



# Learning from and for coaching:

# Understanding the coaching journeys and biographical learning of British Orienteering coaches.

# A Research Report to British Orienteering

# **Submitted by:**

Dr Thomas Leeder University of Essex Essex Sport Arena, Room 3.10 Wivenhoe Park, Colchester CO4 3SQ

Mob: +44 (0)789 1851319

Email: Thomas.leeder@essex.ac.uk

March 2022

# TABLE OF CONTENTS

Executive summary	3
Acknowledgements	4
Introduction	5
Research background	5
Coach learning and coaching journeys: A short overview	
Rationale, aim, and research questions	
Methodology	9
Research approach	9
Data collection method	9
Procedure	12
Sampling and participants	
Participant analysis	
Data analysis process	15
Results and Discussion	17
Introduction	17
Journeys into coaching	17
Reasons for commencing coaching	
The role of previous athletic experiences in shaping coaching practice	
Developing a coaching philosophy	
The holistic nature of coaching journeys	
Learning for coaching: How wider life experiences structure coaching	
Learning from coaching: How coaching impacts wider life experiences	
Coach education and development for orienteer coaches	
The influence of critical incidents on facilitating coach learning	
Positive perspectives towards formal coach education	
Critiques of formal coach education	
Recommendations for improving formal coach education  Continuing and ending coaching journeys	
Reasons behind coaching journeys ending	
Opportunities: A door open or closed for coaching journeys?	
Transitioning roles and passing the baton	
Conclusion	
Recommendations	
References	76

#### **EXECUTIVE SUMMARY**

In 2021, British Orienteering released their 'Thriving Clubs for a New Generation' strategic plan, which incorporates four strategic themes: (1) Change the perception; (2) Create engaging experiences; (3) Strengthen lifelong pathways; and (4) Provide foundations for success. Out of these strategic themes, 'Strengthen lifelong pathways' focuses on orienteering coaching and the need to ensure alternative pathways exist to keep individuals motivated to stay in the sport beyond their athletic years, for example, how the athlete-to-coach transition be supported. Within this strategic theme, British Orienteering are keen to develop clear developmental pathways for their volunteers, which includes their coaches. Two strategic actions within this theme focus on creating clear coaching pathways to retain individuals within the sport, while also delivering effective and efficient training for volunteers within local club settings. Consequently, British Orienteering are keen to establish a baseline understanding of the coaching journeys and developmental pathways their existing coaches have taken to get to where they currently are.

To support British Orienteering in establishing a baseline understanding, the aim of this research was to understand the coaching journeys of British Orienteering/Scottish Orienteering Association coaches and the relationship between their biography, learning, and practice. Data were collected via an online qualitative survey, which was open for 10 weeks between November 22<sup>nd</sup>, 2021, and January 31<sup>st</sup>, 2022. In total, 84 orienteering coaches in the UK completed the survey and provided their perspectives, experiences, and recommendations towards a range of questions focusing on their coaching journey and the significant factors which have impacted upon their learning and development. The data were analysed via thematic analysis and resulted in the creation and development of four primary themes: (1) Journeys into coaching; (2) The holistic nature of coaching journeys; (3) Coach education and development for orienteer coaches; and (4) Continuing and ending coaching journeys.

The findings of this research provide both British Orienteering and the Scottish Orienteering Association with several practical implications and recommendations to support their current provision of formal coach education and CPD. Moreover, it is hoped that in understanding the idiosyncratic coaching journeys of the participants within this research, more bespoke and tailored support packages can be designed to support the progression of orienteering coaches of the future, while providing meaningful learning opportunities.

#### **ACKNOWLEDGEMENTS**

I would like to thank both Rayan Summat and Peter Brooke at British Orienteering for their initial enthusiasm and support of this research project, in addition to their efforts in promoting and disseminating the online survey to the qualified coaches on their mailing lists.

I would also like to thank all the participants who gave up their time to share their coaching journeys, experiences, and perceptions. As someone without a background in orienteering, I found your accounts fascinating and insightful, and there is clearly some fantastic coaching going on across the UK to support the learning and development of orienteers of all ages. Thank you for your participation and please keep up the good work.

#### INTRODUCTION

# Research background

British Orienteering (2022) define orienteering as "an exciting outdoor adventure sport suitable for all ages and fitness levels. ... The aim is to navigate between checkpoints or controls marked on a special orienteering map. There is no set route so the skill and fun come from trying to find the best way to go. In competitive orienteering, the challenge is to complete the course in the quickest time". In addition to classifying orienteering as an adventure sport, as British Orienteering suggest, it has also been classified as a lifestyle sport. These activities are considered different to traditional Western mainstream achievement sports in that they are usually participated in individually (or at least in small groups), with a focus on enjoyment and the pursuit of technical competence or skill (Leeder & Beaumont, 2021; Tomlinson et al., 2005). Regardless of whether it is classified as either an adventure or lifestyle sport, orienteering in the UK is a well participated sport for individuals of all ages and abilities. For example, in 2021, figures suggest that approximately 22,500 individuals participated in orienteering in some capacity within England (Statista, 2022). However, somewhat problematically this was the lowest approximate participation figure within England for 5 years, demonstrating that the sport is potentially decreasing in popularity.

In 2021, British Orienteering released their 'Thriving Clubs for a New Generation' strategic plan, which incorporates four strategic themes: (1) Change the perception; (2) Create engaging experiences; (3) Strengthen lifelong pathways; and (4) Provide foundations for success. Out of these strategic themes, 'Strengthen lifelong pathways' focuses on orienteering coaching and the need to ensure alternative pathways exist to keep individuals motivated to stay in the sport beyond their athletic years, for example, ways in which the athlete-to-coach transition can be supported.

Within this strategic theme, British Orienteering are keen to develop clear developmental pathways for their volunteers, which includes their coaches. Two strategic actions within this theme focus on creating clear coaching pathways to retain individuals within the sport, while also delivering effective and efficient training for volunteers within local club settings. Consequently, British Orienteering are keen to establish a baseline understanding of the coaching journeys and developmental pathways their existing coaches have taken to get to where they currently are. Moreover, British Orienteering are interested in exploring how they

can best support individuals on their coaching journeys, by understanding how additional support and coach development opportunities can be enhanced and made more meaningful and accessible to coaches. Thus, the new strategic plan the specific strategic themes highlighted above were the catalyst for this research project.

## Coach learning and coaching journeys: A short overview

Coach learning is influenced by a combination of formal, non-formal, and informal learning 'situations' (Cushion et al., 2010). It has been recently argued that coach learning should be considered a blending, rather than a separation of these inter-connected learning situations, where each coach will encounter and utilise different sources of information in unique and variable ways throughout their life course (Lyle & Cushion, 2017; Stodter & Cushion, 2017). Although formal, non-formal, and informal 'learning situations' should not be viewed as isolated concepts, they provide a typology to describe and consider the numerous methods through which coaches learn and develop their craft over the course of their coaching careers.

Formal learning situations often refer to national governing body (NGB) delivered coach education qualifications, where candidates are expected to comply with a set curriculum and demonstrate a certain level of competence to achieve certification at the end of the process. In recent years, formal coach education has been largely critiqued as a method of 'training' rather than education, where coaches are often indoctrinated into a prescribed 'right way of doing things' (Lyle & Cushion, 2017). Indeed, coaches often perceive formal coach education to be "an inconvenience to negotiate rather than viewing them as opportunities to up-skill themselves for future coaching careers" (Blackett et al., 2018, p. 220). Hence, it is perhaps unsurprising that coaches have demonstrated a preference for learning through informal or self-directed means such as practical coaching experience, observations/discussions with other coaches, past playing experiences, and mentoring opportunities (Cushion et al., 2010; Stoszkowski & Collins, 2016).

Nonetheless, describing the different learning situations coaches engage with ultimately lacks context and only provides a retrospective and superficial view of coach learning (Piggott, 2015; Stodter & Cushion, 2017). This descriptive approach reduces coach learning down to a straightforward and linear process, often neglecting "the wider context, coaches' existing knowledge, beliefs and practice, and the way various learning experiences fit together" (Stodter

& Cushion, 2014, p. 64). This can also be seen when exploring coaching journeys, where some empirical analyses have presented coaching pathways to be a-theoretical, linear, and one-dimensional, reducing coaches' career trajectories down to be a "generic stepwise model that describes careers in terms of age-specific and chronologically ordered milestones" (Christensen, 2013, pp. 99–100).

When further reflecting on coaching journeys and the process of learning to become a coach, Werthner and Trudel (2009) have urged researchers to consider and "explain the variations or idiosyncrasies that seem to prevail in the coaches' learning paths within different coaching contexts" (p. 436). Indeed, a large proportion of the research exploring coaching journeys to date has focused on high-performance sporting contexts within mainstream team sports (e.g., Blackett et al., 2018; Christensen, 2013; Watts & Cushion, 2017), overlooking coach development in what might be considered as adventure and lifestyle sports, such as orienteering, in addition to coaching that occurs within participation and development domains. This results in a gap in both the literature and our understanding, highlighting a need to explore this area further to ensure meaningful coach learning and development opportunities can be devised to support the coaching workforce within these sports and domains, such as orienteering.

# Rationale, aim, and research questions

To support British Orienteering in critically understanding the coaching journeys individuals have taken within the sport, this research project focuses on the role of biography (e.g., past experiences, wider life events) in structuring both coach learning and practice, in addition to the impact of formal coach education. As outlined above, while previous research has attempted to explore the learning pathways and journeys of coaches, these have tended to focus on high-performance coaches who work within mainstream team sports, such as football and rugby (e.g., Blackett et al., 2018; Christensen, 2013; Watts & Cushion, 2017). Thus, we know little about the journeys and learning pathways of the coaching workforce within adventure and/or lifestyle classified sports, who predominantly operate in voluntary roles. Consequently, to address this gap in the literature, while supporting British Orienteering in achieving their strategic plan, the aim of this research is to understand the coaching journeys of British Orienteering/Scottish Orienteering Association coaches and the relationship between their biography, learning, and practice.

To address this broad research aim, four research questions have been developed:

- 1. How do the biographies of orienteering coaches shape and structure their coaching philosophies and practice?
- 2. How do coaching journeys evolve over time and what do individuals learn *from* and *for* orienteering coaching?
- 3. How do critical incidents and formal coach education provision impact upon coach learning and development within orienteering?
- 4. What factors influence whether coaching journeys end or transition within orienteering?

To answer these questions and to provide insightful data to both British Orienteering and the Scottish Orienteering Association, the perceptions, experiences, and voices of orienteering coaches in the UK need to be heard. Therefore, following on from this brief introduction, the next section outlines the methodological approach of this research, explaining how data were collected, analysed, and interpreted.

#### METHODOLOGY

# Research approach

Due to the designated aim and four research questions underpinning this project, a qualitative research approach was considered the most appropriate. Qualitative research approaches broadly aim to understand "social phenomena and the ways in which people make sense and extract meaning from their experiences" (Jones et al., 2013, p. 3). Qualitative research is used to uncover perspectives, meaning, and understanding, specifically when a particular problem or issue needs to be explored (Creswell, 2013). Thus, this research aimed to understand the coaching journeys of British Orienteering/Scottish Orienteering Association coaches and the relationship between their biography, learning, and practice. Therefore, adopting a qualitative framework enabled the research team to uncover the meanings individuals (e.g., orienteer coaches) construct, in addition to understanding the journeys and wider life experiences which have impacted upon their development, beliefs, and ultimately coaching practice (Sparkes & Smith, 2014). In essence, qualitative research places great emphasis on participants being able to articulate their personal views of reality, enabling researchers to understand individuals' experiences, thoughts, and actions within unique cultural contexts (Baxter & Jack, 2008).

#### **Data collection method**

As a result of the qualitative research approach chosen, a qualitative online survey was utilised to gather "nuanced, in-depth and sometimes new understandings of social issues" (Braun et al., 2021, p. 641). Qualitative online surveys are generally the dominant mode of survey research, which are designed and delivered via online survey software, while focusing on participants' responses to open-ended topic-based questions alongside a small number of closed, demographic questions. The emergence of web-based survey capabilities has resulted in qualitative online surveys becoming an attractive and practical data collection method for researchers, primarily due to ease of use and accessibility, reduced demand on time and resources, access to geographically distributed populations, and high level of anonymity for participants (Braun et al., 2021).

While the logistical benefits of qualitative online surveys are evident, several participatory advantages exist, with participants afforded greater control, as they can manage the pace, time, and location of the survey completion (Braun et al., 2021). Furthermore, qualitative online surveys have the potential to address sensitive topic areas, giving a voice to

participants due to the unobtrusive nature and increased social comfort (Braun et al., 2021). Qualitative online surveys offer the unique opportunity to collect a 'wide-angle lens' on a range of both broad and specific topic areas, helping to capture a diverse range of participants' experiences, perceptions, and practices (Braun et al., 2021). Consequently, in addressing the designated aim and research questions of this study, a qualitative online survey was considered an appropriate data collection method to understand the coaching journeys of British Orienteering/Scottish Orienteering Association coaches and the relationship between their biography, learning, and practice.

A qualitative online survey was developed using Google Forms and structured via five sections. Before commencing the survey, a participant information page was provided which included information related to the aims and background of the research, participant confidentiality, intended outcomes of the research, and survey completion instructions. Having read this information, participants progressed to Section 1 which contained a series of statements where participants were required to tick a box and digitally sign to give their informed consent as a form of procedural ethics (Palmer, 2016). Participants were unable to access the rest of the survey if they did not provide their informed consent. Following the suggestions of Braun et al. (2021), Section 2 included the first set of questions related to demographic information, which were considered the least threatening. These involved a mixture of four open and closed questions regarding the participants' age, gender, country of residence, and ethnicity. Section 3 focused on the participants' coaching background, involving a combination of seven open and closed questions to acquire information on who the participants were coaching (e.g., athlete age and level), participants' coaching qualifications, years of coaching experience, and their current coaching roles (e.g., number of sessions delivered weekly, and events attended monthly).

Section 4 included nine topic-based questions (Braun et al., 2021), geared specifically towards addressing the aim and four research questions, focusing on participants' coaching journeys and biography (see Table 1). Good qualitative survey questions are generally open, clear, and provide some form of instruction if explicit detail is required (Braun et al., 2021). Due to the focus on lived experience and participants' perceptions and beliefs, we believe nine topic-based questions were an appropriate amount to provide depth and detail, while minimising participant disengagement and tedium (Braun et al., 2021). Section 5 concluded

the survey with a final comments space, inviting participants to share any other thoughts they feel might be relevant (see Table 2).

**Table 1: Online Survey Topic-Based Questions (Section 4)** 

#### **Questions**

- 1. In as much detail as possible, please explain how and why you became an orienteering coach? Examples might include it's always been an ambition, being in the right place right time, or due to an athletic career ending.
- 2. How has your previous or current experiences as an athlete (in any sport) shaped your coaching behaviours and practice within orienteering? Please provide examples where possible.
- 3. How would you describe your coaching philosophy and what factors have shaped its development? E.g., what are your values and beliefs as a coach, and where have they developed from?
- 4. In what ways have your wider life experiences (e.g., work, family, other interests) impacted upon your coaching journey to date?
- 5. Do you believe any skills, characteristics, or traits you have developed through orienteering coaching have influenced your life outside of sport?
- 6. Throughout your coaching journey, can you recall a critical incident which has significantly impacted upon your learning and development as a coach? Examples might include having a mentor, attending a formal coach education course, or experiencing/overcoming a challenging situation. Please try to explain why this incident was significant.
- 7. In reflecting upon your learning as a coach, how has formal coach education and CPD delivered by British Orienteering, or the Scottish Orienteering Association influenced your development? Please provide examples where possible.
- 8. When considering your personal development as a coach, how could formal coach education delivered by British Orienteering, or the Scottish Orienteering Association be enhanced further to meet your individual needs?
- 9. If you are not actively coaching, please can you explain your reasons for stopping and whether you see yourself coaching again in the future? If you are actively coaching, you can ignore this question.

