, our findings reflect the aspirational and positive disposition of women coaches reported by LaVoi & Dutove (2012) rather than the more

entrenched and deficit-led perspectives of Norman (2010, 2013) and Fielding-Lloyd & Meân (2011). However, as with all the coaching-related studies we have cited, our sample comprises women coaches who are already invested, albeit to differing degrees, in coaching and thus provide no evidence relating to the perspectives of those women who may have been dissuaded or prevented from engaging in coach education due to perceptions relating to the barriers discussed within Norman's (2010, 2013) and Fielding-Lloyd and Meân's (2011) work.

Several coaches were very positive about the work of their respective NGB in terms of providing *freedom from institutional barriers* thus providing coaches with the ability to make decisions about their own development. Lucy was particularly positive:

I think British Rowing are quite good at including everyone. As a woman, I don't feel discriminated against at all. There are enough awesome role models in women's rowing that girls can feel they can get involved in rowing ... I think British Rowing have got it going pretty well. I think they have a great team of people who are enthusiastic.

(Lucy, Level 2 rowing coach)

Ellie believed there had been a shift in the culture of coach education in equestrian sport. Despite having taught for many years, but not yet having completed a UKCC award, she considered herself to have many more traits of the contemporary coach than a 'traditional' equestrian teacher. She describes how she perceived the culture of teaching in equestrian to be characterised when she first entered the industry:

It didn't fit well with me, as it was very directive – shouting 'do this, do that'. So in my teaching career for many many years after, I did it my way, I didn't do it by the book. What is now considered more as coaching rather than teaching ... For me [what is important is] mostly experience, but for others, getting out of the 'teaching' mind set into the 'coaching' mind set is something that needs to be done through courses and workshops.

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The autonomous drive for personal development, together with the freedom to make decisions relating to problem solving and individual approaches to coaching practices was strongly related by coaches throughout the Discovery phase. Graham et al. (2013) and LaVoi & Dutove (2012) reported concerns regarding the falling number of women in high-profile coaching roles and the impact this was having in the diminishing female voice at the highest levels and the related lack of decision making and autonomy perceived by women in coaching. Whilst our data reveal a concern by some coaches, coach educators and NGB officers regarding the lack of women in high profile coaching roles, the women in this investigation reported a strong sense of autonomy regarding their coaching futures and perceived a strong sense of being immersed in a culture which embraced freedom to make decisions. This was not only apparent in the two female-dominated sports, but was also evident, albeit to a lesser extent, in cycling and rowing. The women in this investigation viewed their development in the long-term and were frequently keen to discuss their long-term aspirations and future development which embraced an appreciation of the concept of lifelong learning. Such evidence suggests that the difficulties of the culture of coach education discussed by Callary & Werthner (2011), Kerr & Ali (2012), Callary (2012), Lewis et al. (2015) and Kidd (2013) can be, in part, countered by a deliberate institutional commitment to facilitating an autonomy-supportive experience for women coaches which enables positive dispositions, personal development and the freedom to make decisions.

The importance of the self-determination to engage with coach education cited by coaches in the Discovery phase was also recognised by some of the coach educators. Kevin felt that the culture of supporting freedom and decision making had developed considerably over his years of involvement in the sport. He perceived that very few coaches now engage with formal coach education merely for the attainment of a qualification:

The experience of my role in coach education has been that those animals [coaches enrolling merely for the qualification], they don't exist anymore. I can't remember

the last time I witnessed or heard about that. Peoples' motivations and reasoning to get involved in coaching and coach education is vastly different now and I think that means you are at a completely different starting point ... That's one of the big changes, the motivation and the recruitment process of why people are involved in coaching and coach education ... Then there is an expectation of the level of experience people get when they go on a British cycling coach education course. If they don't get the grade one experience they're quite shocked.

(Kevin, cycling coach educator)

Kevin's reflections concerning expectations of coaches enrolling on formal awards with British Cycling illustrate a small range of the factors impacting the broader environment of coach education in the sport. The coach educators and NGB officers interviewed within this investigation were supportive of the coaches' desire to be self-directed in their coach education and to make their own decisions about their development. Geoff felt that self-determined decision making was essential to the broader culture of sport and was pervasive through the various aspects of the NGB's function:

That's why the GB cycling team have been so successful - because they had the right people at the beginning coming through the system, developing slowly and just having that consistent funding and autonomy, to do what they think is best. And what's fascinating with how that system has worked, knowing the coaches as I do, is they worked out most of the theory for themselves, without this academic side, they worked out what works out really well.

