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# **An empirical examination of UK coaches' issues and problems, and their support and advice networks**

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## **Abstract**

Although there have been increasing calls to recognise the ‘voice of the coach’ in both policy and research, there has been very little work that has asked the coaches directly: ‘what are your main issues and problems?’, and ‘where do you go for support?’ Instead assessments and decisions have been made on these issues by the media, policy-makers, support agencies, governing bodies and researchers with results often reflecting the perspectives and interests of the latter. This paper presents new research with a reasonably representative sample of over 1,000 UK coaches that considers the issues and problems, and support networks, from the perspective of the coaches themselves. The results suggest that coaches experience a wide range of problems but that they can be broken down into 17 main categories with places to play sport (e.g. facilities), problems with player-coach interaction, and problems with coaching knowledge and skills, being most frequently mentioned. In terms of support networks, the coaches tended to look ‘closest to home’: to themselves, their family/friends, participants and parents, and local coaching networks. Governing bodies and coaching associations tend to be less well used. Some implications for policy and practice are discussed.

**Keywords:** sport coach, problems, issues, support networks, policy

## **Introduction**

There is increasing policy recognition of the potential of sport coaching and sports coaches to assist in the delivery of a range of important individual and social outcomes for participants and performers e.g. physical activity, health and wellbeing, improved confidence and social connection (Sport England, 2016; Sports Coach UK, 2008). However, there have also been concerns that the existing sport coaching workforce is not realising this potential because of fundamental weaknesses related to, for example, the quality of their practice, their knowledge, and how they develop (DCMS, 2002; Kay, Armour, Cushion, Thorpe, & Pielichaty, 2008; Sport England, 2016; Sports Council, 1991).

An interesting feature of this discussion, however, concerns from where and who these issues and problems are raised and articulated. The most prominent voices have been the media, policy makers, support agencies, governing bodies and researchers. There appears to have been no specific research that has specifically asked the sport coaches themselves to identify their experiences and views concerning *their* issues and problems. Despite recent calls to hear more, and to promote, the ‘voice of the coach’ through both policy and research (Duffy, North, Curado, & Petrovic, 2013; ICCE, 2017), coaches remain noticeably silent in shaping the structures and support around them.

Furthermore, as policy makers, support agencies, governing bodies and others seek to develop policies and programmes to support coaches this has often been based on assumptions, rather than specific evidence, about how coaches’ typically network to access support and advice. Although research examining coach learning and development, for example, has touched on learning sources that imply advice and support networks (e.g. Erickson, Bruner, MacDonald, & Côté, 2008; Reade, Rodgers, & Hall, 2008; Stoszkowski & Collins, 2016; Timson-Katchis & North, 2008), there appears to have been no research that has specifically examined these networks.

The next sections provide an overview of the ‘voice of the coach’, and their issues/problems and support networks, in policy and research, drawing, in particular, although not exclusively, on a UK perspective.

### **Coaches’ issues and problems: Understanding the voice of the coach**

#### **In policy and programmes**

There has been no research attempt that identifies the coaches’ voice on their issues and problems and its influence on coaching policy and programme development. However, by tracing policy and programme documentation (e.g. DCMS, 2002; Sports Coach UK, 2008; Sports Council, 1991; UK Sport, 2001), and our collective experience of engaging in the policy and programme development process<sup>1</sup>, we can offer some insight into this.

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<sup>1</sup> The lead author, for example, was Head of Research between 2003 and 2010 at UK Coaching (then Sports Coach UK) and was centrally involved in the development of the UK Coaching Framework (North, 2009; Sports Coach UK, 2008) which was a forerunner of the ICCE’s International Sport Coaching Framework

Sport and coaching policy we suggest is largely developed by politicians and policy advisors consulting with sport and coaching experts and senior administrators from the main lead and support agencies, sport governing bodies including coaching directors/managers (although many of these individuals have coaching experience), consultants, and academics. There are some examples of coaches being invited to inform and influence policy and programme development, notably head coaches, and through consultation with development and community coaches, but this is often minor (e.g. UK Sport, 2001). For example, the UK Coaching Framework was at least partially informed by data collected from coaches, although most development work was driven by UK Coaching officers, UK sport and coaching agencies/funders, and governing bodies (Sports Coach UK, 2008).

In the sport governing body landscape, highly experienced, typically, head coaches are often drawn onto committees that help to develop policy and programmes, but governing body officers often remain the driving force. Our analysis and experience, then, suggests that the voice of the coach has largely been neglected in the policy and programme development process, although there are some isolated pockets of influence.

### **In research**

Similarly, there has been no specific attempt that identifies coaches' issues and problems through research. However, there has been research that provides partial insight through addressing related topics. First, there is a body of research that has analysed the factors that impact on coaches' stress. A recent systematic review by Norris, Didymus, and Kaiseler (2017) of 38 research articles on coaches' stress over the period 1994 to 2016 suggests the following: Coaches identify issues related to, *inter alia*: their own performance; the demands from others such as from parents, public and the media; the demands of competing at an elite level; administration and finances; and balancing coaching with wider life obligations. Kelley and Baghurst (2009) developed a 'coaching issues survey'. This initially sounded promising to our research questions until it was realised that its principal focus of attention was also coaches' stress. Kelley and Baghurst detail a 26-item schedule including issues such as understanding athletes, dealing with athletes, hiring assistant coaches and support staff, having enough time, and dealing with media.

Second, there is a small body of research that has made a general assessment about coaching issues in particular socio-historic contexts. For example, Kay et al. (2008) offered an assessment of UK performer development coaches' issues and problems in the run-up to the London 2012 Olympics suggesting problems with an over-reliance on volunteers, unsupportive coaching systems and funding deficits. The research also noted the problem that performer development coaches were often recruited from a selective and self-perpetuating sports participant population, notably excluding minority groups. This research was largely the voice of academics providing commentary on secondary data. There is also research that has offered an assessment of coaching issues for particular minority groups. For example, women coaches issues (e.g. Norman, 2010), and black and

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(ICCE, ASOIF, & LMU, 2013) and European Sport Coaching Framework (Lara-Bercial et al., 2017). The lead author has also worked with governing bodies on their coach consultation and development work.

minority ethnic coaches issues (e.g. Fletcher, Piggott, & North, 2017). This ‘voice’ research obviously provides very important insight into the coaching issues and problems of particular groups but is not wide-ranging.

Third, there is a significant body of research examining coaches’ issues and problems through specific disciplinary lenses - notably, behavioural, cognitive and social lenses. Coaches’ issues and problems essentially become dictated, or ‘master driven’, through the disciplinary approach chosen (North, 2017). Thus, under a behavioural scheme, coaches’ issues and problems are reduced to displaying effective coaching behaviours (e.g. Horn, 2008); under a cognitive scheme coaches’ issues and problems are reduced to decision-making and planning (e.g. Abraham & Collins, 2011); and under a social scheme coaches’ issues and problems are reduced to the negotiation of complex social relations and contexts (e.g. Jones, Potrac, Cushion, & Ronglan, 2011). It is the researcher’s discipline that dictates coaches’ issues and problems *a priori*. It is interesting how much of this research tends to conclude the extant workforce is practicing poorly (e.g. Cushion, 2013; Kearney, Carson, & Collins, 2017). This is because they are often subject to such austere measurement against strict disciplinary criteria that can never be fully satisfied in real coaching situations (North, 2017).