**Table 2: Online Survey Final Comments (Section 5)** 

#### Questions

- 1. Moving forwards, what does your journey as an orienteering coach look like? E.g., please provide details on your coaching ambitions, and motivations, and where you see yourself in both the short and longer term.
- 2. Do you have any final comments/thoughts you would like to add which are related to your development as an orienteering coach and your journey so far?

#### **Procedure**

Ethical approval was obtained from the School of Sport, Rehabilitation, and Exercise Sciences, at the University of Essex on October 15<sup>th</sup>, 2021 (Application ETH2122-0175). Following ethical approval, the lead author designed and developed initial drafts of the online survey, which were shared with British Orienteering staff members to ensure the correct terminology and phrasing was used to maximise clarity and reduce any ambiguity within each survey question. Having completed the final draft, the online survey became 'open' and went live on November 22<sup>nd</sup>, 2021, with participants being recruited via two main methods.

The primary method of participant recruitment was via email, as the link to the online survey was disseminated by British Orienteering to their mailing list of qualified coaches (circa 350 coaches). An email reminder was sent on multiple occasions to this mailing list throughout the duration of the online survey being live. Moreover, British Orienteering's Communications Officer published two posts related to the research project within their website's news section, with the link to the online survey contained within each post. The first post was published on December 10<sup>th</sup>, 2021, and the second and final post was published on January 18<sup>th</sup>, 2022. The online survey was eventually closed and stopped accepting responses on January 31<sup>st</sup>, 2022. The survey was 'open' and live for a total of 10 weeks (70 days).

# Sampling and participants

Sampling within this research was broadly purposive (Braun & Clarke, 2013), as participants needed to be a qualified orienteering coach in the UK who is over the age of 18, regardless of whether they are actively coaching or not (e.g., participants needed to have a desired set of characteristics). Nonetheless, due to the survey being disseminated to a large audience (e.g., British Orienteering's mailing list and anyone who viewed the website posts), sampling involved both convenience-based (e.g., whoever completed the survey was recruited) and snowballing (e.g., participants may share the survey to individuals within their networks) strategies to increase the response count (Braun & Clarke, 2013).

Sample size within qualitative survey research is not straightforward (Braun et al., 2021), however, they tend to be larger than interview-based research, ranging anywhere between 20 to over 100 responses. While bigger sample sizes do not always translate into better data (Braun et al., 2021), larger sample sizes may help compensate for shorter participant

responses which might lack depth and detail. Nonetheless, sample size within survey-based research should generally be dictated by the aims and scope of the study, breadth of topic area, diversity of the population, and nature of responses (Braun et al., 2021). In total, 84 participants completed the online survey for this research project (see Table 3).

#### Participant analysis

Recently, Christian et al. (2022) conducted a demographic analysis of 504 adventure sport coaches from across 15 sports in the UK. Their research outlined that 72.2% of their participants were male, 74% were under the age of 44 with an age range of 18-74, while most participants (65.7%) had been coaching for less than 10 years. Furthermore, 38.3% of participants were qualified to coach beginners and/or intermediate level performers (e.g., level 1 or 2 qualified), whereas the remaining 61.7% of participants were qualified to coach advanced performers and/or were coach educators. UK Coaching's (2019) 'Coaching in the UK' survey also offers some demographic information related to the general coaching population in the UK, across all sporting categories, based upon the responses of 50,000 coaches. From this large-scale project, key findings indicated that in the UK, 19% of coaches possess either a level 1 or 2 qualification, 55% of coaches are male compared to 43% female, and 24% of coaches come from either a BAME or other ethnic background. While orienteering was not included within Christian et al. (2022) study and was not explicitly mentioned within UK Coaching's (2019) survey, we can begin to make some comparisons and distinctions between the findings and participants of those research projects and the orienteering coaches within this project.

For example, this research project contained a higher percentage of female participants (40.5%) than the adventure sport coaches within Christian et al. (2022) research, potentially suggesting orienteering is not as male-dominated when compared to other sports within similar classification categories. However, the figure of 40.5% females is more aligned with the general UK coaching population which is stated to be 43% (UK Coaching, 2019). Perhaps the most significant difference between the participants in this research project compared to Christian et al. (2022) and UK Coaching's (2019) survey is the age of the participants. Within this research project, the average age of participants was 59.1, with an age range of 25-77. Moreover, 35.7% of participants were over the age of 65, which is significantly higher than the 10% figure within UK Coaching's (2019) survey. Building upon this, only 13.1% of the orienteering coaches participating in this research project were under the age of 44, which is

considerably low when compared to the 74% of Christian et al. (2022) and 61% of UK Coaching's (2019) survey. More problematically, only 1.2% of the coaches participating in this research project (1/84) suggested they came from an ethic background other than White (English/Welsh/Scottish/Northern Irish/British/Irish/Other), which is significantly low when compared to the 24% reported within the UK Coaching (2019) survey.

In terms of learning, development, and coaching practice, the orienteering coaches within this research project had considerably more coaching experience than participants in both the Christian et al. (2022) and UK Coaching (2019) survey. For example, the orienteering coaches who participated in this study had on average 21.1 years' experience of coaching any sport, and 17.8 years' experience of coaching orienteering specifically, with 58.3% of the participants qualified at either level 1 or 2 within the sport. This contrasts with the coaches within Christian et al. (2022) and UK Coaching's (2019) research, where 38.3% and 19% of participants respectively possessed either a level 1 or 2 qualification in their sport.

**Table 3: Participant Demographic Information** 

Individual-Level Variables	N	Percent	Mean	SD
Age	84		59.1	12.0
Sex				
Male	50	59.5		
Female	34	40.5		
Ethnic Group				
White - English/Welsh/Scottish/Northern Irish/British	79	94.0		
White – Irish	2	2.4		
White - Other	2	2.4		
Other Ethnic Group	1	1.2		
Country of Residence				
England	65	77.4		
Northern Ireland	1	1.2		
Scotland	16	19.0		
Wales	2	2.4		
Years Coaching Any Sports			21.1	14.8
Years Coaching Orienteering			17.8	12.6
Current Orienteering Coaching Age Group				
Children (5-18 years)	33	39.3		
Adults (19-64 years)	5	5.9		
Children and Adults (5-64 years)	14	16.7		
Adults and Older Adults (19-65+ years)	2	2.4		
Children, Adults, and Older Adults (5-65+ years)	10	11.9		
Current Orienteering Coaching Context				
Participation	29	34.5		
Development	27	32.1		
Performance	6	7.1		
Participation and Development	1	1.2		
Development and Performance	4	4.8		
Participation, Development, and Performance	1	1.2		
Not Coaching	16	19.1		
Highest Level of Orienteering Coaching Qualification				
Level 5	3	3.6		
Level 4	6	7.1		
Level 3	20	23.8		
Level 2	32	38.1		
Level 1	17	20.2		
Unknown	6	7.1		
Orienteering Coaching Sessions Taught (per week)			1.1	1.3
Orienteering Event Engagement (per month)			3.6	2.6

# **Data analysis**

To analyse participants' responses to the online survey questions, thematic analysis was utilised. Thematic analysis encompasses a form of qualitative data analysis which helps to identify patterns of meaning which exist across a dataset. Thematic analysis offers the potential for "nuanced, complex, and interpretative analysis", especially when used to understand people's experiences of, and perspectives towards, social issues (Braun et al., 2016, p. 191). Consequently, a *reflexive* approach to thematic analysis, which emphasises researcher

subjectivity, was considered an appropriate analytical tool when interpreting participants' responses to the online qualitative survey (Braun & Clarke, 2021). *Reflexive* thematic analysis follows an iterative six-stage process, where the researcher progresses back and forth through stages: namely, familiarisation; coding; generating initial themes; reviewing and developing themes; refining, defining, and naming themes; and writing up.

Initially, the lead author immersed themselves within the data through reading and rereading all 84 participant survey responses overtime to become familiar with the content and to achieve depth of engagement, looking for tentative ideas and concepts which may help to address the project's aim and designated research questions (Braun et al., 2016). After immersion and familiarisation, the survey dataset was coded in an unstructured, subjective, and organic manner, where coding was considered a process of researcher interpretation, with both latent and semantic codes evolving and shifting over time as researcher understanding was developed (Braun & Clarke, 2021). Organised codes were then clustered together to form initial themes which represent patterns of meaning connected by a shared idea or concept, while highlighting something important and meaningful about the data (Braun et al., 2016). Theme development continued with further refining, defining, and naming of themes to capture the core content and to represent the outputs of the data analysis process (Braun & Clarke, 2021). These themes are presented within the results and discussion section which follows this methodology and are supported with data extracts and critical analytical commentary within this report (Braun et al., 2016).

#### **RESULTS AND DISCUSSION**

#### Introduction

As a result of the *reflexive* thematic analysis process undertaken, four primary themes were developed: (1) Journeys into coaching; (2) The holistic nature of coaching journeys; (3) Coach education and development for orienteer coaches; and (4) Continuing and ending coaching journeys. These themes aim to represent the core ideas, concepts, and topic areas contained within participants' responses to the survey questions. To delve into these ideas, concepts, and topic areas in further depth and detail, each primary themes contains two to four further sub themes, which help to identify more specific areas of interest (see Table 4). Thus, this following section describes and analyses data relevant to each theme and sub theme. Data extracts are included and are supported with some analytical commentary, supplemented with sport coaching literature, to help contextualise the data and situate it within wider research, where appropriate.

Table 4: Themes and sub theme development

Journeys into coaching	The holistic nature of coaching journeys	Coach education and development for orienteer coaches	Continuing and ending coaching journeys
Reasons for	Learning for	The influence of critical	Reasons behind
commencing	coaching: How	incidents on facilitating	coaching journeys
coaching	wider life	coach learning	ending
The role of	experiences	Positive perspectives	Opportunities: A door
previous athletic	structure coaching	towards formal coach	open or closed for
experiences in		education	coaching journeys?
shaping			
coaching			
practice			
Developing a	Learning from	Critiques of formal	Transitioning roles
coaching	coaching: How	coach education	and passing the baton
philosophy	coaching impacts	Recommendations for	
	wider life	improving formal coach	
	experiences	education	

## Journeys into coaching

Individuals decide to embark upon coaching journeys for a variety of reasons. However, it is important to realise that individuals do not start coaching careers as a blank slate, with no prior experiences, attitudes, beliefs, or perspectives towards coaching practice. Indeed, even before

planning and delivering their very first session, coaches will have developed their own personal coaching biography, often informed, and structured by their prior athletic experiences, which subsequently inform both their coaching philosophy and practice. Consequently, the aim of this first theme is to understand the reasons why individuals decide to embark on coaching journeys within orienteering, while also exploring how previous athletic experiences (as an orienteer or within other sports) inform and shape coaching practices and philosophies. This theme addresses research question one: How do the biographies of orienteering coaches shape and structure their coaching philosophies and practice?

#### Reasons for commencing coaching

The motivations, aspirations, and reasons for individuals commencing a coaching journey will vary significantly and will ultimately impact upon both their philosophy and practice (Nash et al., 2008). It is perhaps unsurprising that for many participants in this research, becoming an orienteering coach was considered a seamless and natural progression from their athletic career. Indeed, the athlete-to-coach transition entails "a shift from the athletic career as a competitor to the vocational career as a coach and demands that the individual undergoes adjustments related to identity, skills, and competencies while at the same time having to act and deliver on the coaching job" (Chroni & Dieffenbach, 2021, p. 3). While recognising that many orienteering coaches still 'compete' alongside their coaching roles, the athlete-to-coach transition was still considered a natural transition for many participants. These individuals represent 'active' pathways into coaching, often self-initiated while actively seeking coaching opportunities and experiences (Blackett et al., 2018).

I started orienteering from a very young age. I pursued the sport as a junior, but I stopped when I went to university. I failed university and ended up leaving early. When I left, I set up my own business to teach schools how to teach orienteering as I never did it at school growing up. I have now been in business for 12 years and worked with over 1000 schools nationwide. (P19)

I wasn't a top athlete and enjoyed making maps, planning, and organising events. I was very technical and interested in technique and started coaching younger kids at school. I was active in all aspects of orienteering at university but after a discussion with the British Orienteering Professional Officer and the Regional Committee and Chairman of the Coaching Committee I decided to set up the Northwest Regional Squad focusing on coaching 12- to 18-year-olds. There were very few coaches, and I was encouraged to focus on coaching and fast tracked on coaching qualifications. (P34)

Being part of a regional junior squad was a very important part of my own teenage years, so enabling other junior athletes to have that experience has always felt a natural

way to express the gratitude to my own coaches. I dabbled in occasional coach assistant roles as opportunities arose through my twenties, then after finishing university I moved to a region in which the junior squad was floundering with no regular committed coach. I volunteered do what I could to enable trainings to happen and in doing so realised that increasing my own level of qualification would be beneficial. (P48)

I coached alongside being an elite orienteering athlete and then continued after retirement from international events. I have coached junior and senior beginners all the way through to being at JWOC and mentoring members of the senior squad. (P54)

When I finished in the regional junior squad, I began to coach that squad and then moved on to coach on national junior tours throughout my 20's. (P57)

I was a successful junior but was not personally motivated by performance. Was motivated as part of a team and make people better. At university started working with regional junior squads (NWJS) and then progressed to coaching/lead coaching summer tours. From there my ultimate ambition was to coach orienteering at the Olympics. Progressed to coach the junior squad and lead juniors to minor international competition and supported JWOC. (P58)

Was involved in setting up training sessions while an athlete, took roles with Scottish and British Teams during 1983 to 1997. Natural progression from competing as an athlete. (P72)

In my 20s I got injured and couldn't compete internationally myself but wanted to stay involved so coaching was my way of staying involved and giving back to the sport. From the Yorkshire Junior Squad I was asked to support the GB Junior Squad in 1997 and I worked through my coaching qualifications whilst climbing the ranks there. Ultimately becoming lead coach and Level 3 coach by 2001. (P64)

The findings seem to suggest that the character, structure, and culture of orienteering enables and encourages athletes to stay in the sport, making the transition into a coaching role smooth and seamless (Bergstrom et al., 2021). If athletes were active in seeking coaching positions and qualifications, it would seem opportunities were available. However, in contrast to 'active' pathways, several participants demonstrated 'passive' pathways into their coaching journeys. Here, rather than being self-initiated, their coaching journeys tended to commence "in a relatively unintentional way as opportunities arose (or were offered to them)" (Blackett et al., 2018, p. 223). These individuals 'fell into' coaching roles or were encouraged/invited to consider taking up such positions.