(Geoff, cycling NGB officer)

Geoff's belief surrounding the importance of consistent, and supported, autonomy in the development of excellent coaching practice is consistent with more generic literature in the sports coaching domain (McLean & Mallett, 2012; Occhino et al., 2014) and provides further evidence for the importance of supporting practitioners to find their own paths to excellence and that this also leads to the subsequent emergence of genuinely self-determined coaching practice. Many of the

commonly reported barriers to provision for women in coaching more generally such as those presented by Cunningham et al. (2007), Norman (2010, 2013), and sports coach UK (2013) in respect of time constraints, covert discrimination and a lack of desire for advancement have enjoyed very little prominence within this investigation, albeit with a focus on coach education specifically. Instead, female coaches, coach educators and NGB officers have focussed on the issues which may enhance engagement with coach education amongst women; a stance firmly underpinned by a belief in the fundamental competence of women coaches.

Coaching competence

Amongst the coaches featured within this investigation there was a strong sense that engagement with coach education fostered the development of perceived coaching competence which, in turn, elicited enhanced confidence. Nevertheless, the coaches had differing perspectives on the relative merits of the various aspects of coach education and highlighted formal, non-formal and informal aspects as all having merit within the development of perceived coaching competence. The majority of coaches felt that *informal learning – mentoring*, observing and co-working were the most effective in helping them develop their coaching practice. Perhaps the most extensively discussed topic revolved around the centrality of mentoring in developing competence and building confidence.

I'd say mentor coaches to be honest; that's been the most important for me. You can go on the courses and they can teach you the theory and the practical, but working in your own time, at your club, at your own venue with your own participants, you've got to chance to work with them, to see what advice they could give you along the way; is the best. It's almost a less-threatening environment. You feel like you're being watched on a course, like you're being assessed, even though you're not. When you're with your mentor coach, you feel like you can ask more questions.

(Trish, Level 3 trampolining coach)

Mentoring with UK coach education is enacted in very different forms across the industry with contrasting theoretical and operational models deployed by the various NGBs (Jones et al., 2009). The importance placed by coaches on mentoring, observing and co-working within the Discovery phase of this project was supported and extended by the coach educators and NGB officers. Elizabeth said:

So mentoring is really, really key to our coach education system, because without mentoring people, they're not able to practice their skills to then move forward to assessment but they're [mentors] a group we don't have any direct contact with, because they might be working in the clubs in the leisure centre and so on.

(Elizabeth, gymnastics NGB officer)

Mentoring is widely cited as a crucial component of coach education and the findings of the present study lie comfortably alongside the previous literature in this area (Jones et al., 2009; sports coach UK, 2013). The importance of this process was clearly evident within this investigation across all four sports. Particular value was placed on mentoring when the process featured long-term engagement. These insights reflect the value of mentors in developing confidence and perceptions of competence amongst coaches, but also reflect the 'autonomy: freedom to coach' theme from the previous section. The coaches' articulation of their relationship with their mentors here evokes a sense of growing independence and autonomy. Jemima found that *informal learning - experiential development and information seeking* was the most important element in learning about coaching, although also cites a number of other key aspects commensurate with the *informal learning and non-formal coach education* sub-theme:

I learned about coaching through experiencing coaching, and then applying those ideas to other people. I enjoy reading about coaching – and found a lot of resources that piqued my interest. Attending a talent breakfast furthered my appreciation for sports psychology. Learning alongside another coach was most important, especially talking with more than one coach. Firstly because a lot of what I learnt on

my UKCC was generic information, set in a variety of different contexts, so discussing with coaches on a more one-to-one basis gave me the opportunity to divulge [sic.] more into a specific context, what choices they made and why. Also because things I picked up during my own experience of being coached I didn't necessarily always understand.