Finally, coaches’ issues and problems have been used as part of a methodological approach. Reade et al. (2008) used coaches’ problems to discuss favoured learning/information sources. For example, Reade and colleagues asked how coaches respond when their ‘athletes are not performing well’. Coaches responded by prioritising knowledge (in order of importance) on tactics/strategy, mental training and preparation, team building/cohesion, fitness/conditioning, team practice/drills, individual skill development, injury prevention/recovery, and strength training and nutrition (Reade et al., 2008).

### **Coaches’ support networks**

Research on networking behaviours has been used in other occupational areas to offer constructive and critical comment on how these groups are being, and should be, supported by government and support agencies, for example, the networking behaviour of entrepreneurs (Curran & Blackburn, 1994; North, Blackburn, & Curran, 1997). In the sport coaching literature, there has been very little published research that specifically focuses on coaches’ support networks although there has been research that examines coaches’ sources of knowledge and learning (e.g. Erickson et al., 2008; Reade et al., 2008; Stoszkowski & Collins, 2016; Timson-Katchis & North, 2008). This research typically elicits specifically learning based responses, many of which are not related to support networks, such as learning from experience of being an athlete, coach or parent. However, it also suggests the importance of specific support networks. For example, coaches commonly mention learning about coaching from interacting with other coaches – this is typically the most frequent response (e.g. Erickson et al., 2008; Reade et al., 2008; Stoszkowski & Collins, 2016; Timson-Katchis & North, 2008). Thus, according to this research, other coaches become an important coaching support network (if only for learning). Likewise, this

research also points to the importance of coaching support agency and governing body led/facilitated coach education. Thus, agencies and governing bodies can be seen as a support networks albeit in relation to the specific task of providing coach education. From this it is clear from the above that further research is required into both coaches' issues and problems, and their support and advice networks.

The purpose of the current study is to identify and conceptualise UK coaches' issues and problems, and their chosen support and advice networks, with reference to the experiences and views of the coaches' themselves. The work has a distinctive UK feel, however, we believe many of the findings and resultant lessons can extend beyond this.

## **Method**

### **Ethics**

The research achieved ethical approval from the Leeds Beckett University Research Ethics Committee in October 2015.

### **Participants**

The research is based on data collected from 1143 UK coaches. The mean average age of the sample is 44 years – this is slightly older than other surveys which suggest the typical mean average is 35-40 years for the UK (Sports Coach UK, 2011; Timson-Katchis & North, 2008; Townend & North, 2007). There is some evidence that slightly older coaches are more likely to complete online web-based surveys (North, 2012), which is the method used in this research.

The sample coaches had been coaching for an average of 13-14 years – this is slightly higher than in previous panel surveys in the UK which suggest about 12 years coaching experience on average (Timson-Katchis & North, 2008). 63% of the sample were males, 37% females – this more or less reflects the UK picture as described in other surveys – with the percentage of males coaches generally being in the range of 62-74% (North, 2009; Timson-Katchis & North, 2010; Townend & North, 2007).

In terms of coaching qualification – 4% had no qualification, 26% a level 1, 41% a level 2, 22% a level 3, and 7% a level 4 and above. This is not typical of national surveys where there is a greater percentage of non-qualified coaches – typically around 40-50% although there is evidence that this percentage is decreasing (North, 2009; Townend & North, 2007). The sample is closer in qualification profile to panel surveys recruited through mainstream coaching networks such as through sport and coaching agencies and governing bodies (Sports Coach UK, 2012). Thus, the sample might reflect more formal, and less hidden/informal, coaching sometimes picked up in national surveys (e.g. MORI, 2004).

There were 47 sports represented in the sample – the top 10 were football (12%), swimming (8%), bowls (7%), rowing (5%), netball (5%), athletics (5%), cricket (5%), gymnastics (5%), rugby union (5%), canoeing (3%), and golf (3%). Compared to other UK surveys there is under-representation of football and swimming coaches (who consistently

have the most coaches overall by quite some margin in the UK), and also hockey, tennis and badminton. Bowls and rowing appear to be over-represented in the sample compared to other surveys of UK coaches (MORI, 2004; North, 2009; Timson-Katchis & North, 2008; Townend & North, 2007).

The coaches in the sample mainly coached children – especially young children aged 4-13 years (46%) and older children aged 14-16 years (23%). They also coached adults 21 years and over (23%). Only 8% coached young people aged 17-20 years. This is reasonably typical for UK coaches – about 7-8 out of ten work mainly with children (North, 2009; Timson-Katchis & North, 2008). The coaches in the sample also tended to work with ‘competition level’ athletes (39%) and beginners (31%), less so recreational athletes (17%) and representation, and national and international athletes (11%) (although a weakness of this data is that it is based on self-report and coaches may overstate their level of athlete performance). Again, this is fairly typical for UK coaches with most supporting competition in clubs (about half), and about a third, beginners (Sports Coach UK, 2012). High performance coaches represent only a tiny proportion of coaches in the UK (North, 2009).

### **Instrumentation**

The research piggy-backed on a survey of UK coaches conducted by UK Coaching on behalf of a number of UK sporting agencies and governing bodies (detailed below). The wider schedule contained questions on the coaches’ demographic details, their coaching profile, their experiences of and attitudes towards coach development and education, and how they are deployed/employed. The data for the coaches’ problems, solutions and support networks section of the survey were gained through three questions: (1) ‘what are the main coaching issues or problems that you have experienced in the last 12 months?’, (2) ‘for each of the coaching issues/problems you identified, what solutions/sources of support and advice did you pursue?’, and (3) ‘thinking about the issues you have had in the last 12 months, what individuals or organisations have you used to address them?’ The first two questions were open with coaches providing a qualitative response. The final question was a closed tick-box multiple response question with the following options – ‘did not look for/use other resources, support and advice i.e. dealt with it myself’, ‘social media e.g. Facebook/Twitter’, ‘internet forums/chat rooms’, ‘internet search’ , ‘magazines books, journal and all printed materials’, ‘family including partner’. ‘friends’ , ‘participants/athletes/players’, ‘parents/guardians’, ‘other coaches in immediate coaching environment i.e. connected to coaching group, team, squad’, ‘other coaches in club/school/college/leisure centre/academy etc.’, ‘other coaches outside coaching environment’, ‘club/school/college/leisure centre/academy contacts and officials etc.’, ‘colleagues/contacts in higher education’, ‘colleagues/contacts in coaching association’, ‘colleagues/contacts in sport governing body’, ‘UK Coaching’, ‘other’.

### **Procedure**

The draft questions were compiled and sent to UK Coaching in November 2015. These were then added to an online survey data collection form using SNAP (London, UK) – an online data collection package. UK Coaching recruited the sample in the following ways: the

UK Coaching membership data base of 40,000 coaches, the Sport Scotland coaching database, Sport Northern Ireland distributed a web-link to their national governing bodies who then posted the link on their websites. The link was also distributed by social media. The link was attached to an introductory note and a web page with details about the research. The link went live between 18 January, 2016 and closed on 24, Feb 2016. Reminders were sent via social media. On closing the survey the data was then extracted from the SNAP package and sent to the researchers for analysis.