When I became too old for my regional junior squad, but was still resident in the area, I was asked to help hang controls and shadow/coach some of the younger athletes (as I was a GB and England international by this time) at squad training events. One thing led to another, and I soon became a qualified coach and was invited to attend British Orienteering junior training camps to Scandinavia as a coach. This happened whilst I was still competing internationally myself. I now coach with a local school, the British

Orienteering Talent Squads, and the England Team at the World Schools Championships. In addition to attending events to compete myself. (P18)

Came up through junior regional squad system and National squad structure of the time. I think I knew I wasn't destined to be a world champ, but I was still actively competing. One of my regional squad coaches encouraged me to do a coaching course before I left for university and invited me to come back to coach at regional squad sessions during the holidays. (P22)

As a member of the Southeast Junior Squad, I was encouraged to start coaching some of the younger juniors and then continued to do so when I left the squad. This then led into coaching on British Orienteering tours and taking over the running of the South-Central Junior Squad. (P25)

I was in the GB Junior Squad for five years and as a young senior I was invited to help on training camps and tours - initially as control hanger and getting more involved with the coaching eventually ending up as the lead coach of the GB Junior Squad. I also did some personal coaching with juniors in my local club and students at university. (P33)

As a long-term athlete, I had experienced quite a lot of coaching myself. I helped my children in the sport and through them was involved as a helper at various training camps and coaching days. I enjoyed this but felt I had much to learn in the "how to coach" and was persuaded to undertake a coaching qualification. I think it is worth pointing out that many orienteering coaches are also active, and often high level, competitors in their own age classes. (P39)

Approached by the SE Junior Squad coaches to try coaching. They needed help with someone who was younger and faster than they were. (P47)

The above extracts demonstrate examples of 'passive' pathways from athletic careers to the beginning of a coaching journey. However, coaching journeys can also arise out of incidental events (Purdy & Potrac, 2016), alongside simply being in the right place (both physically and in terms of life position) at the right time (Hesse & Lavallee, 2012). Thus, several participants alluded to being in the right place in their lives, often citing their children and family life as a reason for becoming an orienteering coach within participation and development domains. While potentially not holding any formal coach education qualifications at the time, these individuals were able to draw upon wider life experiences to support their initial introduction to the coaching role.

It had never crossed my mind to become a coach until a few years ago, and to be honest, I'd never really noticed until I had my own children that there was an athlete pathway as such. My interest in coaching is purely about beginners, building membership in our club for new families and juniors, working with 'running mums', and building confidence and capacity of teachers to do orienteering better in schools. Three years ago, I decided to do the Level 2 coaching certificate (but it took ages due to Covid) and

I guess it was about it being the right time, but on reflection I wish it was something I'd done years ago but it wasn't really on my radar. (P5)

I attended the AGM of the Southeast Orienteering Association in about 1983. No-one was coaching the Regional Junior Squad, so I took it on initially with a friend. (P6)

I was in the right place at the right time when the club I was with at the time needed more coaches. I found it helped my own orienteering (I continued to compete as well as coach). (P9)

I have been involved in sport all my life and was a Secondary School physical education teacher for many years. My original sport was competitive swimming from the age of 10 and within swimming I had many coaching qualifications and was an active coach up to National squad level. In my late 30's my wife and I were introduced to Orienteering (mid 1970's) and have been involved ever since. My more active orienteering and coaching has been since 2000 when my own two children had left home and gone to university, and we had more time to ourselves. (P11)

I qualified sometime in the 1990s. I never had any ambition to become a coach - I just sort of tagged along at that time. (P16)

My children were beginning to take part so going to coaching was good for us all. (P24)

My daughter was a member of the local regional squad which I went along to coaching sessions to help out. The squad manager and lead coach both gave up their roles and there was no one willing to take them on. Knowing how much the juniors got out of the sessions I decided to take on both roles. Although I had no orienteering qualification, I was a qualified teacher with a specialism in Outdoor Education and held MLC and BCU qualifications so was experienced in coaching and planning residential visits. (P28)

Accompanied daughter to a squad coaching session and as a former teacher of PE and Outdoor Ed was horrified at the apparent lack of supervision and coach to participant ratio. I felt I needed to get involved although at the time I had almost no orienteering experience. The coach was well meaning and working hard but there was a lack of safety provisions, and I was concerned about child welfare. (P30)

My daughter was selected for a Regional Squad. I used to go along and was invited to take part as I was a regular competitor. When my club Junior Team Manager stepped down, she asked me to take over, and I did. (P40)

Due to having daughters join the regional squad level (at about 12/13 years old) I was always at the sessions (taxi lifts) and wanted to do more. Cannot do anything if not qualified with paperwork. The opportunity in the East Midlands to take the Level 2 course was advertised. The cost was also going to be subsidised by the club. It was on weekends that I was free. They are still regularly available so interested people in the club have to be signposted to the right person(s) who might be doing a course. (P42)

I thought I could do a good job as I have worked in education for 40 years and I wanted to do something sporty when I retired. I also thought our club and our area needed someone to try and coach young people and get them interested in orienteering. (P43)

I did some orienteering coaching in my 20/30 for a few years. I needed a new focus away from work after a bereavement and after children grown up. I decided coaching juniors in my sport of orienteering enabling me to spend more time outdoors seemed a good idea, the club needed a coaching programme for juniors to aid development. (P71)

I was invited to be a junior coach at Lagganlia in approx. 2013, after I had stood in for a relay member who was ill at the JHIs. I really enjoyed that week and went back the next year. The enjoyment I got from coaching and giving back to the next generation of orienteers prompted me to get more involved in regional squad and club coaching. I was never going to be an elite athlete in orienteering, but I wanted to remain heavily involved in the sport and for me that means coaching and commentating. I have also been to Lagganlia again in recent years, as well as the Badaguish tour. This led to me being asked to be one of the team leaders for England at the JHIs, and I enjoy mixing the technical and pastoral side of coaching here, as well as being able to work with a large number of athletes. I was mentoring the daughter of a friend anyway but became more of a personal coach in lockdown. It also coincided with her being the right age to take on more technical training. (P74)

While perhaps not competing at an elite level, the individuals above have described a range of incidental events (e.g., children/family, coaches leaving, personal reasons) that have resulted in them being in the right place, right time to begin their coaching journeys. In building upon the comments from P74 above, the notion of 'giving' something back to the sport was also identified multiple times within the dataset. Indeed, giving something back to the sport, leaving a legacy, and sharing passion/experience are often key reasons for individuals to commence coaching roles (Lorimer & Holland-Smith, 2012; Ronkainen et al., 2020).

My children were involved in orienteering and had benefited from coaching, and it was an opportunity to give something back. (P20)

Interested in helping others to develop and grow in the sport. Pass on my own experience and the benefits I got as an international athlete. Add to the diversity by being a female coach to help maintain sexual equality, which was something that wasn't the case when I was an athlete. Help young people attain their potential and enjoy the sport. (P23)

I was very active as a junior through school and then university from age 11 through 21. When I graduated, I had a job in London, and started coaching with the Southeast Junior Squad. That led on to coaching some junior national tours, and I've continued ever since at various levels. I would say I'm naturally inclined to give something back to the sports I'm involved in, in whatever way best suits my skills. So, for example I also plan, organise, and control orienteering events. But being a strong orienteering as a junior and through into seniors I felt I was in a good position to pass on my knowledge to coach others. (P26)

Giving back to the sport and as part of my degree requirements. (P36)

I had the time to put something back into the sport. (P45)

To learn and give back to the sport. (P51)

I wanted to share my love of orienteering with others and was encouraged to become a coach by some of the club members. (P56)

I love orienteering and want others to experience the benefits. I really enjoy helping people and discovering something new. I felt I should give something back to our club having supported our children for many years. There was a one-day course being held locally which was very convenient to attend. (P77)

Passing on a passion to younger people, especially as I only started aged 24, as part of my PGCE subsidiary subject studies... Seeing students enjoy it, and succeed, and 'pass it on' to others is also a motivating factor. Also, more selfishly, to increase my own skills (particularly on the coaching course) and to get more time 'in terrain' and to get fresh air and exercise during the school day! (P81)

Furthermore, for participants who were already involved in teaching and outdoor education occupations, becoming an orienteering coach was also considered a natural transition, and supplemented their current full-time roles.

I was a teacher and coached lots of sports at school as a side-line and then I got into orienteering and my kids did. (P12)

To start with, as part of my work in an outdoor education centre. I was an orienteer and then learned about the coaching craft through work; I started at the base level for orienteering coaching and worked my way through the system to a L4 British Orienteering coach. (P13)

Part of a set of qualifications I took as part of a degree in adventure recreation. (P14)

I began orienteering in March 1972, as a means of getting fit for the cricket season after I'd had a knee cartilage removed. Two colleagues from school had taken up the sport after having been on a course run by the old Lancashire County LEA. Immediately hooked on the sport, I helped them start a school orienteering group at our school in Crosby, Liverpool. In 1973, I went on one of the early one-day courses to qualify as a British Orienteering Federation Instructor, one of the earliest orienteering qualifications. When I moved over the years to teach in schools in Tewkesbury, Glos, and then to Dorset, I established school orienteering groups there as well. (P15)

I completed a PGCE in Outdoor Education in 1985. Orienteering was one of many outdoor sports practiced. A few years later a friend on that course persuaded me to enter a few events. As I was already keen on countryside and outdoor navigation, within a short time I became hooked on the sport; because of the challenge, the navigation, the areas visited (often private land or out of the way) and the intrinsic combination of running and navigation. The nature of my PGCE and development as an Outdoor Education teacher meant I was very keen on adding knowledge, skills, and expertise in different sports. I undertook a one-day course which qualified me as an instructor. I

didn't think it was adequate, so I did a further Instructor course to make up for the lack of content available in a one-day course. Orienteering coaches were few and far between in the 1990s, so I was keen to fill this gap especially at my work in a residential outdoor centre, where orienteering was traditionally poorly taught/coached. I worked for an LEA in a County where there was a senior coach who was keen to encourage my progress. This together with my increasing personal engagement with the sport is important. (P17)

I worked at an Outdoor Ed Centre for 37 years. Orienteering was a regular and important part of the programme. I was also a founder member of our local orienteering club officiating and coaching with them for the past 38 years. (P31)

I first became a coach to have the qualification to teach pupils orienteering. (P32)

I am/was a teacher by profession. Became a squash coach and then when I started orienteering became an orienteering club coach. I love teaching, helping people to improve so becoming a coach is a natural progression. I also train coaches and teach teachers and outdoor centre staff how to deliver orienteering. (P65)

Asked to take on club coaching from previous coach and being PE teacher felt it was something I could do. (P67)

I was one of the first in UK to start orienteering (1965) so in joining in to spread the word of this fantastic sport I started teaching/coaching orienteering locally which linked well with my profession as a PE and Outdoor Activities Teacher. My career advanced to jobs in an outdoor centre then University PE Department then specialist PE training college - all progressions which resulted from me being an orienteer. (P70)

I was working in Outdoor Education in school and was wanting to expand my qualifications including sports I actively involved in. (P83)

This subtheme has highlighted just some of the many reasons why individuals choose to engage in orienteering coaching journeys. While the athlete-to-coach transition was natural for some, others followed more 'passive' pathways, and were encouraged to engage in coaching despite it not always being something on their radar. Furthermore, coaching journeys often began due to incidental events, being in the right place, right time, and due to participants' enthusiasm and passion to give back to the sport which has given them so much. To conclude, orienteering coaching was often considered to be interconnected and linked to participants' full time occupational careers within both teaching and the outdoor education sector, meaning coaching was viewed as a natural extension of their existing roles.

#### The role of previous athletic experience in shaping coaching practice

Before commencing a coaching role, it has been argued that individuals undergo an 'apprenticeship of observation' (Cushion et al., 2003), referring to time spent watching coaches

and being coached as an athlete. These athletic experiences are often an influential form of learning for coaches (Blackett et al., 2018; Christensen, 2013; Watts & Cushion, 2017), and have the potential to structure future coaching beliefs and practice. Within this research, several participants alluded to the ways in which their experiences of competing as an orienteer have shaped their current coaching practice, specifically with regards to demonstrating techniques, skills, and passing on 'knowledge'.

Knowing that orienteering is a competitive sport - this shapes my coaching as I think it's important to encourage beginners to enter courses where they achieve success. All too often I see beginners progressing to a longer more technical course too quickly and they don't feel the competitive success of orienteering. (P5)

Competitive experience at orienteering helped me explain and demonstrate techniques and set up relevant practices. (P9)

My orienteering experience as a competitor, organiser, planner, and controller gave me a good grounding in the sport before I started coaching. Much of this experience I built into my coaching, not just in terms of planning technical exercises, but also into developing the supportive team environment that is crucial throughout orienteering. Technical exercises would include elements of how a planner sets courses and the problems they can set an athlete in completing a leg, e.g., controls on convex slopes which force the athlete to go down the slope when they can't see below and are reluctant to go too far down in case they have to climb back up. Developing a supportive team environment is crucial for a group of athletes who are starting on their journey to become an elite orienteer. This can be fostered through team building exercises using both orienteering and non-orienteering activities, e.g., critical skill community builders, or using circle activities in de-briefing sessions and evaluations. (P28)

Understanding how I have learnt the sport and have appreciated advice from others has influenced my planning of activities and style of presentation e.g., breaking down techniques to details that can then be set up as an exercise, post event analysis identifying the state of mind when things went very well and comparing with when errors were made. (P62)

Furthermore, in reflecting on their athletic careers, several participants identified coaches who had a significant influence on their development. Consequently, these participants outline how these previous coaches have had an impact on their current coaching, as they try to emulate and 'copy' specific approaches.

Certainly, in my early coaching days, I would often do things in a similar way to how coaches worked with me. Over time, as I gained experience, I developed my own skills and techniques. This was particularly when I became a lead coach for the regional squad and on the BOF camps to Scandinavia. (P18)

I remember being a bit on the outside of the national squad - I wasn't as dedicated to the sport as some, but I was still producing respectable results. The coaches who worked best for me were the ones who saw their role as getting the best out of me by seeing the world from my point of view, rather than those who had a set idea of what a successful athlete should look like/be doing. I have always tried to be that coach - adapting my techniques/advice/expectations to the individual athlete's potential, motivation, and personality. (P22)

Much of what I deliver as a coach is based on the experience of coaching, I had from others as a junior and watching other coaches in action. (P25)

Regardless of whether they competed or are still competing at an elite, development, or participation level, it was argued that previous athletic experiences were useful in being able to adopt an empathetic approach when coaching. For example, due to having 'been there', participants suggested that they were able to relate to their athletes when coaching them, and understand their thoughts, feelings, and what they are generally going through.

I have struggled as an orienteer. I never had much coaching. I understand that there are lots of people who also struggle with the techniques, so I have empathy and I want to help. (P43)

I have been orienteering for ~46 years and was involved in the British junior squad as a junior. I have throughout this time been competitive for my age group. It was then easy to relate my experiences in top competitions to juniors trying to improve. I have long thought that many adults have had no personal technical orienteering if they started later in life, they then individually develop techniques which work most the time or some of the time but do not tend to improve over time. I have enjoyed coaching small groups of such adults. Outside of orienteering I have been a keen fell runner and have developed the skills to lead interval sessions along with strength and conditioning sessions for members of my fell running club to which orienteers were invited. (P44)

My experiences of attending coaching sessions early in my orienteering career made me appreciate the benefit of learning skills and how to apply them. I understand that many people can't take time out to go to a full coaching session, but they like to go to events regularly. That has led me to believe there is value in using any opportunity to help people try 'just one thing' at an event that might develop their skills. (P69)

I feel like I can relate to a lot of juniors in the m/W14 age class who struggle with the physical side of orienteering, as I did so too at that time. The first time I went to Scotland, I was 14, so often tell stories from that time to my athletes, in order to be a bit more relatable. I always feel like my technical orienteering skills are strong, which helps me convey them to athletes. (P74)

Thus, the participants within this research argued that their previous experiences competing as an orienteer have enabled them to deliver and demonstrate technical knowledge, while also adopting an empathetic and relatable approach to their athletes, having been there before.

Moreover, the participants at times indicated that they tried to emulate their orienteering coaches of the past who they felt were particularly effective in some way. However, it was also suggested that athletic experiences outside of orienteering had also proved significant in informing future coaching practice.