(Jemima, Level 3 rowing coach)

Consistent with the wide range of literature concerning coach learning (Cushion et al., 2010; Mallett et al., 2009; Nelson et al., 2006) women coaches perceived a broader spectrum of mediums featuring experiential learning and other informal sources such as personal research, reading and surfing the internet as being fundamental to their learning. Furthermore, non-formal mechanisms such as CPL were also highly valued which is also consistent with contemporary discussions in coach learning (Nash & Sproule, 2011; Trudel, Culver, & Werthner, 2013).

The coaches also discussed their engagement with *learning and formal coach education*. The cycling coaches were the most positive about their experiences of formal coach education, perceiving a considerable development in the quality of coach education in cycling in recent times. However, some coaches felt that overly-technocratic formal coach awards potentially damaged their coaching efficacy. For example, Brenda said:

A lot of females are coming in as parents and so they are trying to get them to do the course when they are not active participants. I think that knocks their confidence. We had a couple of mums on the course. They're quite happy riding their bike, but they couldn't do the more technical aspects and then we're asking them to deliver that stuff. Certainly in practical elements, it does favour those who are doing the practical aspects.

(Brenda, Level 2 cycling coach)

Brenda's perspective suggests that NGBs may benefit women's confidence and perceptions of coaching competence by shifting from technocratic conceptions of coaching to an appreciation of

the importance of greater pedagogic understanding, the coach's role in developing the coach-athlete relationship and, more generally, the 'softer' coaching skills (Jones, 2006; Light, 2008; Vinson, Brady, Moreland, & Judge, 2016). Such an approach may be effective in enhancing women coaches' confidence in sports in which males have a natural physical advantage, because it would challenge the rhetoric that the faster (for example) cyclist or rower must be the better coach. The same logic may also challenge the prominence of hegemonic masculinity in sport as discussed by Norman (2010) and Norman (2013) although such an assertion requires considerable further investigation. The findings presented here support the proposition by LaVoi & Dutove (2012) who suggested that a systemic shift may be more powerful than individually-focussed strategies. Furthermore, these findings may also contribute to closing the gap described by Piggott (2015) relating to the extent to which current practice with coach education represents an open, as opposed to closed, society educational approach. Our findings support Piggott's (2012; 2015) contention that an open society educational approach is likely to be beneficial for women sports coaches and that Piggott's (2015) belief that learning tools such as virtual networks, open forums and cooperating sharing episodes should be actively deployed by NGBs.

Gender and the coach education environment also featured extensively within this investigation in relation to perceived coaching competence. However, from the outset, Anthony was keen to challenge beliefs that women are under-represented in coaching:

We have about six million riders across Britain and somewhere around fifty thousand professional full-time coaches. So it always makes me laugh when I hear stats around professional coaches in sport and the fact that it's male dominant. Well actually, no, because if you actually include equestrian coaching in that, it actually becomes actually, across all sports, it becomes very female-dominated because there's so many more full time professional coaches in this sport. It completely outweighs what happens in a lot of other sports. I think it does give a real different

476	[perspective], and shift to some of the national statistics that may have previously
477	provided.
478	(Anthony, equestrian NGB officer)
479	Anthony's assertion that equestrian coaching is female-dominated has clearly impacted his
480	appreciation of the needs of the workforce. Additionally, a number of the respondents felt that
481	women were better suited to the practice of coaching than males. For example, Geoff said:
482	Females make better coaches. I respond better to female coaches, because they
483	tend to listen more and they're more interested in me as a person, or more able to
484	adapt their delivery to suit the needs of the participant.
485	(Geoff, cycling NGB officer)
486	Geoff's perspective reflects similar perceptions reported elsewhere (e.g. Miller, 2015) although the
487	empirical basis supporting his assertions relating to listening and adaptability has yet to be
488	established. The impact of single-gender activities arose in a number of the interviews which
489	generally sided on the positive impact of allowing women to participate separately from men. For
490	example, June went on the say:
491	In a career of 20-odd years teaching PE, there is definitely a need for gender-specific
492	groups. Put girls in an all-female group and they don't feel intimidated and they will
493	shine. It works the other way too; some people will shine more in a mixed group.
494	(June, unqualified cycling coach)
495	Xena did not share June's enthusiasm for women-only courses, despite having coordinated such
496	programmes as part of her professional role:
497	We have run women-only courses, but as a woman I want to be treated like
498	everyone else, I know that's not the view of everybody, but if I'm going to coach I
499	want to be there as a coach and not as a token woman; I don't want special
500	consideration, but want to be treated equitably and fairly and being judged for what
501	I do and who I am rather than because of my gender. I know not all my colleagues

share that view, we have to be mindful that we need a different timetable e.g. of the day when people can access courses.