### **Analytic method**

The research utilised qualitative coding and theme development procedures commonly used in sport coaching research (Braun, Clarke, & Weate, 2016; Miles, Huberman, & Saldaña, 2020). For question one, each of the 1143 coaches in the study were invited to provide up to three issues or problems, thus providing the possibility of up to 3429 responses, 2833 responses were actually recorded: 1143 for Q1a, 971 for Q1b, and 719 for Q1c. The average response length was between 11-12 words for a, b, and c, with the range being 1 (for example, 'time' or lack of it) to up to 138 words. The data were coded and checked by the first and last authors to produce 61 separate data codes. These were then reduced further to 17 composite themes that provide the basis for the results presented in the next section.

The data from the first and second question where then combined to produce issue/problem and response couples. Thus, the coaches were invited in question two to offer some ideas about how they responded to the issues/problems identified in question one. This provides examples of the specific issues/problems that coaches face and how coaches responded to this through their own interventions and/or external support. There was an opportunity for 2833 responses, and 2512 were recorded: 1009 for Q2a, 853 for Q2b, and 650 for Q2c. The average response length was between 9-10 words for a, b, and c, with the range being 1 up to 142 words. The top eight composite themes were analysed in detail and are overviewed in the results section. This procedure was undertaken by all members of the research team – 2 composite themes each. Finally, question three, all the coaches provided at least one response to the question on support networks. This data were analysed through frequency and cross-tabulations tables. All coding and analysis was undertaken in Excel (Richmond, Washington, U.S.) and SPSS v.22 (Armond, New York, US).

### **Limitations**

There are two main limitations linked to (1) the sample and (2) the rigour of the qualitative approach. First, the sample is perhaps slightly older and more experienced than the UK picture, and certainly more qualified, but this may reflect the inclusion of coaches who may be more typically thought of as formal community and competition coaches, representative of a great deal of club and school coaching activity in the UK (rather than more informal 'unseen' activity). Second, self-administered qualitative surveys encourage a relatively brief overview of potential issues/problems and their solutions, compared to, for example, interviews. Interviews also provide an opportunity to refine and interrogate participant responses, to check for consistency, and to explore issues the may not be immediately

obvious to the participants (North, 2017; Pawson & Tilley, 1997).

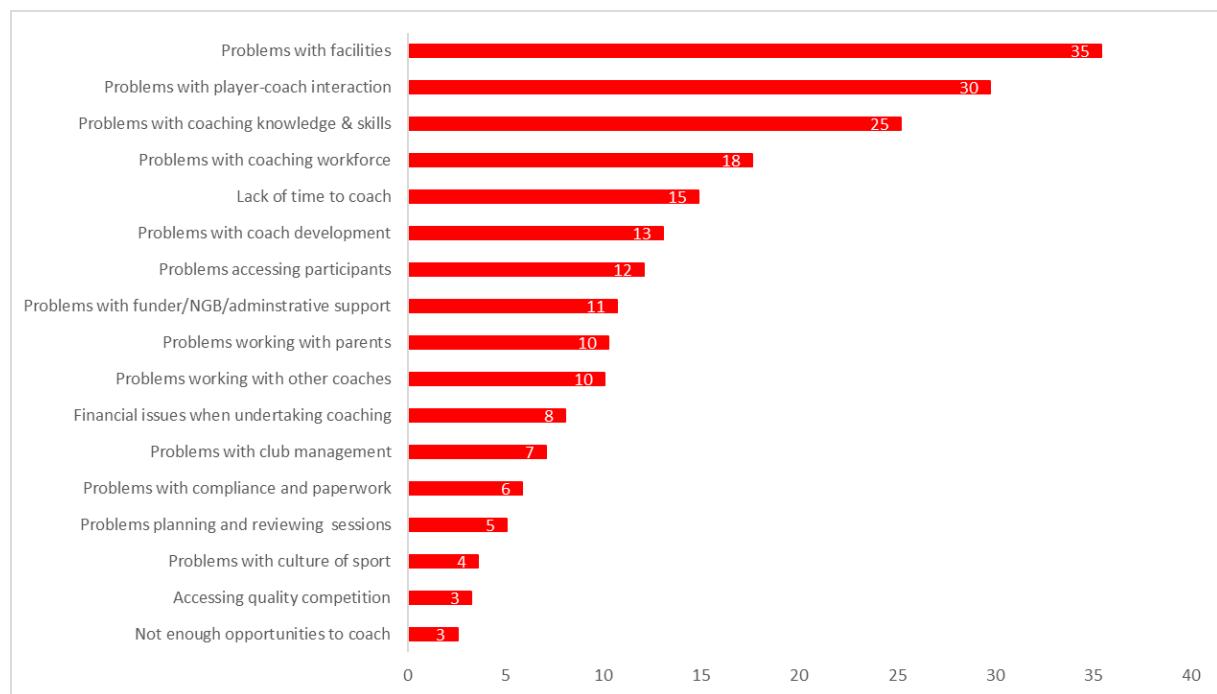
## Results

The results are organised using the following structure: (1) an overview of coaches' main issues and problems with some examples provided of each (2) coaches' problem-solution couples, and (3) an overview of coaches' main support networks. Illustrative quotations are provided for 1 and 2.

### Coaches' issues and problems

The results suggested the coaches faced 17 main composite issues and problems (Chart 1). The following narrative discusses the ten most mentioned in more detail.

**Chart 1: UK coaches' issues and problems (% of all mentions)**



The results show, somewhat surprisingly, that UK coaches were most likely to raise problems with facilities (35% of all mentions). This suggests problems with the 'basics' of sporting provision i.e. finding a place to play, and suggests the 'day-to-day' nature of coaches' issues and problems. This category covered a lack of facilities, a lack of quality/appropriate facilities, problems with facilities when the weather turns hot (skiing) or cold and wet (e.g. football), a lack of equipment, and a lack of storage space for equipment. It was thought that there may be some slight bias towards problems with facilities given the time of year of data collection i.e. January and February in the UK. However, many of the comments about facilities were not weather/temperature related so we suggest this remains an important finding.

*No dedicated facility in Scotland where coaching can be accessed for all at all times (83)*

*Poor equipment not enough money to replace (1071)*

The second largest category was something more commonly raised in the literature (e.g. Jones et al., 2011) – problems with player-coach interaction (30% of all mentions). This category includes understanding/grasping participants' (developmental) needs; perceived lack of commitment on behalf of players to particular coaches; finding it difficult to motivate and engage participants (notably adolescents); falling attendances, at training and impact on planning; behaviour management and discipline; team cohesion; effective communication and 'coachability'; and principles and practices of athlete selection.

*Attitude of players / concentration (547)*

*Motivating athletes to keep going (511)*

*Keeping players of different abilities focussed (1317)*

The third largest category involved the coaches examining their own knowledge and skills – a more inward looking self-assessment (25% of all mentions) and common to external assessments of coaching issues and problems (e.g. DCMS, 2002; Kay et al., 2008). Important themes in this category included knowledge of the technical and tactical considerations of their sport; currency and variety of practice ideas (especially for tactical awareness); working with large mixed ability groups (including special educational needs and disability); participant progression and transition (to the 'next level'), and dealing with health issues and physiological/psychological/social problems (e.g. injury, eating disorders and mental health).