My experience of good coaches has had an effect, in particular a top table tennis coach I had at university... he showed such patience, persistence, and precision. (P12)

It has shaped it in many ways, some sports I have been involved in are non-competitive (e.g., sea kayaking, mountaineering) with orienteering being my competitive sport. As an athlete involved in sport, I have always recognised that the better I perform the more I enjoy the sport. I have therefore had to work my way through each sport from a base level, understanding what will make me better. At times this has been through selfdiscovery (e.g., sea kayaking, learning about tides and wind) at other times this has involved being coached (e.g., acquiring skills with the paddle). I have transferred this learning to orienteering, ensuring that the athletes I coach have good basic skills which they can rely on in any situation so have found ways which engage the athlete in working on these basic skills so they become as good as they can be. I also know the value of being considered as an individual as well as an athlete - being valued as a person means that I had much more buy in to the coaching I received (e.g., while learning river kayaking skills, I felt I was not very good, but the coach valued me as a person, tailored the coaching to my way - I was not someone who was macho in that environment). From this I always try to ensure everyone is treated and valued as an individual and has equal attention in my sessions. (P13)

I was a slow cross-country runner on 4 years university teams. Being a slower runner was fun, relaxed, still very challenging. I had good coaches. In track seasons I did the longest races (no placings, quite slow), and wish someone had shown me O earlier. (P21)

Participants were able to describe how exposure to 'bad' coaching or teaching in previous athletic endeavours outside of orienteering has motivated them to become a better coach, ensuring they don't adopt such behaviours and mannerisms.

I've seen good and bad practice in coaching in various sports, especially at the junior level. I take great exception to the "you are training to race" philosophy of some coaches. Some people are, others just want to enjoy their sport and be better at it. I hope I provide appropriate coaching for everyone. (P39)

At high school I was subjected to rugby coaching from a brutal obsessive who had no interest in the pain and distress inflicted on the children involved. Since then, I have been taught, instructed, and coached by good quality mentors and bad. I have tried to profit from the good quality lessons and filter out the rubbish. From an involvement with Sport Parachuting, I learned how to visualise my future actions and membership of a Judo club helped with the Zen concepts of being focused in the moment. The psychologically pressurised nature of Sport Parachuting also highlighted the observation that people who have an outstanding natural talent for a sport lack empathy

or understanding for normal people finding it difficult and make less effective coaches. When teaching Navigation for orienteering the methods are indistinguishable from good practice in mountaineering and hillwalking. (P49)

While not associated with previous athletic experiences, participants within this research also outlined how coaching other sports and having other backgrounds (e.g., family life, teaching) have shaped their beliefs towards effective and appropriate coaching in orienteering.

The coaching and fitness regime within swimming and athletics that I coached (and taught at school) for many years heled me to bring different aspects into the orienteering coaching. (P11)

My PGCE in Outdoor Education at UCNW was very thorough and we were instilled with very high levels of instructing/teaching/ethics/organisation. One feature of that course was that we routinely did three very different activities in a day, e.g., pool safety swimming session following by white water canoeing then a night navigation exercise. This was all transferable and gave me the experience and skills to deal with working at an Outdoor Education Centre as well as coaching orienteering. Previous sporting experience such as playing football, cricket, tennis, rugby was of little value (P17)

My experience with my own children in the past has shaped how I approach my coaching. (P27)

My teaching background was very much based on providing first-hand experiences in the outdoors. Equity in my teaching was built into my teacher training as was the need to match lessons, experiences to the needs of the participants. Building relationships was important to develop trust and create a learning environment based on mutual respect and a willingness to learn. (P28)

I am also an instructor in rock climbing and mountain walking and used to coach kayaking, surfing, and coasteering. This helps to structure a session, break down skills and manage safety etc. (P63)

While coaching journeys begin for a variety of reasons, this subtheme demonstrates that no coach starts as a blank slate. Rather, previous athletic experiences, alongside former roles and engagements within other sports and professions, have a profound influence on what individuals perceive good and bad orienteering coaching to be.

# Developing a coaching philosophy

The concept of a 'coaching philosophy' is a key area of discussion amongst sport coaches and coach education providers globally, with it being suggested that coaches simply cannot operate without one. However, at present the term 'coaching philosophy' within sport coaching is more akin to an ideology, with a lack of concise definitions coupled with conceptual ambiguity

(Cushion & Partington, 2016). For clarity, within this research we define a coaching philosophy as a set of personal values and beliefs which guide coaching practice.

When analysing the responses to question three within Section 4 of the survey, it was clear that some orienteering coaches had clear values (e.g., what they think is important) and beliefs (e.g., why they believe those values to be important) which guide their coaching practice. To begin, several participants outlined how they value inclusion and participation for all within their coaching while aiming to provide equal opportunities. In some cases, participants were also able to articulate who and what has influenced the development of their coaching philosophies.

Belief that everything is possible and putting the participant at the top of the priorities, their wellbeing, development, enjoyment of the sport etc. Never limiting potential and never undermining athletes any way. Encouragement and understanding are top. Again, the PGCE course and subsequent teaching experience are formative in my philosophy. I worked at a very tough Special School for 5 years with young people of lower educational ability and with multiple behavioural and background issues. It has put into context everything I have subsequently tried to develop and achieve. (P17)

I believe that orienteering should be available to all regardless of background, financial situation, or local space. My mission is to give as many people as possible a positive experience of orienteering from a young age so when they are adults, they are more likely to pursue it as a sport. (P19)

Everyone matters, if they turn up, they deserve the best a coach can offer to meet their individual needs. My basic values came from my parents and the example they set for my brother, sister, and myself. Life experiences developed these further, but a major factor was a desire for lifelong learning and its sharing. Helping others was also a key factor. Hence my stepping in to take over the regional squad. (P28)

I want to give everyone the chance to develop to the level they are aiming for. This means highlighting opportunities for people who don't know about them, but also making sure that expectations are realistic. I want to have clear standards, so that everyone knows what is required to be a member of the team; I have seen the confusion and loss of interest when standards are opaque. (P29)

I believe coaching should be fun and inclusive not elitist. They have developed from my work as a teacher where you have to teach everyone not just the best. (P43)

In addition to valuing participation, inclusion, and providing equal opportunities for all, a key aspect of participants' coaching philosophies related to their holistic and athlete-centred approach to coaching. In these instances, the participants were able to describe how they value

and believe that adopting a holistic approach to coaching (e.g., developing the whole person, not just the athlete) will reap benefits in both the short and longer term.

My coaching philosophy is to value the individual as a person as well as an athlete. To work with them to form their goals and to work with them to help them to achieve these goals. They have been developed through a lifelong learning path and much has been gained by working with others in a collaborative environment. (P13)

I believe the whole person is developed through sport. This is the individual, and the person as part of a team. I believe I as a coach also have a lot to learn, too. (P21)

I come at coaching from a predominantly personal and social development standpoint. Through engaging in the 'adventure' of trying new things; the effort and practice to improve and the 'success' and achievement that brings, people of all ages derive benefits of wellbeing, resilience, and self-belief. This is particularly so when surrounded by likeminded people who support and enhance that personal development. (P31)

I believe in developing the athlete as a whole person - combining technical development with other aspects of their person such as emotional and social development. This includes things like encouraging leadership and team skills, communication, and personal organisational skills. I have been influenced by the coaching I have received myself as a junior and elite competitor, coaching I have observed others deliver, discussions with other coaches particularly on the JROS platform and BO Coaching Conference (P48)

Developing skills in outdoor activities are essential to a young person's development. It encourages confidence, independence, and endurance. These are all transferable to other aspects of life. I have seen how my own children have benefitted from outdoor sport and activity. Yet so many children are not able to share such experiences and live lives that are too sedentary. Providing opportunities for children to develop orienteering skills offers something for children who may not be attracted to regular school sports. (P71)

Indeed, the notion of being athlete-centred was reiterated by many participants. While adopting a holistic and whole-person approach to coaching was valued, it was also identified that the role of the coach is to meet individual needs. Thus, several coaches within this research discussed how they value the importance of creating a facilitating environment, where bespoke and tailored support can be provided to the athletes under their lead. Again, in some instances participants were able to outline the factors which have helped to shape the development of their coaching philosophy.

That whoever I coach feels responsible for their own success. Creating the right environment during coaching so there is self-discovery which I think is the best way to learn. That there is progress/new learning in every coaching session. Being responsive to the group. I think this has developed from my educational philosophy. (P5)

As I gained experience, I learned that no two athletes are the same. Therefore, it is necessary to tweak the way a message is communicated from one athlete to another. So, my philosophy is along those lines. When talking about planning physical training with athletes, a key message/philosophy is always to 'listen to your body'. (P18)

Helping each athlete achieve what they want i.e., athlete-led in every respect. 'It's not about me, it's about them' and 'two ears, one mouth is about the right ratio' would be two key phrases for me. Also, important that coaching is fun, not too serious, regardless of age group. Try things if they don't work try something else. (P37)

If I have a philosophy, it is that everyone is an individual, everybody learns at their own pace and what is important is that the trainee should feel a gain in value from the exercise. How this philosophy has developed is through personal experience. (P49)

My values as a coach are allowing each athlete to achieve their own goals. Understanding that each athlete is unique and one person's physical and mental needs and measures of success are not the same as another's. This developed from my own experiences of being coached as a junior in the national system where too much pressure was put on conforming to a norm e.g., xx hours of xx training a week. (P57)

While bespoke and tailored approaches to coaching were valued and believed to be important for facilitating athlete learning and development within orienteering, ultimately, many coaches simply articulated how their coaching philosophy revolves around emphasising fun and enjoyment over competition. Fun, enthusiasm, and enjoyment were heavily valued and believed to be important aspects to ensure continued motivation and lifelong participation in orienteering.

My philosophy is to enjoy orienteering and to try to pass that enthusiasm on to newcomers bamboozled by the complexities of the sport. (P3)

I like to encourage participants to learn by doing, improving from whatever their current standard is. Enjoyment and variety are important, and I like to see participants' confidence grow. The parallels between orienteering and life in general are too good to miss! (P9)

I think my main belief has always been that it should be fun for the youngsters to help encourage them to want to stay involved. (P11)

I want others to build on their own strengths and weaknesses, and my role as a coach is to help point them, and provide advice, but not to be too prescriptive. I also aim to encourage and make training fun for the participants. (P26)

I have encountered coaches (not in orienteering) that created and colluded with a bullying atmosphere. I believe all should be encouraged and helped to achieve the best they can. Winning is not the only goal and a pyramid of happy participants enjoying the sport ensures a good future for the sport. Elites are all well and good, but they would

have no events to run without the grassroots enjoying the sport and planning, controlling and so on (P55)

Fun! Otherwise, it is a waste of time. I find the social aspect is very important at lower levels and with children. Regularly gauging how your coaching is reflecting in the response of participants is important - not everyone is looking for the same thing, some participants want to go in pairs and others want their own journey. Some want to get on with some action and others prefer the theory and digesting information. (P77)

However, despite the recognised importance of a coaching philosophy and ensuring coaching practice is underpinned by an evolving set of values and beliefs, some coaches suggested that they simply did not have a coaching philosophy, or they could not explain or describe what it is.

I don't really have any philosophy or beliefs. (P16)

It was a long time ago before coaching philosophy was ever considered. (P20)

No philosophy! There is such a lot to learn in order to become a good orienteer. This knowledge is derived from personal experience. (P46)

I'm not sure I have a philosophy as such. (P54)

I do not do all this philosophy stuff. I use my orienteering and teaching experience to try to get young people involved in the sport and to give them the basic skills. (P76)

While it would appear some coaches could not articulate their coaching philosophy or did not see the relevance/importance of one, many of the participants in this research project described what they value within their coaching practice. These participants outlined what they value, why they believe those values to be important, while also identifying some of the key factors (e.g., people, incidents, upbringing) which have shaped and structured the development of their coaching philosophies. To summarise this first theme, orienteering coaches commence their coaching journeys for a wide variety of reasons, with their coaching practice and subsequent coaching philosophies being guided by previous athletic and wider life experiences.

# The holistic nature of coaching journeys

Research exploring coaching journeys has often been critiqued for presenting career/learning pathways as linear and one-dimensional, which simplifies coaches' career trajectories and experiences (e.g., Blackett et al., 2018; Christensen, 2013). Consequently, rather than viewing learning pathways and coaching journeys as a benign and straightforward process, it is important to acknowledge that coaching journeys evolve and develop over time. Indeed,

coaching should not be compartmentalised and seen as a separate entity throughout an individual's life course. Rather, it is worthwhile to understand how an individual's wider life experiences influence their coaching world, while also appreciating that the coaching role will impact and structure parts of a coach's life beyond purely sport. Therefore, this second theme addresses research question two: How do coaching journeys evolve over time and what do individuals learn *from* and *for* orienteering coaching?

#### Learning for coaching: How wider life experiences structure coaching

As alluded to above, sport coaching cannot be seen as a separate entity which is unaffected or impacted by other aspects of an individual's life. When we consider that orienteering coaching for many individuals in the UK is a voluntary and part-time occupation, it is perhaps unsurprising that the skills and knowledge developed through wider life experiences and occupations structures coaches' current coaching beliefs and practice. For example, several participants discussed how their current or previous full-time employment positions has supported the development of their coaching skills.

I was a Senior Manager in an IT firm. Coaching a Regional Squad was like managing a department - some were better than others, but it didn't stop you trying to treat them equally and getting them all to grow. (P6)

Management skills - both in terms of people management and time management - are transferrable between work and coaching. This has had a significant impact on the way I now coach. (P18)

Yes, I'm a director of a manufacturing company and I was a student at Cambridge University. I learnt to embrace all opportunities, often despite being difficult, and that it was always worthwhile. Hard work, positive attitude and joining others in the journey pays off. (P23).

I am a manager of people at work, and many of skills in coaching are transferable between the work and sporting environments (P26)

I originally trained as an architect and I've used the analytical, problem solving and creative elements in my coaching. I like to change my style and approach to suit the people I'm coaching and come up with new partly because everyone's different and partly to keep me interested. I've always been interested in science and many of the books and articles I've read have inspired ideas that have shaped my understanding of orienteering and coaching. Since having children of my own I've become more involved in grassroots orienteering with SYO and local Sheffield schools and have also learnt from helping with coaching in other sports that the kids have taken up. (P33)

I worked for many years as a Clinical Psychologist and Group Analyst. I am a mother and have been a navigating hillwalker for many years. As a result, I bring elements

from all these spheres of life to coaching, people skills, analysis, encouragement, organisational skills, preparation, and reflection. (P50)

Philosophy informed by managing personal development in a work context, recognising that everyone is on a different pathway with different aims and goals. (P60)

It is all related. Currently an IT manager running projects working with users - not so different from preparing teams to compete in elite competition. (P72)

The results indicate that through careers outside of coaching, the participants have been able to learn *for* coaching, developing management, organisational, and analytical skills which have supported their coaching journeys and practice. In addition to employment, several participants discussed how educational experiences e.g., their experiences as a student or their experiences as an educator in other settings, alongside family life, have structured to some extent their coaching journeys to date.

I'm an educational trainer and teacher so I can see how other training I run (not sport related) has impacted on my coaching. I want participants to feel success. To see 'mistakes' as essential parts of learning. (P5)

My parents also believed in equality for everyone, and this is important in my coaching. In particular helping participants who find the sport harder. Getting a talented person to achieve is not as difficult and almost self-fulfilling. (P17)

Growing up in a small rural village I have always loved being outside which developed overtime with opportunities that came my way. At school I loved map reading lessons in Geography and I was more than happy to get involved with orienteering when the opportunity arose. I know how much I get out of orienteering and how the outdoors in general helped me develop as a person and this recognition showed a way, I could help others. Watching the athletes grow gives me great pleasure and when they succeed at a high level it gives me a glow inside, as too does meeting those who may not have gone on to become elite athletes but have their own families and contribute positively to society as a whole. (P28)

As a parent, but also a coach and teacher, I have an understanding of both sides of the pressures that young talented athletes can experience particularly when there is pressure for selection. Athlete centred approach is vital. (P30)

My work as part of Youth Service provision within our Local Education Authority has played a huge part in my coaching journey. However, my wife and 2 children (now mature married men!) lived on-site with me at my Centre and were involved participating in all the activities offered. Coaching my 2 boys through their development as Orienteers to Home International level by their late teens gave me many insights and ideas which developed my coaching skills. They were also founder members of the O club. We as a family, travelled widely in the UK, Europe and further afield participating at O events and the other activities. (P31)

My family raised me as a Catholic and they always supported me and raised me to help others. My father was a keen walker, cycler, and golfer and keen on the outdoors. I was always encouraged to do well at anything I did and to set high standards bot in achievement and of behaviour. (P34)

Education - My MSc and BSc has informed me in my coaching and teaching - improving my coaching skills well beyond what can be given over a UKCC course. (P37)

My experience as a teacher in Higher Education especially teaching and assessing mature adults through work-based learning has been a strong influence. (P69)

My education background is intertwined with how I coach; I take a constructivist approach to coaching; you start form where they are and work to enable them to learn/make progress. (P83)

While some of the extracts above allude to how family can be a facilitator of learning *for* coaching, unfortunately in some instances family life has impacted upon coaching journeys in a negative way, specifically in terms of restricting time available to dedicate to the practice.