504 (Xena, rowing NGB officer)

sports coach UK (2013) reported that some women coaches requested the provision of female-only formal coach education courses although it rejected this proposal in favour of suggesting that more inclusive approaches which tackled gender-related issues in a less segmented way should be explored. Lewis et al. (2015) reported strong support for women-only coaching courses. Our data provide modest support for women-only courses among coaches and coach educators which appears to be primarily due to the perceived impact on confidence and competence of sharing the educational space with male colleagues, although some NGB officers were not convinced that gender segregation was the best approach.

In addition to ensuring an appropriate pedagogical approach for female learners, some other potential enablers to engaging more women in coaching were discussed by the coach educators and NGB officers. Xena was keen to highlight the power of a small-scale, bespoke, scholarship programme:

I think we need to do more with women; One thing I am really proud of is our scholarship scheme ... we have run it for over 10 years supported by the Henley Stewards' Charitable Trust. The idea is we support people to do a postgraduate qualification, usually a Master's, but doesn't have to be; they spend up to 20 hours per week coaching young people in up to three clubs. I am really proud because so many of the people that come in through that route are women and it has been hugely successful; its enabling us to grow our own coaches, all four of our initial ETP [England Talent Pathway] programme came through that route and some of them didn't learn to row until they were at university, so were beginners when they came ... Generally speaking the women are more mature, interview better, and have a more developed sense of why they want to get into coaching, and quite often they

perform better on the coaching practical ... It [the scholarship scheme] is highly regarded within the sport and can increase employability.

530 (Xena, rowing NGB officer)

It is evident that niche and focussed scholarship schemes or targeted recruitment strategies can be effective mechanisms in developing a small number of coaches in a very powerful and impactful way. Although clearly highly resource-dependent, such programmes might provide an important strand of a much broader institutional strategy to enhancing inclusivity and representativeness. More generally, coach educators and NGB officers perceived inclusive pedagogies as a broad issue surrounding notions of holistic understandings of athletes, coach (and horse) affirming recent discussions in sports coaching (Light, Harvey, & Mouchet, 2014; Nelson et al., 2006; Padley & Vinson, 2013). Overall, the evidence reported here represents a genuine shift in the perceived nature of the delivery of coach education pathways which Cassidy (2010) was sceptical was occurring, albeit half a decade ago.

Relatedness and belonging

The coaches were very assured surrounding their motivations for coaching which largely concerned their sense of belonging to the sport, club and/or the athletes with whom they worked. Coaches' sense of belonging at whatever level was analogous with their commitment to coaching but also their continued engagement with coach education. The vast majority of coaches said their fundamental motivations for engaging in coaching and coach education framed the sub-theme 'to give something back' – commitment to the sport, club and athletes. The love of the sport was also almost universally acknowledged by the coaches within this investigation and is consistent with previous research (McLean & Mallett, 2012; McLean et al., 2012). Another strong theme within coaches' motivations for coaching featured their passion for the betterment of the coach-athlete relationship. Throughout the interviews, the coach educators and NGB officers demonstrated excellent understanding of the coaches' motivations for being involved with the sport. The importance of passion in underpinning self-determined coaching practice was, in some cases,

dependent on the extent to which coaches found a place within a local club. In gymnastics, coaches have to have their own club participants to bring to an assessment, making club membership a prerequisite to develop as a coach. Elizabeth articulated the importance of the club in personal development:

I do recognise that, really the biggest influence on you, is your own coach and your own club environment and your mentor coach, because, depending on what sort of situation you're in, coaches in gymnastics can be in the gym, anywhere between one hour a week and 30-40 hours a week. So, obviously if your one hour a week, our course is probably going to have a big impact on you because our contact hours with you at level one are 21 hours and so obviously if you're one hour a week in the gym, 21 hours of impact of being with a tutor is quite significant. If you're in the gym 30-40 hours a week, 21 hours really doesn't even scratch the surface and you're far more influenced by the environment you're in and the mentality of the person who coached you and all those people.