*Not being fully confident in my own ability and authority within sessions (899)*

*Understanding and developing tactical awareness (289)*

*Transferring to new methods of delivering - guided discovery (377)*

*How to help engage young people who live with diagnoses such as Asperger's/ADHD in a safe and appropriate manner (586)*

*Keeping players engaged and interested in the transition to senior cricket (906)*

The fourth largest category concerned problems with the coaching workforce (18% of mentions). This mainly concerned a lack of volunteers (numbers) to match available roles, for example, within a club. The coaches also noted a lack of other coaches with the appropriate experience and qualifications. Finally, they mentioned feeling isolated, or lacking support, from others in the club (coaches, management) to deal with workforce issues – an issue that has emerged in UK research (North, 2010).

*Numbers of players and lack of coaches to deliver (467)*

*Not having a second adult at the group so if I cannot attend, the training session is cancelled (630)*

*Less experienced colleague swimming coaches depending too much on me preparing their session plans (395)*

The fifth largest category was a lack of time to coach, or, perhaps, coach effectively (15% of all mentions). This mainly concerned constraints on the coaches' time to engage directly with their coaching, notably constraints from family and work commitments; injury and poor health; that they were still playing/competing themselves; or were volunteering for other roles in their academies/clubs. It was also linked to finding time to develop and improve as a coach and/or player whilst coaching sessions. Others mentioned constraints on facility availability and time. Finally, some coaches mentioned that there was not enough time with players during seasons/weeks to develop and improve them e.g. one hour per week was not enough to achieve the development improvements required.

*Juggling coaching with home life and the expectations of parents with young children (579)*

*Lack of time / capacity to continue to develop professional skills (755)*

*Time with players for preparation virtually non-existent (823)*

The sixth largest category was problems with coach development (13% of all mentions). The coaches' concerns linked to survey work commissioned or conducted by agencies and governing bodies on their coach education provision (e.g. MORI, 2004). The main concern was the lack of availability of quality, relevant, timely, and local, coaching courses (e.g. Level 1-3) and continuing professional development opportunities (see also Cushion et al., 2010 for a wider review). Another significant concern was the lack of opportunity to work with, observe, be observed by, and receive feedback from, mentors and senior coaches in their sport. Finally, it was suggested there was a lack of opportunity to share ideas with other coaches and to operate in a community of practice.

*Not being able to do [Sport] Level 2 coaching course for example because it was only being delivered in England and we had no funding to send us over to it nor could we bring a coach over to deliver it in Northern Ireland (1276)*

*Difficulty in moving to the next level in coaching as there are no Level 3 coaches in the club to mentor me (851)*

*Opportunities to observe and share good (best) practices across a number of disciplines with leading coaches in these fields (1017)*

The seventh largest category was problems accessing participants (12% of all mentions). This concerned a lack of potential participants available for clubs and teams; competing for players' time with other sports, life and academic commitments; a lack of engagement from schools and stakeholders to support children in physical activity; and the poaching of players between clubs.

*Limited number of people wishing to take up the sport (1244)*

*Amateur players and the balance they are trying to strike between working in 'zero hours' jobs and their ability to get to training and games (30)*

The eight largest category was problems with funder and governing body administrative support (11% of all mentions). This mainly concerned perceptions of a lack of interest or support from governing bodies, for example, related to how the latter communicated, or the resources they made available for programmes. The coaches were also concerned about a lack of clear player and coach pathways, and a sense that some governing bodies had 'favourites' in terms of coaching support or positions, and that there was nepotism.

*Poor communication/organisation from [governing body] regarding exam dates (48)*

*Lack of competitions organised by [agency school sport programme] and governing bodies that are actually accessible (1150)*

*Current performance coaching programme not being sustainable due to no funds from governing body (561)*

*National body using coaches with, in my opinion, poor qualities on and off the pitch (100)*

The ninth largest category was working with parents (10% of all mentions). Given that three quarters of the coaches in the sample coached children this was surprising, especially given the focus that is often placed on this area in children's' sport (e.g. Holt & Knight, 2014). The main issues were managing parents' expectations about their child's progression/ performance; a lack of parent understanding and education e.g. about the nature of sport, coaching and child development; parental interference, for example, in sessions; lack of support and involvement from parents to support their children/club; and a lack of communication from/to parents.

*Interfering parents who think they know better and put enormous pressure on youngsters. Children who don't actually want to be at training, but it is handy to use as babysitting service (123)*

*Primary school player whose father continuously interferes with coaches and his son during training sessions in a verbally aggressive and critical manner (402)*

The tenth largest category was problems working with other coaches (10% of all mentions). As with athlete-coach relationships, this issue has been discussed as part of a broader exploration of social relationships in sport coaching (e.g. Jones et al., 2011). In the study coach-coach problems mainly concerned management/mentoring of other (volunteer) coaches; nepotism and favouritism between club officials and coaches; difference in opinions and approaches between coaches; educating coaches on their levels of effectiveness in coaching practice; the lack of competence/commitment/motivation of other coaches; coaches going 'off plan'; inappropriate behaviour of other coaches towards athletes and others; bullying by other coaches; and limited opportunity to liaise and learn from other 'like-minded' coaches.

*Managing other coaches within our coaching team (189)*

*Established lead coach won't listen to my ideas or let me lead a session if he is there (42)*

*'Senior' coaches whose self importance far exceeds their competence (1032)*

*Other coaches from outside the club coaching unsafe practices to junior and youth riders that take a lot of re-education to break (146)*

### **Coaches' issues and problems - sub-sample 'hotspots'**

The dataset included information on the coaches' sport; participant age and level, age, gender; coaches' years coaching and qualification level. The coaches' issues and problems were compared/cross-tabulated with these variables. The results suggest that coaches' problems appear to impact on different types of coaches in a fairly consistent manner. However, there were some 'hotspots' as indicated by higher frequency of mentions over the mean (Table 1, next page).

The following describes some of the more interesting results reported in table 1. Coaching adults (21 years and over) appears to present a greater frequency of player-coach athlete interaction problems than coaching children. Adults may be demanding or difficult to manage especially it appears in a recreational environment (it might have been anticipated that there would have been more problems in high performance e.g. Jones, Armour, and Potrac (2004), but this may be due to small sample sizes in the latter). Female, less experienced and lower qualified, coaches were more likely to report problems with their coaching knowledge and skills. The willingness of females to under-estimate/down play their knowledge and competence has been noted elsewhere (e.g. Fielding-Lloyd & Meân, 2011). The results on less experienced and lower qualified coaches are reassuring in the sense that novice coaches at least acknowledge they 'know less' and that this may cause problems and issues for them. A lack of time to coach was noted most by coaches in their 30s and 40s which was linked to expectations at work, and parenting.