Coaching is an extremely time consuming, admin heavy, and a relatively thankless job. The commitment to coaching was very hard to sustain whilst family felt like they were losing out on quality time. (P7)

Up until I had a child, I was merrily combining coaching alongside work and other commitments. I struggled to continue with my orienteering at all, let alone coaching, with a small child and have since become heavily involved in other interests which fit better with family life. I hope to come back to the sport/coaching over the next few years as he gets old enough to take up the sport himself. (P22)

I stopped coaching when we had a family and have only started to do some coaching again now the children are older. (P25)

Since I work full time and chair the governors at a primary school, I am too time poor to want to do any more coaching than I already do... as a single parent it is very difficult to attend things like coaching conference halfway across the country. (P52)

I had to step away from coaching when I had children due to time commitment. I think having children and development at work have given me different experiences and perspectives which could improve me as a coach if/when I return to coaching in the future. Particularly different learning traits (e.g., audio/visual learner). (P73)

In addition to full-time work occupations, education, and family life, participants within this research also discussed how they have been able to develop knowledge and skills which are transferable to orienteering coaching from wider outdoor and adventure education contexts. These experiences have directly structured how these participants go about their coaching role.

Work has impacted hugely in my coaching journey; in the outdoor education centre the approach was people centred and work was seen as a joint journey. Opportunities to work with others, team teaching environments (observing what worked for them, seeing if it worked for me, learning what did not work, observing and being curious all the time). (P13)

A lifelong connection with Girlguiding has influenced my approach to coaching. This has instilled an attitude of inclusion, of recognising effort and 'doing one's best' above outright achievement and has impacted my application of safety and risk assessment measures. (P48)

Our characteristics are a product of our experiences. I have had an awful lot of experience in learning and teaching land navigation. While employed on search and rescue work in my early twenties it was obvious to me that an awful lot of grief and heartache could be avoid by the general public having an increased level of resilience through an improvement in navigation and outdoor skills. I have since spent a lot of my life trying to achieve that. (P49)

Being a scout leader gave me some useful skills. (P78)

I did work as an instructor at an outdoor education centre in the Highlands until the money to pay me ran out and consequently I was pulled back to classroom teaching. This impacted on my coaching. (P83)

Alongside these roles, and perhaps unsurprisingly, many of the participants within this research also described how their experiences of coaching other sports beyond orienteering have had a positive impact on their current coaching practice.

My study of language and linguistics led me into research on the language of successful coaches, that was fascinating and very relevant... coaching in any sport can usually lead to learning that relates to coaching orienteering. (P9)

Many of the skills I gained from teaching a variety of sports have helped me in my coaching as many of the aspects apply to all sports and not just orienteering. (P11)

Through other sports I have observed different ways of coaching and used some of these to transfer to my own orienteering coaching. (P13)

I have taught running, shooting, canoeing, mountain biking and taught how to drive and this teaches patience and provides best practice to deliver the subject. (P46)

Being active in many other sports has helped to understand how skill acquisition can make a difference to performance and how skills and fitness need both play a part. (Most of my sports blend mental skills and physical skills (e.g., climbing). However, other sports and commitments take a lot of time, so I have had limited time available to dedicate to orienteering coaching. Experience from working with young people in an FE college has shown me that the competitive element is crucial in motivating students to try harder - this might not always be the case in other activities or academic work but certainly makes a big difference in orienteering). (P63)

I'm a mountaineer and X fell-runner. I believe that serious athletes should have other interests as well as their main sport - this puts things more into perspective and can help to take the pressure of needing to be successful. If for any reason I couldn't orienteer, then at least I can make my life fulfilling with other interests. The few coaches I have had have also been an influence on my own style of coaching - more of a mentor role than prescriptive. (P70)

Coaching practice does not operate in a social vacuum. The results from this sub theme clearly outline how participants' beliefs, approaches, knowledge, and skills developed and required *for* coaching have been learned and shaped through experiences outside of the coaching role. In contrast, rather than looking at learning *for* coaching, the next sub theme highlights how participants have been able to learn *from* coaching.

## Learning from coaching: How coaching impacts wider life experiences

On average, the coaches participating in this research project have accumulated 17.8 years of orienteering specific coaching experience. Subsequently, they have been able to learn *from* coaching, developing skills, traits, and attributes which have supported their growth and development in all aspects of their life. To begin, participants were able to explicitly outline certain 'soft skills' they felt coaching had helped them to develop. Skills related to leadership, problem-solving, decision making, and reflection were described.

Most definitely precision. Decisiveness. Strategic thinking. Thinking ahead. Watching others! (P21)

Yes, there are lots of cross-over hard and soft-skills between coaching and the rest of life, such as leadership, empathy, long-term planning, communication etc. (P22)

Resilience, perseverance, patience, not to be over ambitious in what you are trying to do. To make things enjoyable and simplified to be accessible to all. (P27)

Orienteering is a way of life. It helps with being the best person you can possibly be. Keeping fit both physically and mentally. Being independent. Being a good decision maker. Decision making under pressure. Being disciplined. If you are organizing a 2-week coaching course in Norway for example for some top athletes, you need to get your act together! You need to have thought a lot about how you are going to coach them. You need to be confident in what you are doing. You need to plan and organize. The most I have gained out of coaching though is about understanding how the mind works. Understanding how people are all different and finding out what makes them tick. The higher level you coach the more Sports Psychology is important but even at lower levels it is important. (P34)

Orienteering coaching has given me increased confidence and leadership skills. (P48)

Allows you to understand others drives and subsequent actions, so don't be critical unless you have listened, and any critique should be positive to provide a way forward. (P51)

I probably have the same patterns of behaviour, thorough preparation, reflection, testing and reviewing ideas, in all areas of my life and they influence and re-enforce each other. (P69)

More specifically, interpersonal soft skills such as communication in terms of both speaking and listening were highlighted by participants as being significantly developed from their coaching experience.

More confidence speaking in front of groups. Realising that I have expertise that others value - and want to or need to know now about - even though they might not always let on that they are learning from you. (P7)

My aged mother (now deceased) used to say that I went "all coach-y" on her at times when I was trying to get her to move or try something she wasn't sure about. The questioning skills tend to get ingrained. (P9)

I transferred ways of communicating with people - not just listening but listening in an active way, trying to ensure I give people a chance to speak without interruption, valuing what they say even if I disagree with it. (P13)

I think it's made me a better listener and communicator, and possibly more patient. I think it's meant I'm good at training colleagues when they start in the job. (P74)

Thus, the participants within this research project described a range of interpersonal, organisational, and leadership 'soft skills' which they have been able to learn and develop through their orienteering coaching experiences. These, amongst other traits and attributes, have enabled these individuals to thrive and succeed in wider occupational aspects of their lives.

I am a manager at work, and I believe that I have put some of my coaching styles into my work and vice versa. (P2)

I was quite shy at school but orienteering and particularly coaching has given me the confidence to interact with people and I'm comfortable standing up in front of large audiences or chairing high powered meetings and also the ability to get to know people. I've had a variety of jobs in consultancy, product development, management, and sales all of which have benefited from coaching experiences. (P33)

I have used performance coaching in business life regularly to manage colleagues and the focus on development. Plus, the ability to take teams out to new countries and managing large teams has given me a lot of confidence. (P58)

I enjoy helping and supporting people, so I started work in a HR background. I now support a team of Building Surveyors. Supporting and bringing the best out of people is my enjoyment. (P64)

In thinking about how to orienteer I developed an approach to management that worked well. (P84)

These findings stress that orienteering coaching both structures and is structured by wider life experiences, specifically those which occur within other occupational fields. Indeed, sport coaching is a pedagogical process, similar in nature to teaching. Therefore, participants who work in other educational settings were able to articulate how they have been able to learn from their orienteering coaching experience and apply specific facets to their educational practice.

The Level 2 coaching certificate really forced me to focus in on specific skills in a much narrower way than before in a single session. I can see this has impacted on my working with teachers in other subjects. By nature, I'm more of a big picture person in my work but it was good for me to focus on more detail at specific skills. Also, I tend to be a deep thinker and slower paced in my work outside of orienteering and the coaching has made me have a bit more pace - short activities, with less talking! I've recently gone from teaching primary to secondary teaching, and I've put this into practice with some challenging low ability year groups in my teaching (not sport related) to focus on short activities with clear learning outcomes and more pace. (P5)

I have found the "teaching me how to teach" has been extremely useful in work and wider life. Understanding different learning styles and how to provide helpful feedback are extremely useful skills. (P39).

I mentor students and early career university staff. This requires empathy and constructive dialogue. (P41)

Being aware of the different ways in which people learn can be useful in other spheres of life. (P44)

Alongside staff development at work, coaching has made me reflect on how I teach and impart knowledge. People respond differently so sometimes the approach and method of communication must be adapted (P60)

Gaining knowledge of how to pass on skills - i.e., teach - which I did not have before. This has been useful in improving how I coach junior work colleagues when learning new skills. (P71)

In summary, the findings from this theme clearly demonstrate that individuals learn *for* coaching throughout their lives, while also learning *from* coaching, contributing to their holistic growth and development of soft skills. Orienteering coaching and wider life experiences (e.g., work, family, other interests) are interconnected, each influencing and structuring each other

in variable ways. Thus, coaching journeys evolve and change because of wider life experiences, in the same way, wider life experiences change and evolve because of coaching journeys.

### Coach education and development for orienteer coaches

Learning to coach has been depicted as an idiosyncratic process (e.g., Holmes et al., 2021; Stodter & Cushion, 2017), which occurs over time through an individual's life course via engagements in multiple learning situations. Specifically, formal coach education provision (e.g., certified qualifications) can be considered a sub-category of coach learning (Piggott, 2015), and forms one of the many situations, encounters, and activities, which contribute towards coach learning over time. Therefore, the focus of this theme is participants' perspectives and experiences of formal coach education provision delivered by both British Orienteering and the Scottish Orienteering Association. While providing positive perspectives and critiques, participants also identified recommendations for both NGBs to consider, while also describing the influence of critical incidents throughout their lives which have influenced their process of learning to coach. This theme addresses research question three: How do critical incidents and formal coach education provision impact upon coach learning and development within orienteering?

## The influence of critical incidents on facilitating coach learning

Throughout this research project, participants outlined several critical incidents which impacted upon their learning and development as an orienteering coach. According to Tripp (1993, p. 24), a critical incident may appear "typical at first sight but is rendered critical through further analysis". Consequently, the aim of question six within Section 4 of the survey was to encourage participants to reflect on their coaching journeys to date and identify a significant moment or event which may have seemed mundane at the time but has had a lasting impact on their learning and development. While critical incidents are personal and unique to everyone, several patterns and common themes were noticeable across the dataset. For example, several participants alluded to the importance of working with a mentor or team/squad manager, either formally or informally, to develop an area of their coaching practice and obtain new coaching ideas.

I learned a lot from the lead coach of the junior squad when I started to help with the coaching on squad weekends. The same is true of the Team Manager on my early BOF training camps, who mentored me on those trips. The knowledge and experience I

gained from those people, and the confidence they had in my, was influential in me continuing to develop as a coach. (P18)

I got into coaching because of the fantastic opportunities I was given as a junior through the SEJS. Having incredible mentors who taught me lots of coaching techniques was invaluable. (P19)

Participants suggested that having access to a mentor enabled them to affirm their existing knowledge and skills, while also proving a source of motivation and inspiration.

I benefited from the services of a mentor who was able to affirm my skills and abilities, working across the board with families, including children. My coach training had in some ways left me feeling deskilled because there was no recognition of the skills I had and for which I had qualifications. (P50)

Having \*\*\* \*\*\*\*\* as a mentor has been incredibly valuable to me in the past. She is a calming influence with huge passion for orienteering and coaching. An inspiration. (P55)

Furthermore, some participants alluded to the instrumental nature of mentorship, and discussed how having access to a mentor or team/squad manager supported them through the completion of formal coach education courses.

When I started running my linked sessions on my Level 2 coaching certificate, I realised that I was trying to cover too much in one session with a group of 'running mums'. When talking this through with my mentor I realised this was a weakness for me. My mentor recommended I pick on just one skill in orienteering I wanted to coach and focus on doing that well. (P5)

When I took on running the regional squad, I was helped a great deal by one of the other squad managers who got me on to a residential Level 1 coaching course that he was running. What made it significant was that he recognised what I had already started doing and encouraged me to keep going and asked me to present what I had been doing to coaching conference, which was intimidating, but my presentation was well received and therefore motivating for me to continue what I was doing. He also did everything to make sure I qualified as quickly as possible and become involved with the Start and Talent Squads. (P28)

Having mentor support was critical to completing my qualifications - some of the criticism of prepared sessions felt very nit-picky and without the support of my mentor I don't believe I would have completed the course. (P61)

Research within sport coaching has continually suggested that mentorship has the potential to harness the influential power of experience through guidance, observation, and reflective practice, allowing coaches to become better equipped to deal with the uncertain nature of coaching (Leeder & Sawiuk, 2021). Therefore, coaches within this research advocated the use

of mentoring programmes (or equivalent) to develop a structured way to encourage learning from others in situ.

Being able to work with the GB talent squad coaches and see their methods and variations to suit individual athletes and able to amend session to individual needs. (P2)

The most recent situation which has made a significant impact was listening in to another experienced coach talking to and questioning a young athlete - I quickly looked at and thought about my style of questioning and changed it significantly. New learning and/or changing what has become automatic or ingrained as an adult is complex and takes considerable time. If there was a system to enable this pathway to take place smoothly and easily that would be wondrous! (P70)

Thus, mentorship, in one form or another, acted as a critical incident for several participants within this research, helping them to develop and contextualise their knowledge further while facilitating the completion of formal coach education qualifications. On the topic of formal coach education courses, for some participants, simply attending a course itself, or a specific moment within a course, acted as a key 'light bulb' moment or source of reflection. For some coaches, the process of engaging with formal coach education delivered by either British Orienteering, the Scottish Orienteering Association, or other organisations was a critical incident which significantly impacted upon their learning and development.

I think that the most critical incident was during a higher-level coaching course when I was challenged to think about my coaching methodology - I feel that when I started to coach, I was formulaic in my approach, probably using this as a crutch to ensure I was in control/charge of the session. I learnt through this challenge that I could be much more flexible provided I had prepared well before the session; I started to build up my 'What ifs' and my responses to them. I started to really enjoy and gain a lot of satisfaction from working with the individuals and what they said/drawing from them through Qs about what they did, using my own toolbox of coaching skills to be flexible to the situation. I gained self confidence in what I could do. (P13)

I think the first high level coaching course I attended in Sweden was hugely influential. What they were doing was so different to what was done in the UK. The people teaching me were some of the world's top coaches but the system they used there was also completely different. That was 35 years ago, and I tried to get most of those systems implemented in the UK. (P34)

I wouldn't call it critical, but the UKCC Level 3 coaching course was memorable. (P41)

Doing various exercises and then analysing them during my first Level One coaching training course probably gave me insight into my own ability to improve my skills, even though I had years of competitor experience and thought I knew it all. (P62)

It was suggested that the delivered content within the attended formal coach education courses opened participants' eyes to new coaching methodologies and approaches, while providing insight to become more self-reflective. In addition to the course content, participants also highlighted how engaging in informal conversations with other learners often proved to be significant, inspirational, and critical moments for development as a coach.