(Elizabeth, gymnastics NGB officer)

The power of a strong coach-athlete relationship to enhance coaches' sense of belonging to the sport was also evident throughout the interviews. The importance of coaches' passion for athletes and the more general strength of the coach-athlete relationship is a relatively well-rehearsed discussion in the literature and is strongly supported within this investigation (Davis, Jowett, & Lafrenière, 2013; Jowett & Ntoumanis, 2004; Jowett, Yang, & Lorimer, 2012; McLean & Mallett, 2012; McLean et al., 2012; Rhind & Jowett, 2010; Weiss & Fretwell, 2005). Relatedness, especially when considered from the perspective of quality interpersonal relationships was frequently highlighted by the coach educators. For example, Pamela said:

When women are in a stressful situation, they tend and befriend, they go for that mutual support. So when I have groups of people on my courses, when they are female, they tend to set up little groups of support, either a Facebook group or an

email group and I think without that face-to-face contact that wouldn't happen ... In terms of supporting female learners, they need that sense of community.

(Pamela, equestrian coach educator)

The term 'community' has featured prominently within numerous recent coach-related investigations (e.g. Culver & Trudel, 2008; Stoszkowski & Collins, 2012), predominantly pertaining to the term 'Community of Practice' (CoP) (Lave & Wenger, 1991), although use of this phrase has also been criticised as being theoretically misconstrued resulting in rather formulaic, homogenous or instrumentalist conceptions of the framework (Piggott, 2015). Whilst our findings support the notion of community as an important mechanism to support the effectiveness of coach education for women, the simplistic nature of the interactions described here do not provide sufficient evidence to warrant use of the CoP term in enabling self-determined coach practice.

Many coaches reported a strong opinion of the work of their respective NGB which enhanced their own sense of belonging to the sport thus forming the sub-theme of *Coach-NGB* relationships. In particular, a number of the cycling coaches praised the focus and work of their NGB in terms of generally getting women involved with the sport. Brenda said:

There is certainly a big drive from British Cycling to get women involved. I think they've realised there is a need and a role for it. We're still a minority, but it is improving so that is good.

(Brenda, Level 2 cycling coach)

Coach educators were cognisant of their role as representatives of the NGB and were very much focussed on ensuring a positive and productive relationship with coaches. For Zoe, the ultimate goal was to help coaches "Develop a sense of belonging in a very individual sport" (Zoe, cycling coach educator). In cycling, Alexander articulated how British Cycling's use of social media was related to the desire to strengthen the informal relationship between coach and NGB:

...much more social media; we use Twitter a lot as well now. So we interact with the coaches and try and create a culture and a bond which, again, there wasn't

previously. Twitter ... [we've] only been using it 12 months or something like that and that's going quite well and obviously the more we can do with that [the better]. Before, we would train them and send them off and that would be it, so I think that regular interaction, us looking like we are there for them and we're along with them and getting a relationship with them. It also gives us an opportunity to highlight good practice, or articles or workshops, learning opportunities.

(Alexander, cycling NGB officer)

The breadth of the issues concerning the development of coaches connection to the sport and feeling a sense of relatedness within their coaching practice was quite extensive and drawn on across a wide range of foci, target groups and responsibilities. What is clear is that building a sense of belonging and relatedness among coaches was very high on the agenda for coach educators and NGB officers. The topic of the nature of the relationship between coach and NGB has not previously been investigated. Research investigating coach education has largely portrayed the relationship between coaches and the institutional operations of NGBs through the mechanism of different intermediaries such as coach educators (Nelson & Cushion, 2006; Roberts, 2010; Taylor & O'Sullivan, 2009) and, in the UK, County Sport Partnerships (Baker, Vinson, & Parker, 2016; Vinson, Parker, Baker, Padley, & Croad, 2013). Therefore, the findings reported here represented the beginnings of a potentially fruitful line of inquiry relating to developing self-determined coaching practice. It appears vital to build a sense of belonging wherever achievable, and at as many levels as possible, to encourage greater engagement with coach education and to foster a sense of inclusivity.