**Table I: Sub-sample segments with a higher frequency of mentions over the mean for specific coaches' issues/problems**

<b>Coaches' issues/problems</b>	<b>Descriptive variables with a higher frequency of mentions</b>
Problem with facilities	Tennis, golf
Problems with player-coach interaction	Coaching adults (21 years and over, not necessarily performance/high performance)
Problems with coaching knowledge & skills	Females (their report/perception), less experienced coaches (1-2 years' experience), no coaching qualification
Problems with coaching workforce	Golf
Lack of time to coach	Coaches aged 30s-40s
Problems with coach development	Gymnastics, canoeing, coaches aged less than U18
Problems accessing participants	Gaelic football
Problems with funder/governing body administrative support	No 'hotspots' in the data
Problems working with parents	Gymnastics, football
Problems working with other coaches	Swimming, tennis
Financial issues when undertaking coaching	Coaches aged U18
Problems with club management	No 'hotspots' in the data
Problems with compliance and paperwork	Canoeing
Problems planning and reviewing sessions	No 'hotspots' in the data
Problem with culture of sport	Less experienced coaches (1-2 years' experience)
Accessing quality competition	Rugby union
Not enough opportunities to coach	No 'hotspots' in the data

Coaches of football and gymnastics noted more problems working with parents. Problems in the parent-coach relationship in football have been noted both by the English Football Association notably through its 'Respect'<sup>2</sup> campaign and in research (e.g. Harwood, Drew, & Knight, 2010). Coach-coach issues were more prevalent in swimming and tennis, two individualised sports, where coaches often have a paying relationship with their athletes in the UK, and coaches may be more economically competitive with each other. Finally, less experienced coaches (1-2 years' experience) noted the greatest problems understanding or changing the culture of their sport.

<sup>2</sup> <http://www.thefa.com/get-involved/respect>

## **Coaches' issues and problems – inward or outward looking?**

An interesting feature of the data analysis was the extent to which coaches' issues and problems were focused on *themselves*, exposing vulnerabilities about their own knowledge or actions, or was a reflection on wider *externally facing issues, or the knowledge and actions of others*. The data was coded to reflect these inward or outward looking concerns. The results suggest that 19% of all the issues and problems mentioned were inward looking, and 81% outward looking. There is no comparative data to suggest whether these figures are high or low – but the results would appear to suggest that coaches are more likely to attribute their issues and problems to external situations and others. This, however, to be clear, may be a legitimate account of their experiences.

## **Coaches' problem-solution couples**

The research also provided an opportunity to explore how UK coaches responded to their issues and problems. We asked coaches: 'for each of the coaching issues/problems you identified, what solutions/sources of support and advice did you pursue? To set the scene for this data there is a body of research that has suggested that coaches are not very capable decision makers (e.g. Cushion, 2013; Grecic & Collins, 2013), and indeed, at times may be largely non-/ir-rational (Cushion, 2016; Jones & Wallace, 2005). Whilst the conclusions drawn by the latter often depends on the understanding of the measure of sophistication at which coaches make decisions, and/or demonstrate rationality/irrationality, and indeed, how austere academics are in their measurement of coaches' decisions/behaviours against external e.g. good practice or evidence based standards (North, 2017), it is important to offer some counter examples based on evidence. There is no sense that the data vindicates coaches as overwhelmingly expert, profound, or homogenously reasonable and rational, but, in general, the issues and problems identified appear to be met by an appropriate response. We choose four problem solution couples as examples. These are facilities, problems with player-coach interaction, problems with parents, and problems with coaching knowledge and skills. We offer illustrative quotes against each.

The main problem, with facilities, was met by the following strategies: searching for new/better facilities, locating/buying new equipment, and finding external support, for example, from the club or a local authority.

*Problem: Carrying out coaching during bad weather or when course conditions are not good.*

*Solution: Discuss with other coaches and try to minimise problem by having a secondary area in mind (276)*

Problems with player-coach interaction were addressed through talking with players, parents and teachers; changing session activities and delivery; discussing strategies with other coaches and mentors; undertaking online research; seeking out governing body development opportunities; developing appropriate club policies; and, indeed, at times, 'struggling through'.

**Problem:** Age group think they know it all – under 14s football - how to coach them can be challenging

**Solution:** Talk to and utilise other club coaches (1349)

In terms of problems with parents, again, the coaches used a range of direct, or information gathering, strategies. These included communicating with, and educating more effectively, parents through 1:1 meetings, workshops, information leaflets, sharing session plans, and using social media. Some coaches established codes of conduct, sometimes through parent working groups. Some raised parental issue with others in the club who have greater credibility/authority with parents. The coaches were also willing to take advice on parenting issues from other coaches, mentors and governing body officers.

**Problem:** Dealing with parent expectations

**Solution:** Talk to parents (290)

Finally, in terms of problems with coaching knowledge and skills, the coaches asked and observed other (more experienced) coaches; undertook online research and used social media; attended development events, or further education and qualifications, with reference to ‘experts’ and ‘professionals’; and also engaged in deliberate experimentation (e.g. differentiation, inclusion).

**Problem:** Confidence in my own coaching abilities

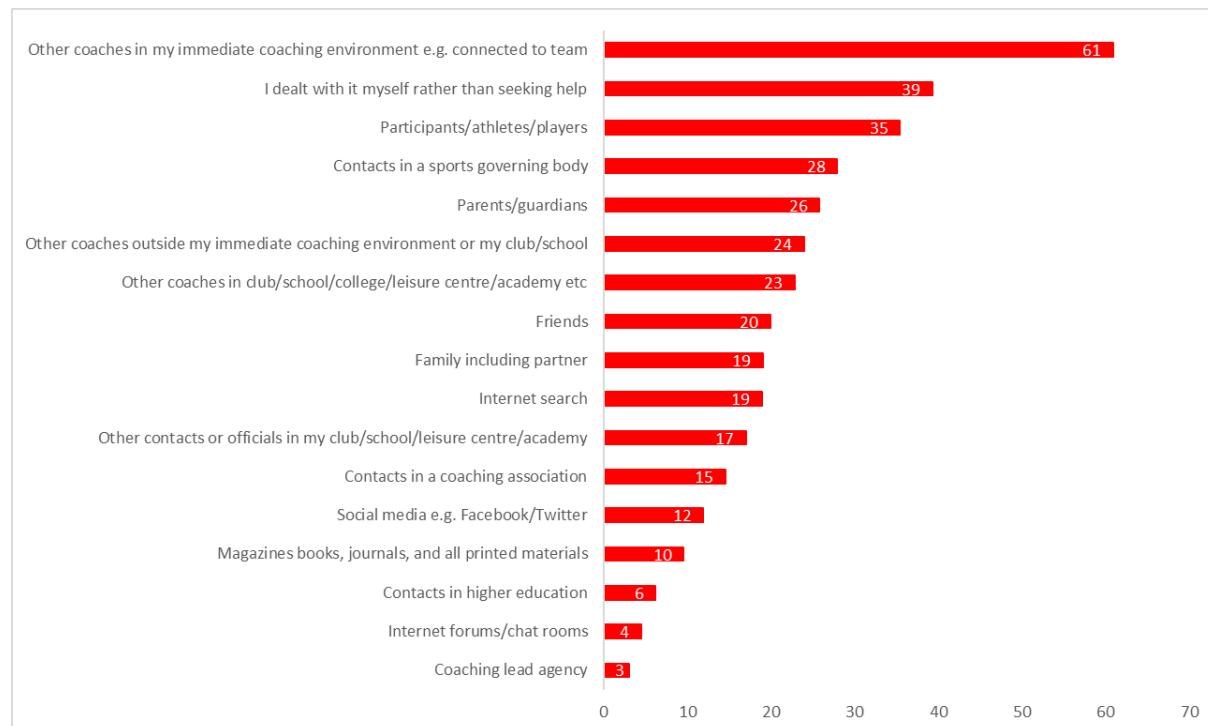
**Solution:** Gained level 2 qualification, keeping on top of my learning and experience, coaching more (307)