The single most significant moment in my coaching journey was over dinner in the evening of a British Orienteering (in-person) Coaching Conference. I had previously begun the Level 2 coaching qualification but had found the workload and my perception of the expectations quite overwhelming and my progress had stalled. The encouragement and practical support given by the more experienced coaches at the table were invaluable. They helped me see that I was already doing a good job, helped me believe that I was going to get the qualification finished successfully, helped me make a practical plan though the next steps and refreshed my enthusiasm to press on with it. (P48)

Attending coaching courses and learning from other participants as well as the lead coach is always beneficial e.g., seeing other coaches doing extremely simple activities that work really well or different ways of using a small area to teach map skills (e.g., students drawing a sketch map for others to use to find a control etc.). These can inspire you to come up with your own versions. (P63)

While mentorship and formal coach education opportunities form the basis of some participants' critical incidents, most events described and analysed by the coaches within this research came from their practical coaching experiences. Therefore, coaches could recall significant moments and critical incidents which forced them to reflect, act, and make changes *in situ* to their coaching practice. Such moments, which were often spontaneous, forced coaches to react and learn through experience.

The most formative experiences were coaching on national training camps with juniors which were 1 or 2 weeks long. It was the opportunity to work with athletes over an extended period and watch them learn and grow as a result of your coaching, that was hugely rewarding (and beyond that seeing some of them in the sport now that I coached in the last 20 years and where they have ended up). (P26)

Having to step in as lead coach for regional squad and enjoying the experience. (P35)

Coaching and learning for me has always taken a practical, hands-on route. Taking a team of juniors to an international abroad is a highly stressful experience requiring planning and a cool head. I was backed up by a great Director of Performance who rewarded my efforts with suitable coaching qualifications. (P64)

Losing a child participant for a short time was worrying. I had to think very quickly to put into effect a search using an experienced adult helper while keeping all other participants safe. The challenge was not to alarm anyone though I was anxious myself.

Fortunately, we had an idea where she was, and she was quickly found. I was reassured that knowledge learned came back to me quickly when required and I now try to assess the skills of each junior and plan how to keep them safe when coaching. (P71)

Moreover, some participants highlighted how for them, critical incidents in their coaching journeys referred to moments associated with community, participation, and engagement. In the examples below, the coaches reflect upon critical incidents which they felt captured the true essence of orienteering, centred primarily around the notion of support, alongside lasting participation and engagement.

I did not coach much formally. I participated in coached team sessions. I am struck by how all are equal in O due to the freshness of the map. Also, we are all subject to injuries. For these reasons we all must support one another. I especially recall summer late evenings, after a club run, with coaching, discussing the maps. Can directly recall at least 10 such evenings. Very special memories, very peaceful. (P21)

Running club nights for families with primary school age children I needed support from volunteers. When young volunteer dropped out because she was bored, I realised that I had to more actively involve others in taking responsibility for parts of sessions rather than expecting them to see what gaps needed to be filled. There are times now when I would organise a coaching session so that the less qualified or unqualified volunteers do most of the work and I am the one to stand around waiting to spot a gap to be filled. (P69)

A young family arrived at an event. They had tried it a couple of times. One of the daughters wanted to do a course on her own but she wasn't ready. I offered to shadow her, letting the parents go round with the other young daughter. Later the family joined the club and said that it was the interest and support that I'd given that had swung the decision about whether to join us, or the neighbouring club. Interest, care, and support can be highly valued. (P80)

Coaching journeys are unique and idiosyncratic; therefore, different moments and incidents will impact upon the learning and development of coaches in variable ways. Nonetheless, across the dataset, several common themes or areas of interest were identified. Specifically, in would seem that both mentorship and formal coach education has the potential to produce 'light bulb' moments, enabling content and knowledge to be both contextualised and enacted in practice. Moreover, away from the technical and tactical skills required for effective orienteering coaching, some participants were able to reflect upon key moments which they felt capture the true spirit and essence of orienteering, most notably centred on aspects of support and community.

While elements of formal coach education were discussed within this sub theme, the following three sub themes focus more explicitly on participants perspectives and beliefs towards formal coach education courses delivered by both British Orienteering and the Scottish Orienteering Association.

## Positive perspectives towards formal coach education

The participants within this research project have attended and obtained a vast range of formal coach education qualifications designed and delivered by both British Orienteering and the Scottish Orienteering Association. The 84 participants possess the following qualifications:

- Level 5 = 3 participants (3.6%)
- Level 4 = 6 participants (7.1%)
- Level 3 = 20 participants (23.8%)
- Level 2 = 32 participants (38.1%)
- Level 1 = 17 participants (20.1%)
- Unknown = 6 participants (7.1%)

Subsequently, these participants have developed their own perspectives and opinions towards the content and courses they have engaged with. Overall, many participants spoke positively about their experiences of attending orienteering specific coach education courses and were able to articulate several aspects they believed were beneficial and meaningful to their learning and development as a coach. While coach education often fails to adequately challenge coaches' beliefs, with courses tending to be additive rather than transformative in nature (Webb & Leeder, 2021), participants within this research spoke favourably about the way in which coach education provision has opened their eyes to new approaches, ideas, and knowledge.

Has provided me with ideas for interesting activities. (P8)

I could not have learned how to coach without formal BO training. (P20)

When I started coaching, the formal education/assessment/CPD wasn't as robust as it is now (with the exception of 1st aid, which is a wonderful skill). When I decided to become a level 4 coach (as it was then) I suddenly had to expand the strings to my bow and attended a number of CPD courses. These were valuable, if only to open my eyes to aspects of coaching that I hadn't experienced at the time, including the coaching techniques utilised in other sports. I can't put my finger on an example, but I am sure I picked up and adopted tips from those. (P22)

Has provided very useful ideas for sessions that could be used for Club nights to help with newcomers learning. (P61)

The SOA Intro and Level 1 courses were a good, structured base for moving on to coaching orienteering. It was a large group, so helpful to see how other coaches operated and brought different ideas. (P77)

Very useful in adding to and organising one's own skills in order to pass on the skills and helping others develop. Improving one's knowledge of other important factors such as nutrition and exercise; safety and safeguarding issues; being able to adapt to changing circumstances. (P79)

Several participants explained how attending formal coach education courses has helped increase their confidence, practical skills, and feelings of 'preparedness' for the challenges and complexities of orienteering coaching.

It's helped me massively. I have only recently qualified as a Level 2 coach and found the trainers/assessor/mentors were fantastic. I've been orienteering myself, and teaching orienteering for so many years on and off and I was quite surprised how much more to the sport of orienteering there is! I feel so much better prepared in terms of the progression of orienteering skills. (P5)

The progression through the coaching levels gave me the confidence to take on bigger coaching challenges - for example, taking groups of juniors away to relatively remote areas and continuing to work safely. (P25)

The formal coaching qualification was very thorough and gave me a good base of knowledge. The practical aspects of the assessment ensured that I had constructive feedback on my coaching skills, and it was a very good base from which to develop as a coach. For instance, guidance on planning extension exercises for the more talented in the group to ensure their engagement in the session is retained and they gain benefit from the session. (P71)

Furthermore, it was suggested that formal coach education enabled coaches to understand the importance of reflective practice in coaching, while also providing a space to reflect upon their coaching beliefs and ideas with others.

It has made me consider other ways of achieving the same outcomes, that may reach different audiences. I also have a better appreciation of the importance of reflection after a session; this has been useful when returning to previous areas, as I have been able to improve the new session based on previous feedback. (P29)

Opportunities to reflect on current coaching activities and ideas from others for future possibilities. (P62)

However, the participants within this research highlighted how the opportunity for social interaction and informal discussions with other coaches was by far the most preferred and enjoyable aspect of attending formal coach education and additional CPD events. While course content and structure was perceived positively by coaches, having the chance to network, discuss, and contextualise knowledge with other coaches was considered highly valuable. Thus, the informality within formalised settings was desired by coaches.

The courses have been excellent and have provided a framework of learning and also provided a network of coaches to bounce ideas off since the course, mainly for myself at regional squad meetings. (P2)

Formal coach education provides me with a way to think and experience out of my usual situation, to find out how others are doing things and generally enriches my coaching portfolio. I find that I am sometimes challenged in my thoughts/philosophy which is positive as it means that I challenge if I am doing the 'same old, same old'. I have learnt from Scottish Orienteering practical coaching days where we bring along ideas and try things out (and I have also learnt how to give feedback to peers). (P13)

Much of my learning has been 'on the job'. However, coach education at events such as the Conference is always thought provoking. For example, discussing different types of exercises can improve/or alter the way I deliver a certain session. (P18)

I was encouraged by senior coaches to get involved with coach education and assessment when BO took on the UKCC qualifications. Orienteering is very different to many sports in the time needed to plan and set up and deliver coaching experiences, so it is important that new coaches are provided with good resources to help them develop their practice. The resources provided help with this, but I have found that providing actual examples of documentation that is used by different coaches particularly useful to new coaches. What has been more important to me has been the informal support that coaches can offer each other. For example, on the residential camps I encouraged lead coaches to involve all coaches and helpers to be involved in de-brief sessions for the day's activities. All were encouraged to contribute, and all contributions were to be treated as valid. What often came out in these sessions was that the younger coaches and helpers brought out new perspectives and ideas that were built on their own recent experiences of being coached. (P28)

CPD where it involves groups of coaches chatting in a structured way is often useful. (P39)

Attending coaching courses and learning from other participants as well as the lead coach is always beneficial e.g., seeing other coaches doing extremely simple activities that work really well or different ways of using a small area to teach map skills (e.g., students drawing a sketch map for others to use to find a control etc.). These can inspire you to come up with your own versions. (P63)

In addition to formal level 1 and 2 qualifications delivered through either British Orienteering or the Scottish Orienteering Association, participants spoke favourably of the annual British

Orienteering Coaching Conference. Regardless of whether the conference was delivered face-to-face or online, it was considered a valuable learning opportunity by the coaches within this research. Moreover, online learning opportunities provided by both national governing bodies during COVID were appreciated and enjoyed.

The January 2021 online British Orienteering Coaching Conference was good in that it brought out many who would not travel to attend a face-to-face conference; however, at the face-to-face conferences I have really valued the informal coffee table chats which have given me ideas to go away and work on - and people to contact to take the idea further. I can recall one British Orienteering Coaching Conference where we were challenged to work in small groups on isolating a single O skill and producing exercises to train & test that skill - I was drained by the end of the weekend but had found working as a team very powerful. (P13)

I really mainly had 3 formal days of coaching training. Around 15 years ago. They were very influential on me. They made me sure I love this sport most of all. In COVID time I did a couple zoom refreshers and again became quite solidly sure these are the nicest, wisest people. (P21)

The coaching conference (in person or Zoom) has been regular and very high quality and relevant (practical to different situations). (P42)

I did the Level 1 and Level 2 coaching qualifications through SOA, which included very valuable courses delivered by their coach educators. In addition, I have found the three most recent BO coaching conferences very useful. There are two benefits from these - the formal teaching 'from the front' and the opportunity to discuss experiences and good practice with other coaches 'around the table'. In 2020, SOA's coaches' zoom calls were useful as we were sharing our thoughts on how to continue coaching within covid regulations. BO's webinar programme has provided some useful education including coaching education, though the standard and level of practical use was variable. (P48)

The coaching conference I did attend was great - as were last year's online offerings. (P52)

Coaching conference is very useful to pick up new ideas. (P55)

The Coaching Conference I attended at Lilleshall many years ago was very valuable in terms of networking with other coaches and taking part in a wide range of exercises from fitness to technical/sprint orienteering - this is very inspirational, especially when the event is supported by elite athletes. (P63)

The coaching conference is always stimulating. (P84)

These findings indicate that most coaches found formal coach education and CPD provision delivered by British Orienteering and the Scottish Orienteering Association to be valuable learning opportunities which supported participants on their coaching journeys. Participants

outlined how they found courses to be a beneficial way to obtain new knowledge, enhanced their reflective practice skills, and generally become more confident and competent in their practical coaching delivery. While course content and curricula were considered useful, the primary finding from this sub theme relates to the perceived benefits of the informality within formal coach education settings. It is evident that coaches valued the chance to network, discuss, and collaborate with coaches, helping them to co-construct new knowledge and understanding related to orienteering coaching.

## Critiques of formal coach education

While many coaches within this research outlined their positive experiences and perceptions towards coach education delivered by British Orienteering and the Scottish Orienteering Association, several participants also critiqued current and past provision. In line with contemporary research evaluating the effectiveness of formal coach education (e.g., Cope et al., 2021; Cushion et al., 2021; Webb & Leeder, 2021), coaches were critical of British Orienteering's and the Scottish Orienteering Association's prescriptive and traditional approach to coach education, which promotes standardised 'curricula' and privileges technocratic rationality (Cushion et al., 2010).

The training course was run in an overly traditional mode, and too front loaded on formal procedures. (P7)

I felt the earlier courses back in the 90s and early 2000s were 'broader' and more 'open-ended'; assessment was light touch. Those courses left room for more personal interpretation of the content whilst still providing and encouraging signposting to more sophisticated methods and deeper understanding of modern coaching theory. I feel the present courses are highly proscriptive (even TOP1&2) and the very systemised and documented assessment process for L1 and even L2 is something of a bureaucratic nightmare for the coach educators trying to implement it. It may be reasonably appropriate for higher level coaches working with serious high-level competitors (essentially a professional level). It seems to me this model of course and assessment has been driven more by professional sports and Sports Councils seeking approval and parity across all sports; at professional level this makes sense. However, it is not effective to cascade this prescriptive modus operandi down to lower levels where coaching is often irregular; with changing participants each time; and with wide differences in levels of competence. A course which deals with that context and those audiences with light touch assessment is needed at ground level. (P31)

For formal coach education to have a meaningful impact on coach learning, delivered content needs to be bespoke and relevant to the needs the learners (e.g., Nelson et al., 2013; Paquette & Trudel, 2018), as opposed to a 'one size fits all' and singular approach to coaching

knowledge and practice (Cope et al., 2021; Cushion et al., 2021). Several participants outlined how the content delivered within British Orienteering's and the Scottish Orienteering Association's coach education provision was often generic and irrelevant to their coaching context and needs (Gurgis et al., 2020).

Minimal [impact on learning] - felt like it was going back over what I already had a very good grasp on, coaching wise. Not enough real coaching within the courses to be very useful. Overly concerned with Risk assessments - that should be a separate course, similar to child protection, and following/delivering a set type of sessions which are not much fun. Need a matrix of coaching development rather than a staid step system (3x3 or 4x4 type system - some people want to coach elites only and should be educated in that strand, while other might want to work with beginners/in schools or intermediates, need a system that meets this requirement that does not kill enthusiasm to help and become a coach, which the present system does). (P36)

Not at all [impact on learning]. The bureaucratic, jargon filled, and prescriptive methods insisted on by BOF and SOA are counterproductive. A lot of the educational and nutritional theory promulgated is discredited pseudo-science. I found better quality and more appropriate methods through the Mountain Leader Training Board and the National Navigation Award Scheme (which, incidentally, was created by orienteers). (P49)

I benefited from the services of a mentor who was able to affirm my skills and abilities, working across the board with families, including children. My coach training had in some ways left me feeling deskilled because there was no recognition of the skills I had and for which I had qualifications... I would not call myself a coach unless it had been required by my governing body SOA. I consider that I have been introduced to areas of learning which are not relevant to what I want to do - encourage newcomers into the sport. The Coach training seems to be pushing me into something which I see as irrelevant for our tiny club which is struggling to survive. We need skills to offer the basics to newcomers who will be enthused to take part and eventually offer their volunteering to the club in order to ensure the succession of the Orienteers who are retired and make up the bulk of the Orienteering population. (P50)

For some participants, the overly bureaucratic, timely, and tedious nature of current coach education provision, with an overemphasis on paperwork and 'box ticking', put them off wanting to attend any further courses or CPD (Chapman et al., 2020; Gurgis et al., 2020). Indeed, the overt focus on progressing through linear courses with instrumental assessment procedures did not appeal to coaches (Cushion et al., 2021).