Conclusions and recommendations

The underpinning framework of SDT has been shown to be an appropriate lens through which to investigate female coaches' journey to self-determined practice and to better understand their likely engagement with all forms coach education; formal, non-formal and informal. This investigation has revealed that each of the three key themes of autonomy: freedom to coach, coaching competence and relatedness and belonging help us to understand the extent to which UK

coach education meets the needs of women coaches. In particular, women coaches' perception of the freedom to coach in a manner consistent with their individual and bespoke coaching beliefs is crucial in the journey to self-determined practice. Approaches to coach education akin to the open society model represent the types of learning environments through which women coaches will thrive and develop confidence. Women coaches should perceive their experiences of coach education to be negotiable and developmental, rather than as a judgement of their personal technical competence or assessment of knowledge. It is evident that formal, informal and nonformal aspects of coach education all have a role to play in facilitating the likely engagement of women coaches as long as they are developmentally framed.

There are a number of recommendations for practice which emerge from this investigation. NGBs' recent shift away from a technocratic conception of coaching to a greater appreciation of the interpersonal and pedagogic skills should be continued and will be a particularly valuable approach to further enable self-determined practice amongst women coaches. It could be, for example, that blended models of learning could be deployed to convey technical information as and when it is required by the individual coaches leaving greater contact time with coach educators to focus on the interpersonal and pedagogic skills. Future research should investigate the perceptions of women not yet involved in coaching to establish whether our recommendations relating to the softening of the technocratic focus of sports coaching or tackling entrenched hegemonic masculinity may most effectively encourage more women to consider involvement in sports coaching.

Women coaches will benefit from being empowered by their NGB through their engagement with all forms of coach education. For example, women coaches could be actively involved in the selection and recruitment of their mentor. Furthermore, the topics of development which subsequently frame the coach-mentor interactions should also involve the active negotiation of the coach. It may also be of benefit to draw mentors from within the coaches' club or community project and be appointed with a long-term perspective in mind. Relatedly, NGBs should ensure that all coaches engaging with coach education have a 'place' to practice to which they can feel genuinely

connected. Within all these facets, it remains the responsibility of the NGB and coach educators to provide a suitable coach education environment which meets the motivational needs of women coaches. The active involvement and empowerment we have discussed here can only be achieved through the careful design and commitment to satisfaction of the needs-related components by NGBs. In turn, this may enable more women coaches to derive greater levels of intrinsic motivation in their engagement with coach education, although clearly considerable further research will be required to investigate this topic.

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8/9	Append	dix i – Interview guide for coacnes	
880	Introdu	action	
881	1.	Could you tell me:	
882		a. Your gender (if not obvious)	
883		b. Do you consider yourself to have any form of impairment or disability?	
884		c. How do you describe your ethnicity?	
885	2.	Can you tell me all about your coaching journey?	
886		a. Key milestones?	
887		b. Development of role?	
888		c. Motivations?	
889	Transiti	ion	
890	1.	Can you tell me about how you have learned to coach (or about coaching)?	
891		a. Formal (courses/degrees)	
892		b. Informal (CPD/workshops)	
893		c. Non-formal (mentoring/observation/web-content/books)	
894		d. Experiential	
895	Main b	ody	
896	1.	To what extent are [enter topics from transition question] important to help you learn as	
897		a coach?	
898		a. Most valuable – why?	
899		b. What is engaging about the most valuable forms?	
900	2.	What are the enablers to engaging in coach education?	
901		a. Personal/general	
902		b. Formal/informal/non-formal	
903		c. Environmental	
904	3	What inspires engagement in coach education?	
905	3.	a. Personal/general	
906		b. Formal/informal/non-formal	
907		c. Environmental	
908	1	When is coach education most effective?	
909	4.		
910			
911	_		
912	5.	To what extent are there needs which are specific to women coaches in terms of coach	
913		learning/education?	
914		a. Issues for NGBs?	
915		b. Issues for sports coach UK?	
916		c. Issues for society/others?	
917	6.	What would help increase the number of women coaches engaging in coach education?	
918		a. Responsibility	
919		b. Environment	
920		c. What else can be done?	
921	7.	What support is needed for women coaches to further enable engagement with coach	
922		education?	
923	8.	What opportunities do/would inspire you to develop as a coach?	
924		a. Coach roles	
925		b. Coach education	
926	Ending		
927	1.	What does the future look like for your coaching practice?	