### **Coaches’ main support networks**

The third part of the study was to look at UK coaches’ main support networks (Chart 2). In line with research on coach learning, development and education (e.g. Erickson et al., 2008; Reade et al., 2008; Stoszkowski & Collins, 2016; Timson-Katchis & North, 2008), the coaches in the sample were most likely to look for support from other coaches, for example, linked to their team (61% of all mentions). Identifying with research that suggests that many coaches feel isolated (North, 2010), or perhaps overly self-determined/confident (Collins, Abraham, & Collins, 2012), the coaches were next most likely to find the solution in themselves (39%). As normative ideas around ‘athlete centred coaching’ become more common (e.g. Kidman & Lombardo, 2010), the coaches were also likely to consult with their participants, athletes and players (35%). However, this also meant that nearly two-thirds did not, suggesting perhaps that, although a majority of the coaches coached young children (where it may be more difficult, though not impossible, to elicit feedback), there is still some way to go to fully engage with this athlete centred approach. Interestingly, governing body

contacts were reasonably high up the list – suggesting that this remains an important source of help and support for coaches (28%).

**Chart 2: Coaches' main support networks (% mentioning)**

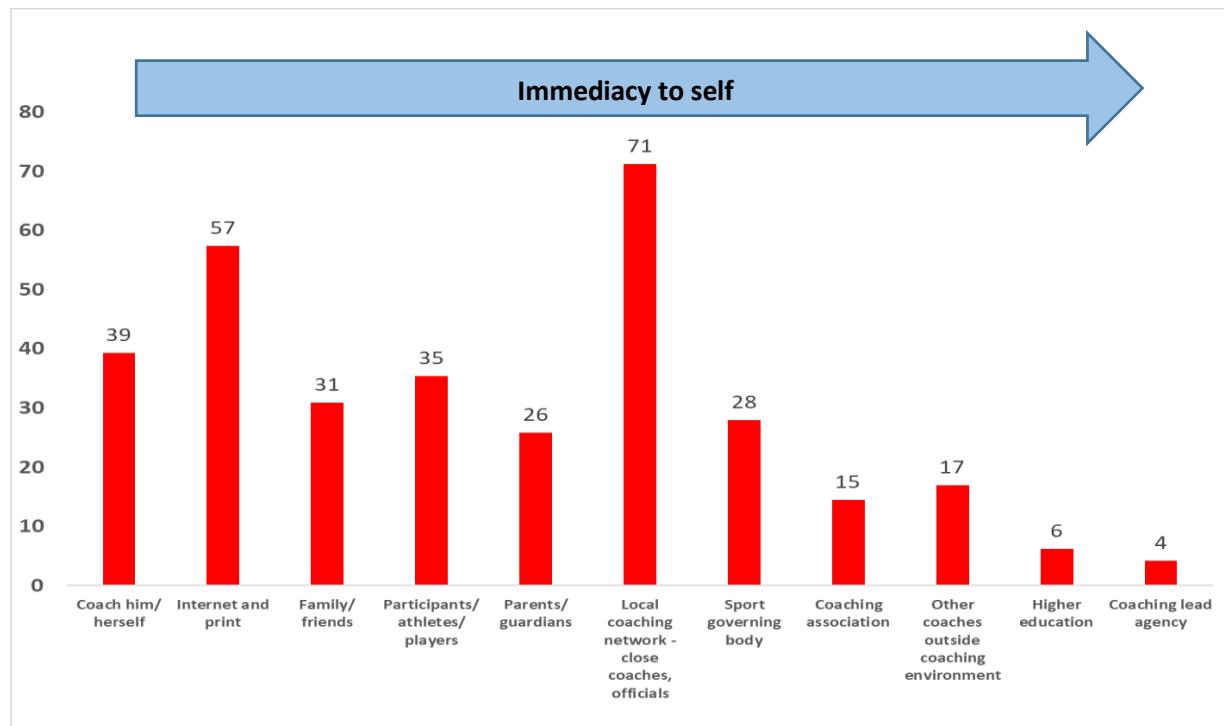


Another way of examining the results on support networks is through their immediacy to the coach (Chart 3). As might be expected, the coaches tended to focus on the sources of support that were 'closest to home'. As already noted, the coaches often found solutions to the problems themselves. They were also very likely to engage with internet (search, social media and chat rooms) and print (57% of all coaches). Nearly one third of coaches did not use the internet or print! The coaches were also likely to draw on advice from family and friends (31%), and parents (26%) as well as participants, athletes and players. However, the most obvious source of support was around the place of coaching: other coaches in the team, other coaches and officials in the club, academy etc. (71%). This was by far the largest source/location for advice and support and highlights the value of using this mechanism by those who wish to support coaches.

Outside agencies – governing bodies, coaching associations and coaching lead agencies, and coaches from outside the sport that are perhaps accessible through these agencies, were less frequently mentioned. This would suggest that to have influence, organisations need 'officers in the field' working locally to support clubs, schools, academies etc., and indeed, this has been shown to be successful in the past (e.g. North, 2010). The major issue, of course, is that the sport coaching sector has relatively limited access to the level of resource required (North, Piggott, Lara-Bercial, Abraham, & Muir, 2019). Despite claims that link the professionalisation of sport coaching with some kind of contact to higher

education, only 6% of the coaches had used this as a source of advice and support.

**Chart 3: Coaches' support networks re-ordered in terms of 'immediacy' to self (% mentioning)**



#### **Coaches' support networks - sub-sample 'hotspots'**

The coaches' use of support networks was compared/cross-tabulated against a range of sample descriptors noted in table I above. Once again, the results suggested that coaches' tended to use support networks in a fairly consistent manner. However, there were some 'hotspots' as indicated by lower and high frequency of mentions from the mean average (Table 2).

Coaches tended to use other coaches as a source of support across all the sub-segments, but notably in gymnastics where there is a very structured mentoring system in the UK (Irwin, Hanton, & Kerwin, 2004) (Table 2). Internet and print were particular important for football coaches where there are high profile online platforms such as Hive<sup>3</sup>. Young and inexperienced coaches were particularly likely to use internet and print sources. Football coaches were also likely to deal with problems themselves, as were coaches in another team sport, rugby union. Younger coaches were also more likely to deal with issues/problems themselves. Coaches in netball and rugby union were very likely to consult with participants, athletes and players, but this was not the case for coaches in football, swimming and tennis – the latter two often involving a paid relationship for coaching. Coaches of adults and experienced athletes were more likely to consult with participants,

<sup>3</sup> <https://thefa.hivelearning.com/thefa/>

athletes and players; as were more experienced and higher qualified coaches (cf. Abraham, Morgan, Muir, & Duffy, 2011).

**Table 2: Sub-sample segments with a lower and higher frequency of mentions over the mean for top four support networks**

Support network	Descriptive variables with a higher frequency of mentions	Descriptive variables with a lower frequency of mentions
Local coaching network	Gymnastics	
Internet and print	Football coaches; very young coaches (under 18); male coaches; inexperienced coaches (less than 1 year experience);	
I dealt with it myself	Badminton, football and rugby union coaches; very young coaches (under 18)	Athletics coaches There was no obvious relationship between coaching experience and qualification!
Participant, athletes, players	Netball and rugby union coaches; coaches of adults; coaches with more with experienced athletes; more experienced coaches; coaches with higher qualification levels	Canoeing, football, swimming and tennis coaches; coaches of less experienced athletes; inexperienced and lower qualification coaches

## Discussion

The paper has attempted to respond to calls for increasing the ‘voice of the coach’ in policy and practice (Duffy, North, Curado, et al., 2013; ICCE, 2017) through overviewing research with a reasonably representative sample of UK coaches on the coaching issues/problems they experience, and the support networks they use to address them.