The pathway into coaching seems very different now then it was, and many more hours are needed working with participants delivering sessions to get qualified. That is probably a good and a bad thing - I'm sure better coaches come out of it, but I also see a lot of good orienteers with a lot of experience who could offer a lot of coaching support but who are not interested in going through all that training. (P26)

The practical, in person, education course was extremely useful. What I hadn't realised when I signed up was the sheer amount of time and paperwork required to become qualified (UKCC Level 2). By the end of the process, I had well over 100 pages of A4 questionnaires, lesson plans, risk assessments etc. This EXCLUDES the associated requirements such as PVG, First Aid. The whole process was apparently designed as a "requirement for employment" rather than as a "help a volunteer perform better" The process was so onerous that the few people who were dedicated enough to complete were mainly either required to qualify for their employment or retired and interested in coaching. Few people in full time employment will dedicate the time required. How many start the process and fail to complete or are put off by the requirements and don't even start? Some participants on my course never completed and I can understand why. (P39)

Formal coaching, although a necessity, has not been my route in the sport. We need the flexibility to see strengths and abilities people and through supporting them we should assess them practically. There's far too much theory and paperwork in coaching these days and I see that as a real negative to getting in the sport and working with various skill levels. We should be able to have more flexibility when assessing coaches, not force them to work through the levels which take up a huge amount of time and paperwork. Insisting on associated first aid qualifications is also a constraint. Having to go away for a weekend every three years to upkeep my 1st Aid qualification drove me to semi retire from the sport and take a backwards step. (P64)

Although self-reported, some coaches within this research believed that the formal coach education courses they attended did little to change their existing beliefs, approach, or coaching practice.

Apart from the emphasis on child protection, it hasn't had all that much influence, if I'm honest. Workshops have reassured me I'm doing the right thing, rather than taught me much or helped me with ideas. (P40)

I did a Level 1 coaching award when I was at university, but I don't think it really changed the way I coach. It was more about getting the piece of paper. (P74)

I went on a coaching course. The students ranged from championship standard orienteers like myself to people who had never orienteered in their lives. I wasted 3 days of my life learning exactly nothing. More disturbingly at least two students were awarded the qualification when they were clearly and obviously totally incompetent. It put me off any further courses. (P76)

Coaches experience coach education courses in different ways, due to their existing knowledge, experience, and dispositions (Stodter & Cushion, 2017; Webb & Leeder, 2021). Consequently, it is of no surprise that while some coaches spoke positively of their orienteering coach education experiences, others were critical and suggested such provision failed to meaningfully impact upon their learning and development. Consistent with research informed critiques of coach education, issues associated with a prescriptive approach, irrelevant content, alongside

the tedious and time-consuming nature of courses were outlined by participants. In building upon these critiques, the following sub theme offers some recommendations and improvements from the participants themselves.

## Recommendations for improving formal coach education

Alongside offering a critique of current coach education delivered by both British Orienteering and the Scottish Orienteering Association, the participants within this research project were able to build upon their thoughts and offer several suggested improvements and recommendations to enhance provision further. One of the main critiques of existing formal coach education programmes centred on content being generic, irrelevant, and largely prescriptive. Therefore, P5 argued that future coach education provision should not assume all learners are orienteers themselves, and instead appreciate the backgrounds and biographies of all individuals, while perhaps reviewing current assessment procedures.

I feel the Level 2 coaching certificate is very much focused on the athlete pathway whereas I was more interested in working with teachers and beginners. It very much assumes the coach is an orienteer themselves. There was someone on my course who was not an orienteer but an excellent athletics coach. I felt the course didn't really cater for coaches who were not orienteers themselves. I think the final assessment is a big ask for someone who is not an orienteer. One of the reasons I did the Level 2 was because I wanted to be a tutor on the Teaching Orienteering Part 1. Although going through the Level 2 coaching has been really valuable for me, I'm not sure it was totally necessary as a pre-requisite for the Teaching Orienteering Part 1. (P5)

Moreover, some participants suggested that coach education beyond level 2 within British Orienteering's pathway is limited and should begin to focus on squad systems while facilitating a culture of sharing, which is sometimes absent within sporting cultures.

I don't know much about the Scottish system but the formal coach education in British Orienteering is very limited beyond level 2 (regional squad level) and a level 3 coaching award focusing on the transition to elite orienteering and topics like personal coaching. However, I think the squad systems should be the main focus for CPD with wide involvement of coaches, education workshops, and culture of idea sharing. The Talent Programme in the last 10 years or so has been particularly poor in terms of coach development with, in my opinion, a lack of understanding of elite orienteering and coaching, a prescriptive style which seeks to educate rather than empower and stifles creativity and individuality. The focus is on a small pool of athletes and squad coaches with limited involvement of personal coaches. (P33)

I felt the coaching system was fine to bring people through to coach club mates and possibly junior squads. It was not very relevant to performance coaching and there was nothing there to support. (P58)

In contrast, some participants felt that current coach education is too focused on elite and high-performance orienteering coaching. Instead, participants discussed the need for British Orienteering and the Scottish Orienteering Association to not only consider the content within their courses, but also the terminology used, suggesting that terms such as 'teaching' and 'instruction' might be more appropriate than 'coaching' depending on the target population.

The National organisations need to reorder their priorities and have a look at the bigger world of outdoor education. If the orienteering coaching world is viewed as a triangle with the international elite at the top and the untrained novice public at the bottom, then the greater part of the task is at the foundation of the triangle. Most of the attention of the national organisations appears to be directed at marginal gains for the tiny number of elites while forgetting about training the recruits. The elite are well served by the level 3 coaches we already have. Level 2 coaches have a position where they can guide experienced club orienteers who are never going to join the elite to better personal performances; there doesn't appear to be a shortage of level 2 coaches. Level 2's can help orienteers with competent navigation standards to become better runners. Level 1 is where we are overstretched and lack sensible guidance from the centre. BOF has a problem in their failure to see that it is not "coaching" that is needed here but "teaching" and "instruction". Without the base foundation knowledge of orienteering greater success cannot be coached out of an orienteering participant. (P49)

I am concerned in the way that Orienteering has taken on Coaching in a very generic way. Orienteering is not the same as other athletic sports in that there is a set of skills (navigation, BOF has described this at 5 levels of Technical Difficulty) which are required. Thus, children and adults alike have to learn these skills. Instruction or training may be a better term to describe this introductory skills acquisition. Non orienteers such as teachers can offer the very basic level of this but people who are Orienteers probably need to offer the higher levels. I am interested in working with people who are participators, unlikely to be aiming for the elite level of competition. The coach education has all be aimed at the 'athlete' which in my case puts me off. I can understand the need to consider Doping, Nutrition etc but my focus is more on helping people (who may not do any regular exercise) to do at least 1 session of exercise per fortnight. (P50)

To ensure that course content is not generic, prescriptive, and moves away from a one-size-fits-all approach (Cope et al., 2021), participants within this research recommended that British Orienteering and the Scottish Orienteering Association may wish to consider optionality and choice within their provision. Indeed, providing coaches with autonomy and choice to decide upon course content, structure, and even assessment methods can be associated with a learner-centred approach to coach education (Paquette & Trudel, 2018), and may help to overcome traditional critiques.

The breakup of the UKCC courses into units which can be done separately and the "would be coach" can pick and choose what they want to learn to become the certified orienteering coach. So, if they want to teach orienteering in a school environment, they need to do X units/modules, with Y as core Z optional from a matrix mixed list of available units/modules. If you want to work with a performance or high-performance group, you can pick a different set of units/modules which suit, but still give you equivalent qualification... Allow diversity instead of demand conformity of learning. especially stale/staid learning. We can have a core group of modules - risk assessments/Child protection etc; with units/modules on real in-depth coaching skills, S&C/Physiology/Psychology/Lifestyle courses being provided or from outside organisations being accepted. (P36)

The approach of offering independent modules with mixed media delivery would enable me to continue to update my coaching skills. (P69)

The adoption of optionality and choice ensures coach education provision is bespoke and tailored to the needs of the learner. Indeed, it is important to recognise that coaches do not arrive at formal coach education courses as a 'blank slate' (Cushion et al., 2003; Webb & Leeder, 2021), instead, they arrive with an abundance of prior learning experiences and attitudes, preferences, and beliefs towards coaching practice. Consequently, it was suggested by several participants that British Orienteering and the Scottish Orienteering Association may want to try and recognise learners' prior experiences and knowledge, to ensure delivered content is bespoke and meaningful.

Formal coach education frequently fails to recognise previous learning. E.g., teachers know how to teach, but might not know how to orienteer well, I know how to orienteer well but not how to teach. I know of a number of experienced orienteers who could make good L2 coaches for more experienced orienteers but do not want to "waste their time" doing the L1 course which is all about introducing the athletes and coaches to orienteering. (P39)

I don't know how the qualification framework works at present, but accreditation of prior learning should be available if it isn't already, and the framework kept simple to encourage completion by volunteers who have many other demands on their time. (P57)

Assessors need to be able to be flexible in deciding the appropriate coaching levels and qualifications for coaches... one should be able to be fast-tracked through the system where their skills and abilities are seen to be exceptional. (P64)

At my stage it is about maintaining enthusiasm and renewing ideas. But it would be great to see something to promote the coaching role for everyone as part of their orienteering journey. Currently the system can work against experienced orienteers committing to coaching because it can be seen as having hurdles and bureaucracy - this impacts on the workings of clubs and limits the development of everyone. (P84)

Building upon learner-centred principles related to autonomy and recognition of prior learning, suggestions were made by participants to further ensure that delivered course content is not decontextualised by arguing that learning should be situated within coaches' actual environment. Moreover, there were several recommendations made by the participants in this research related to the increased use of practical sessions, coupled with more collaborative group-based discussion activities to share ideas, and co-create knowledge between coach learners. These recommendations are supported by contemporary research into coach education and development (e.g., Chapman et al., 2020; Gurgis et al., 2020; Paquette & Trudel, 2018; Webb & Leeder, 2021).

Formal coach education helps to point me towards current thinking for athlete development. I also think that the formal exchange of ideas between coaches enriches us all; the learning environment for this needs to be supportive where all feel valued. (P13)

I delivered a lot of orienteering coaching award courses in the 1990s and 2000s. They were largely very practical in nature. And I felt I contributed to the development of coaching courses and awards at this time. It appears to me that the required involved of Sport England and qualifying bodies meant that these courses became very paperwork heavy. To the detriment of practical aspects. Coaching development would do better to concentrate on practical orienteering coaching and keep the tick boxes and check lists to a minimum. (P17)

At my age I have had a lifetime of development but generally I would say that practical experience and younger people supported by older more experienced people is required. You can't learn much on a formal course. Theory and Practice are two different things! What you really need to know is often not taught on formal courses. (P34)

Coaching is an active interpersonal skill, not an experience that can be gained in the classroom. (P37)

I don't think I need much more formal coaching, but I do need to make sure I attend the coaching conference to learn from other coaches. For example, I am confident being a technical coach, but would love to learn from others about physical, mental and nutritional aspects, particularly regarding coaching adolescent girls. (P74)

While an increase in practical and group-based discussion tasks was recommended by a selection of participants, other orienteering coaches within this research project called for increased online/hybrid learning opportunities in conjunction with more accessible resources and practical sessions where appropriate. Online coach education offers coaches a widespread, affordable, and convenient method of accessing new knowledge and ideas (Driska, 2018), which participants suggested would be beneficial beyond the COVID pandemic.

Continued yearly conference especially now on zoom will be excellent. I can't usually attend when it was in person as not enough weekends free to allow attendance, but virtual attendance is possible. (P2)

'On the job' training is often best, in my experience. However, in the current circumstances, online sessions are clearly more suitable. My personal view is that online training/meetings will be more frequent even when COVID is a lesser consideration. (P18)

Easy to access online videos and refresher ideas for coaching sessions. Maybe they exist but if so, I am not aware of them and maybe I should be made so? Not just an annual coaching conference. (P27)

If COVID has shown us one thing it's that we can do more with less - online or hybrid should be continued, especially for lecture/theory based activities with more in person sessions involving real people by linking coaches journey with real coaching opportunities being organised by clubs, regions, and national organisations - having coach education going on without the training type events being organised hand in hand is a real lost opportunity in doing real coaching, rather than artificial/manufactured scenarios with other trainee coaches. This will allow learning from failing and speed up the coach development. (P36)

Formal coach education to enhance my needs- is there anything outside the coaching conference? Probably there is - buried on the website - I work, so do not have time to dig. Hence why the crafted zoom sessions during lock down (I was still working full time) brought a topic together in a neat and concise way (at the right time of the day). (P42)

Continuing CPD is very important - online training shows us how this can be done to a limited extent. There is no substitute for in-person workshops and conferences, though. (P65)

Although realising that the process of collecting CPD could be useful I have found it all rather tedious to have to record all coaching activity. It has on occasion brought some aspect to mind and I have followed it up, but I think the latest system of webinars and workshops are more useful. You can select the aspects which are of most interest and follow them up. There is room for improvement in offering coaches more opportunities to learn and progress their style without being judged. (P70).

It would be good to have more regular chances to share knowledge, experience, and resources. The coaching conference online was worthwhile last year. Sharing resources to avoid reinventing the wheel all the time. Making sure we can find resources to share. I only seem to find things by searching the internet rather than going to BO website and finding everything there. (P71)

I think making the training accessible is key. Part online is very helpful. I find it difficult with family and work to travel and be away for a weekend. (P77)

I like the advent of remote access coaching resources, but time pressures mean I find it hard to even access them (as a parent, teacher, competitor, and coach!). (P81)

To conclude this sub theme and broader theme of coach education and development, the participants within this research project have provided strong ideas related to specific methods and approaches for enhancing orienteering coach education provision further. In general, participants recommended that changes to course content, optionality, recognition of prior learning, and online learning opportunities would ensure that future provision is not only more accessible, but also more meaningful and relevant to their coaching environment. Connections can be made to principles of learner-centred teaching, where there were also calls for in-person events to include practical and informal learning opportunities which would allow participants to share ideas and co-construct knowledge together.

## **Continuing and ending coaching journeys**

Within this fourth and final theme, the primary focus was understanding the factors impacting upon participants' decisions to either continue or end their coaching journeys within orienteering. While logistical (e.g., time) and demographic (e.g., age) factors were obvious considerations, perhaps more interestingly participants identified challenges associated with accessing opportunities and coach education, which influenced whether they felt they could pursue their coaching role. Moreover, the issue of an aging orienteering coaching workforce was highlighting by participants, who discussed the need to 'move aside' and transition into new roles away from coaching, so they could still support yet provide opportunities for younger coaches to develop their craft. This theme addresses research question four: What factors influence whether coaching journeys end or transition within orienteering?

### Reasons behind coaching journeys ending

This initial sub themes focuses on the primary reasons why the coaching journeys of some participants within this research either temporarily or permanently came to an end. Perhaps somewhat unsurprisingly, a key factor impacting upon coaches' decision to continue coaching or not was down to their available time in terms of both preparation and practical delivery.