The results provide evidence of both similarities and differences with the limited previous research on coach stress (e.g. Norris et al., 2017) (issues/problems) and learning and development (e.g. Erickson et al., 2008) (support networks). In terms of coaches’ issues and problems, there were clearly similarities around:

- understanding participants, athletes, and players
- building and refining appropriate coaching knowledge as a foundation for effective practice

- helping to put in place an adequate coaching workforce, notably with inclusive characteristics
- finding time to coach
- dealing with parents
- dealing with other coaches, and
- unsupportive coaching support systems including those for development and education.

The notable difference in the current research was the emphasis on problems with facilities, the basic spaces and places to situate sport, and the equipment to do it with. A major aspiration of the UK government is to increase participation in sport, and although facilities are an important part of its strategy (Cabinet Office, 2015), the significance of this issue from the perspective of a central ‘cog’ in the sports development landscape i.e. coaches, has not yet been recognised. The results also show how down to earth, or ‘day-to-day’ coaches’ problems can be.

The research provides insight into not only the major issues/problems faced by sport coaches in the UK but also into the content of support services that could be targeted at coaches. Historically, coach education had focused on providing coaches with sporting and technical knowledge and skills (Lyle, 2002), and although this is beginning to change in the UK and elsewhere (Camiré, Trudel, & Forneris, 2014), there is still clearly space for more focus on the social and interactional elements (Jones et al., 2011), including working with other coaches and parents (Holt & Knight, 2014).

The research also points to the value of a ‘systems approach’ i.e. thinking about coaching support as broader than coach development and education, covering policy, infrastructure, institutional arrangements, for development, employment/deployment, reward and recognition etc. (Duffy, North, & Muir, 2013; North et al., 2019). The results do not just highlight the importance of coaches’ knowledge and expertise, but rather a concern with facilities, club management, workforce, and administration. To improve coaching all of these issues need to be addressed, and systems approaches (e.g. ICCE et al., 2013; Sports Coach UK, 2008), would appear to be an important part of this.

In terms of support networks, there was a high degree of congruence with research on coach learning and development (e.g. Erickson et al., 2008), but with some important implications for those seeking to support coaches. The results highlighted once again how much coaches rely on other coaches not just for learning, but for general support. The results also highlighted the value of other localised support networks – participants, parents, friends and family. The coaches were also very willing to contemplate their problems themselves, and undertake web or paper-based research to find their own solutions. This highlights the value of support agencies and governing bodies seeking to gain influence and build resources that take advantage of this networking behaviour. However, there is no pretence that this is an easy task. As the current research has shown, clubs and their stakeholders can often be cynical of governing body and agency influence and support (see also Piggott, 2012). The former often develop their own micro-cultures and practices that maybe different to the good practice advocated by external support (e.g. Cushion & Jones,

2006; Hassanin & Light, 2014). These cultures and practices can often be very protectionist, difficult to penetrate, and resistant to change. However, positive support can be developed and delivered with the right level of resource and quality of workforce (e.g. North, 2010). The question, for coaching, as always is – where does the resource come from, and how is it best accessed (North et al., 2019)?

The results also provide some comfort to the existing support mechanism. Coaches clearly engage directly with governing bodies notably through coach education provision (although this is more for learning and development, than for support). Coaches also clearly use a range of online media and information (Cushion & Townsend, 2018) and many support agencies and governing bodies have attempted to provide useful resources for this space. Both of these mechanisms (coach education and online provision) have been, sometimes appropriately, sometimes harshly, criticised (Cushion et al., 2010; Cushion & Townsend, 2018), so there should be no assumption about the efficacy of this provision and further nuanced research and development work is required.

The research also provided some insight into other issues which are often associated with a professionalisation agenda. Some models of professionalisation emphasise the need for coaches to independently and collectively organise themselves. However, as other research has highlighted (Duffy, North, Curado, et al., 2013), this is not particularly evident in coaches' behaviour. As noted, the coaches in the current research tended to deal with problems themselves, consult local coaches, or draw on personal networks. Links to networks outside of this, for example, coaching associations were relatively minor.

Finally, another finding highlighted by the research, one which is sometimes touched on in the literature, but we are not sure it has been brought out clearly enough, is the lack of time, in a largely volunteer workforce, to address the issues they face. The lack of time with athletes, notably to engage in development activities, appears to be an important issue in the context of the professionalisation and coach effectiveness debate.

### **Some further conclusions and recommendations**

The results point to a very practically focused, grounded, view of coaching – one in which coaches deal with problems in facilities, missing participants, difficult parents, unhelpful fellow coaches and club administrators. There are issues here about how support is targeted at coaches and the kind of language used. There may be considerable merit using a 'wants to hit needs' approach, where support agencies attempt to address practical wants using a language that coaches understand before addressing a perhaps more conceptually complex set of needs.

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## References

- Abraham, A., & Collins, D. (2011). Taking the next step: Ways forward for coaching science. *Quest*, 63, 366-384.
- Abraham, A., Morgan, G., Muir, B., & Duffy, P. (2011). Understanding governing body readiness for level 4: A qualitative examination from 7 governing bodies. Leeds: Leeds Metropolitan University.
- Braun, V., Clarke, V., & Weate, P. (2016). Using thematic analysis in sport and exercise research. In B. Smith & A. C. Sparkes (Eds.), *Routledge Handbook of Qualitative Research in Sport and Exercise* (pp. 191-205). London: Routledge.
- Cabinet Office. (2015). Sporting future: A new strategy for an active nation. London: Cabinet Office/HM Government.
- Camiré, M., Trudel, P., & Forneris, T. (2014). Examining how model youth sport coaches learn to facilitate positive youth development. *Physical Education and Sport Pedagogy*, 19(1), 1-17.
- Collins, D., Abraham, A., & Collins, R. (2012). On vampires and wolves: Exposing and exploring reasons for the differential impact of coach education. *International Journal of Sport Psychology*, 43, 255-271.
- Curran, J., & Blackburn, R. (1994). *Small firms and local economic networks: The death of the local economy?* London: Paul Chapman Publishing.
- Cushion, C. J. (2013). Applying game centered approaches in coaching: A critical analysis of the 'dilemmas of practice' impacting change. *Sports Coaching Review*, 2(1), 61-76.
- Cushion, C. J. (2016). Reflection and reflective practice discourses in coaching: A critical analysis. *Sport, Education and Society*, 1-13.
- Cushion, C. J., & Jones, R. L. (2006). Power, discourse, and symbolic violence in professional youth soccer: The case of Albion Football Club. *Sociology of Sport Journal*, 23, 142-161.
- Cushion, C. J., Nelson, L., Armour, K. M., Lyle, J., Jones, R. L., Sandford, R., & O'Callaghan, C. (2010). *Coach learning and development: A review of the literature*. Leeds: Sports Coach UK.
- Cushion, C. J., & Townsend, R. C. (2018). Technology-enhanced learning in coaching: A review of literature. *Educational Review*, 1-19.
- DCMS. (2002). The coaching taskforce: Final report. London: Department for Culture, Media and Sport.
- Duffy, P., North, J., Curado, J., & Petrovic, L. (2013). CoachNet: The further development of a coordinated network for Sport Coaching in Europe. A report for the European Union. Leeds: Leeds Metropolitan University and the International Council for Coaching Excellence.
- Duffy, P., North, J., & Muir, B. (2013). Understanding the impact of sport coaching on legacy. *International Journal of Sport Policy and Politics*, 5(2), 165-182.
- Erickson, K., Bruner, M. W., MacDonald, D. J., & Côté, J. (2008). Gaining insight into actual and preferred sources of coaching knowledge. *International Journal of Sports Science & Coaching*, 3(4), 527-538.
- Fielding-Lloyd, B., & Meân, L. (2011). 'I don't think I can catch it': Women, confidence and responsibility in football coach education. *Soccer & Society*, 12(3), 345-364.
- Fletcher, T., Piggott, D., & North, J. (2017). 'Problems at the boundary?': South Asians, coaching and cricket. In J. Long, T. Fletcher & R. Watson (Eds.), *Sport, leisure and social justice* (pp. 180-193). London: Routledge.
- Grecic, D., & Collins, D. (2013). The epistemological chain: Practical applications in sports. *Quest*, 65(2), 151-168.
- Harwood, C., Drew, A., & Knight, C. J. (2010). Parental stressors in professional youth football academies: A qualitative investigation of specialising stage parents. *Qualitative Research in Sport and Exercise*, 2(1), 39-55.
- Hassanin, R., & Light, R. (2014). The influence of cultural context on rugby coaches' beliefs about coaching. *Sports Coaching Review*, 3(2), 132-144.

- Holt, N. L., & Knight, C. J. (2014). *Parenting in youth sport: From research to practice*. London: Routledge.
- Horn, T. S. (2008). Coaching effectiveness in the sport domain. In T. S. Horn (Ed.), *Advances in sport psychology* (3rd ed., pp. 239-267). Champaign, IL: Human Kinetics.
- ICCE. (2017). ICCE: Celebrating 20 years of global coaching development. Leeds: International Council for Coaching Excellence.
- ICCE, ASOIF, & LMU. (2013). International sport coaching framework v1.2. Champaign, Illinois: Human Kinetics.
- Irwin, G., Hanton, S., & Kerwin, D. (2004). Reflective practice and the origins of elite coaching knowledge. *Reflective Practice*, 5(3), 425-442.
- Jones, R. L., Armour, K. M., & Potrac, P. (2004). *Sports coaching cultures: From practice to theory*. London: Longman.
- Jones, R. L., Potrac, P., Cushion, C., & Ronglan, L. T. (2011). *The sociology of sports coaching*. London: Routledge.
- Jones, R. L., & Wallace, M. (2005). Another bad day at the training ground: Coping with ambiguity in the coaching context. *Sport, Education and Society*, 8(2), 213-229.
- Kay, T., Armour, K., Cushion, C., Thorpe, R., & Pielichaty, H. (2008). Sportnation research: Are we missing the coach for 2012? Loughborough: Institute of Youth Sport.
- Kearney, P. E., Carson, H. J., & Collins, D. (2017). Implementing technical refinement in high-level athletics: exploring the knowledge schemas of coaches. *Journal of Sports Sciences*, 1-9.
- Kelley, B. C., & Baghurst, T. (2009). Development of the Coaching Issues Survey (CIS). *Sport Psychologist*, 23(3), 367-387.
- Kidman, L., & Lombardo, B. (2010). *Athlete centred coaching: Developing decision-makers*. Worcester: IPC Print Resources.
- Lara-Bercial, S., North, J., Hämäläinen, K., Oltmanns, K., Minkhorst, J., & Petrovic, L. (2017). *European sport coaching framework*. Champaign, Ill.: Human Kinetics.
- Lyle, J. (2002). *Sports coaching concepts: A framework for coaches' behaviour*. London: Routledge.
- Miles, M. B., Huberman, A. M., & Saldaña, J. (2020). *Qualitative data analysis: A methods sourcebook* (Fourth ed.). London: Sage.
- MORI. (2004). Sports coaching in the UK. Leeds: Sports Coach UK.
- Norman, L. (2010). Feeling second best: Elite women coaches' experiences. *Sociology of Sport Journal*, 27(1), 89-104.
- Norris, L. A., Didymus, F. F., & Kaiseler, M. (2017). Stressors, coping, and well-being among sports coaches: A systematic review. *Psychology of Sport & Exercise*, 33, 93-112.
- North, J. (2009). The coaching workforce 2009-2016. Leeds: Sports Coach UK.
- North, J. (2010). Using 'coach developers' to facilitate coach learning and development: Qualitative evidence from the UK. *International Journal of Sport Science & Coaching*, 5(2), 239-256.
- North, J. (2012). British Canoe Union participant survey. Bingham: British Canoe Union.
- North, J. (2017). *Sport coaching research and practice: Ontology, interdisciplinarity, and critical realism*. London: Routledge.
- North, J., Blackburn, R., & Curran, J. (1997). Reaching small businesses? Delivering advice and support to small business through trade bodies. In M. Ram, D. Deakins & D. Smallbone (Eds.), (pp. 121-135). London: : Paul Chapman Publishing.
- North, J., Piggott, D., Lara-Bercial, S., Abraham, A., & Muir, B. (2019). The professionalization of sport coaching. In R. Thelwell & M. Dicks (Eds.), *Professional advances in sports coaching: Research and practice* (pp. 3-21). London: Routledge.
- Pawson, R., & Tilley, N. (1997). *Realistic evaluation*. London: Sage.
- Piggott, D. (2012). Coaches' experiences of formal coach education: A critical sociological investigation. *Sport Education and Society*, 17(4), 535-554.

- Reade, I., Rodgers, W., & Hall, N. (2008). Knowledge transfer: How do high performance coaches access the knowledge of sport scientists? *international Journal of Sports Science and Coaching*, 3(3), 319-334.
- Sport England. (2016). Coaching in an active nation: The coaching plan for England. London: Sport England.
- Sports Coach UK. (2008). *The UK Coaching Framework: A 3-7-11 years action plan*. Leeds: Coachwise.
- Sports Coach UK. (2011). Sports coaching in the UK III. Leeds: Sports Coach UK.
- Sports Coach UK. (2012). Coach tracking study: A four-year study of coaching in the UK. Leeds: National Coaching Foundation.
- Sports Council. (1991). Coaching matters: A review of coaching and coach education in the United Kingdom. London: Sports Council.
- Stoszkowski, J., & Collins, D. (2016). Sources, topics and use of knowledge by coaches. *Journal of Sports Sciences*, 34(9), 794-802.
- Timson-Katchis, M., & North, J. (2008). UK coach tracking study: Year one headline report. Leeds: Sports Coach UK.
- Timson-Katchis, M., & North, J. (2010). UK coach tracking study: Year two headline report. Leeds: Sports Coach UK.
- Townend, R., & North, J. (2007). Sporting coaching in the UK II. Leeds: Sports Coach UK.
- UK Sport. (2001). The UK vision for coaching. London: UK Sport.