Coaching requires too much time input in prep relative to delivery. (P7)

Lack of time. Unlikely to coach again. (P20)

I stopped because I didn't have the requisite qualifications to continue. I also didn't have the annual leave/weekends available to attend activities and local activities took place within working hours. (P57)

Indeed, the additional time constraints and pressures which come with having children and starting a family were frequently cited by participants as key factors driving their decision making. However, this was often identified as a temporary, rather than permanent reason to end their coaching roles.

The addition of a child to our family shifted our focus as a family away from orienteering to other interests. I am expecting that as he gets old enough to become a member of club, regional, national squads etc. I will be active again (P23)

Unfortunately, I was unsuccessful at getting a paid role in the British team, the new coach wanted to go in another direction. At the same time, I started a family and got a new role and built my career in a non-sport direction. Had hoped that my children would take up orienteering but as yet shown no interest and will come back when they are older, probably first with club and see where it goes from there. (P58)

Achieved the long-term dream of medals at WOC - time for family life. Plenty of organisation and special projects since then, but as a volunteer. (P70)

For many participants, orienteering coaching is a part-time and voluntary role. Consequently, in addition to having children and starting a family, changing circumstances in their professional and full-time occupations, or relocating, often resulted in less available time and energy to dedicate towards coaching.

I tend to respond to schools' requests for sessions rather than seek out work at the moment due to other pressures of work. (P28)

I did take a few years out in my 30s nominally to focus on my professional career but perhaps an element of burnout. I did keep some personal coaching going. (P33)

Stopped because I moved away from where I was a coach and had much less opportunity to take it back up. (P45)

I stopped due to a combination of changing demographics within my orienteering club (juniors moving on) and additional time pressures in my own life due to a more challenging job. I am not currently motivated to return to coaching, but if I did it would be to help novice adults to improve basic skills. (P60)

Having children and more responsibility at work. (P73)

As identified within the participant analysis section of the methodology, in comparison to other sports and research projects (e.g., Christian et al., 2022; UK Coaching, 2019), the average age of the coaches within this research (59.1 years old) and the sport of orienteering more broadly is significantly higher. Therefore, for some participants their ever-increasing age, coupled with

developing health issues and reducing physical fitness, resulted in a somewhat 'natural' end to their coaching journeys within orienteering.

Both my wife and I have taken the decision to discontinue our coaching involvement at all levels and just to continue as orienteers as we are not getting any younger. (P11)

At my age I intend to exit from coaching perhaps simply lending a voluntary hand from time to time! (P31)

Just getting old and having health problems like cancer... I may even do some coaching again if helped by a younger fitter person, but I don't have a car at the moment which makes coaching nearly impossible. (P34)

I may stop in a few years, but this will be down to age, however at present I will continue the coaching process. (P46)

My mother moved to care home which required more of my time. Given my age and reduced fitness, due to cancer treatment and COVID limiting exercise and orienteering opportunities I do not see myself returning to coaching. (P47)

Mainly getting less physically fit. But will continue assisting other coaches and trying out new coaching formats for beginners' post COVID. (P62)

The pandemic made things just too hard, and I am currently physically limited by hip degeneration. (P69)

In addition to the age and health problems potentially associated within an aging coaching workforce, participants also identified challenges associated with internal club politics, structure, and support which have impacted upon their decision to end their coaching journey.

I was feeling burned out and had stepped back from coaching with a squad. However, another orienteer made me feel emotionally blackmailed by referring to the governing body contributing to the cost of my qualifications and trying to use this to make me feel obliged to assist with coaching locally. I felt this was completely unacceptable due to the time commitment/holidays/time away from family that I had voluntarily invested in the coaching I had been involved in, so decided to stop coaching completely to avoid being placed in a similar situation again. At this time, I do not see myself returning to coaching - too stressful. (P61)

My coaching activities were reducing before the pandemic because we struggled to maintain a coherent coaching plan within the club, largely because of a lack of younger volunteers. (P69)

Lack of support from other coaches in my club. Probably due to personality differences. I was mostly interested in opportunities for all members of the club to increase participation. I often felt that my suggestions were not welcome and therefore my enthusiasm was quashed, and I did not pursue coaching, instead moved on with other aspects of the sport. (P75)

On the topic of formal coach education, rather than being seen as an opportunity to continue to develop as a coach, for some participants the perceived red tape and constraints associated with obtaining and maintaining British Orienteering/Scottish Orienteering Association qualifications were considered a barrier to pursuing coaching journeys further. The administrative requirements (e.g., time and cost) and perceived lack of support from these NGBs were identified as significant factors.

Another reason [for stopping coaching] was the withdrawal of support by British Orienteering for First Aid training which meant it was much more difficult to get the required three yearly training. (P37)

I am an active coach, but know of a number of lapsed coaches, and from their perspective I can completely understand their decision. The amount of time and effort to maintain a qualification is significant. E.g., a level 3 coach needs to do 2-day First Aid course every 3 years which is difficult to arrange and expensive. They will also need a PVG renewal. Alternatively, they could let their coaching qualification lapse, but still put on club training (not coaching!) events and set exercises and give out advice to participants. The administrative requirements for a training event are significantly less, and the "not a coach" does all the fun and useful coaching. Why should such a person qualify as a coach or remain formally qualified? Every unnecessary requirement adds to the barriers to training and maintaining coaches. (P39)

Decreasing participation really came to a total halt with the pandemic. Prior to that I'd been reluctant to attend yet another First Aid workshop (so boring!) and that made it difficult for me to be helpful. A return to coaching seems unlikely, but you never know. (P40)

Research has often critiqued NGBs and their delivery of formal coach education programmes for their bureaucratic and 'audit driven' culture (Chapman et al., 2020; Piggott, 2012), resulting in the completion of courses being perceived as a box ticking exercise and requirement for coaches (Nash et al., 2017), rather than a genuine learning opportunity. These sentiments were alluded to in some degree by the participants.

It is getting very bureaucratic, especially having to complete certain courses every 3 years. (P8)

It is difficult to put into words, but I find the coaching movement has difficulty in recognising the uniqueness of each sport. This results in a homogenising of sports until the coaching education becomes irrelevant and seems to ignore the requirement for basic skills training. There is also an assumption that clubs have a number of coaches who can support each other but very small clubs do not have this opportunity. (P50)

I still do some coaching but not the huge amount I used to, I became disillusioned when BO as an NGB became a Sport England delivery mechanism rather than a body that represented its members and the sport. (P59)

Bureaucracy kills coaching. Less paperwork, formalisation, and more flexibility and support for those keen to give back to the sport is needed. Get away from ticking boxes. (P64)

Not sure. The paper chase involved is a big factor plus the fact that my wife is not interested in the sport. (P83)

In summary, the coaching journeys of the participants within this research project came to closure due to a variety of reasons. Predominantly, a lack of time often associated with family and other work commitments played a significant role in coaches' decision making. However, the findings within this section further highlight that an aging coaching workforce is evident within orienteering, with participants suggesting that their retirement from coaching was due to their age and health complications. Beyond those factors, coaches also begun alluding to challenges with internal club politics, alongside the time and administrative constraints related to obtaining and maintaining coaching qualifications. These elements either on their own or combined resulted in coaches deciding not to pursue their coaching journeys any further.

# Opportunities: A door open or closed for coaching journeys?

While the concept of 'opportunities' can be considered broad and vague, the participants within this research project often referred to the availability or not of opportunities as an aspect to consider when deciding upon whether to continue coaching or not. As such, the availability of opportunities (in whatever context that may be) either opened or closed the door for participants' coaching journeys. For example, some participants outlined how the limited paid coaching opportunities available is a possible reason to dedicate their time elsewhere.

If qualified orienteering coaches' time was charged at a rate similar to other sports (not just delivered free) then the role might be (and feel) more appreciated. (P7)

I retired from full time work in 2015 and subsequently did some work for British Orienteering on their recognised centres scheme and moderating the delivery of orienteering and coaching courses at Outdoor Centres. Money and resources ran out to continue doing this. I feel I still have skills to continue to do this; I have a deep knowledge of outdoor education and am still competing at a high standard in my age group. The opportunities aren't there. (P17)

Moreover, some coaches suggested that British Orienteering could potentially do more to remove the financial costs associated with obtaining coaching qualifications, making them more accessible and providing more opportunities to pursue coaching in the future (Gurgis et al., 2020; Nelson et al., 2013).

The role of a governing body re coaching is to provide as much practical support and encouragement to potential, existing and experienced coaches. This is very difficult if not impossible without enough staff and money. In the 1990s when I developed as a coach, this was available. But not so now, as I understand it. (P18)

I would recommend that BO try and remove some of the coast to an athlete becoming a coach. I was well support through the Army; however, I have had many young would be coaches who just could not afford the fees even with the regional support. You only get out what you put in. (P46)

In addition to reducing the cost of courses and providing support to existing orienteer coaches, a selection of participants believed that British Orienteering could do more to recruit and encourage a new generation of orienteering coaches. Perhaps in recognition of the existing aging coaching workforce within orienteering, it was suggested there is a need to generate interest amongst the UK public to ensure further orienteering opportunities (in coaching and beyond) are available in the future.

Demand for orienteering as an activity has reduced considerably in recent years. Other activities compete for newcomers' time and geocaching has possibly taken away new recruits. (P8)

In the short term I foresee that our task will become more difficult as BOF and SOA fail to advertise the attractions of orienteering to the general public and recruitment dwindles while they undermine our efforts by offering "Intro O" and TOPS type courses to people with no interest or experience in orienteering... the current Level 1 coaching training scheme is so bureaucratic, impractical and isolationist as to deter applicants while neither BOF nor SOA are making any effort to create new interest among the general public. (P49)

Would like to see better pathways into performance coaching and more support to encourage new/younger coaches to come through. Like we do with athletes, please do not neglect them. (P59)

As opposed to outlining the factors preventing their own or other coaches' opportunities to continue orienteering coaching, some participants explained how their passion and enthusiasm for providing orienteering opportunities for specific populations of athletes (e.g., newcomers, teachers, women) was a key factor which motivated them to continue their coaching journey.

I really want to support our club coach in running sessions at events for our club for beginners and less experienced... I really want to coach teachers in orienteering, so they develop confidence to do orienteering in their schools in a more progressive way.

To run coaching sessions for female runners who are not as confident at navigation and develop them so they can compete in competitions. To encourage more families to orienteer at our club events. There is nothing I like more than seeing a wood full of families at one of our local orienteering events! (P5)

I don't think I have much in the way of ambition. I enjoy seeing the athletes I coach develop and meet their potential, and I love watching them grow up and become adults with their own lives, knowing that I helped influence who they are. (P22)

I would like to be part of developing a culture where participants at local and regional orienteering events can use those events to improve their skills. I hope to continue to support coaching, but I would rather be able to step back, and support not lead. I have always had an interest in offering orienteering coaching to people who will benefit (socially, physically, emotionally, or mentally) from joining in orienteering activities even though they will probably not take the sport up and join a club. (P69)

Thus, the availability (or not) of specific opportunities within orienteering coaching play a significant role in facilitating or hindering coaching journeys. While some participants suggested that funding, coach education, and a reducing demand for orienteering all had a negative impact on their coaching journeys, others indicated that their motivation and perseverance in providing opportunities for all was a catalyst for them to maintain their coaching status.

### Transitioning roles and passing the baton

As opposed to perceiving their coaching journey to have ended, several participants within this research acknowledged how they were in a process of transition from coaching to other club related roles, most notably acting as a coach developer or mentor. Indeed, participants outlined how supporting the learning and development of younger orienteering coaches in some capacity was an ambition they had.

I could possibly support other coaches in session delivery. If admin, such as OHS, was to become significantly simpler and less time consuming then there is a slim chance that I'll do more than that. (P7)

Minimal direct coaching activity but continued involvement as a Coach Assessor. (P10)

My journey as a coach is to work with as many coaches as possible, partly to give my experience but also to continue to learn from them. My motivation is TEAM (Together Everyone Achieves More) and the fact that I really enjoy seeing athletes improve, especially adults who come into the sport. (P13)

Ideally, I'd like to quit my job and spend more time coaching at all levels, documenting and sharing some of the coaching ideas and developing resources for elite coaching. (P33)

I could use my knowledge and experience to mentor younger coaches but that is never requested. (P34)

Influencing instructors that introduce orienteering to raw beginners and creating maps and reassurance to teachers and schools that want to develop orienteering in school grounds. (P38)

Short term, I intend to continue as lead coach with my regional junior squad, and the main aims are to help develop more coaches to enable a more sustainable future for the squad in the event of myself or another regular coach leaving/stopping. (P48)

Alongside functioning as an informal coach developer within their local club environments, participants also outlined how they were interested in transitioning into broader roles related to talent development, map planning, and co-ordinating coaches.

These days I act more as a facilitator, making the occasional map, planning MapRun courses, running the club website and its computing, and sitting on club, regional, and national committees. (P15)

I am interested in doing some more work with elite level athletes, to understand better which athletes have realistic chances of developing further (talent spotting). I am also interested in coach education for support-coaches, training up helpers to be better without necessarily taking a full coaching course. (P29)

At the moment I am my club's 'Lead Coach' - my coach journey is developing into a club coach coordinator - setting up sessions for athletes, beginners, elite etc - organising coach education courses, finding mentor/coaches for ambitious athletes, and trying to develop systems for everyone at every stage of their coaching journeys. (P70)

As stated already within this research, the aging orienteering coaching workforce was a recognised factor amongst participants. However, several older-adult coaches suggested they had a duty to the sport to 'pass the baton' on and provide coaching opportunities for younger coaches within their clubs, for them to progress and hone their craft.

At my age I can continue to provide advice to others whilst not being prepared to add more commitments. (P6)

I will continue coaching at club level for the next 5 years or so, I find myself well motivated by the improvement and enjoyment that I see in the people I coach. But for the good of the sport, I think we ancient coaches should fade into the background and let younger folk take over! (P9)

I'm not in a position to do any more advanced coaching, nor do I wish to, that is for a younger generation. (P15)

Less coaching and maybe stopping altogether soon. Want to hand on to younger people. (P27)

Continue to coach at regional level for another 3-5 years, but as I age, I will focus more on the local club level (regional level needs to inspire young adults so not be taught by oldie who is mediocre. I do not consider excellent coaches as being defined by their age - they keep going). (P42)

To train other coaches and to take a step back in the next 6 years. (P51)

I am considering stopping to allow younger coaches to 'take over'. Having said that I probably would continue because I believe I still have something to give. (P70)

Within this final short and concise sub theme, the findings indicate that for some participants, their coaching journeys do not merely end, but rather transition or evolve towards developing coaches rather than athletes. Due to their passion for the sport, the participants highlighted a willingness to stay involved and support their local orienteering clubs, through adopting new roles instead of or in conjunction with their coaching responsibilities. However, there was an appreciation that individuals cannot coach forever, therefore, providing opportunities for younger and less experienced coaches to develop their skills by 'stepping aside' was considered a progressive and positive step forwards for orienteering.

### **CONCLUSION**

The aim of this research was to understand the coaching journeys of British Orienteering/Scottish Orienteering Association coaches and the relationship between their biography, learning, and practice. To address this broad research aim, four research were developed:

- 1. How do the biographies of orienteering coaches shape and structure their coaching philosophies and practice?
- 2. How do coaching journeys evolve over time and what do individuals learn *from* and *for* orienteering coaching?
- 3. How do critical incidents and formal coach education provision impact upon coach learning and development within orienteering?
- 4. What factors influence whether coaching journeys end or transition within orienteering?

These research questions, and subsequently the broad research aim, have been answered through the development of four primary themes when analysing the data: (1) Journeys into coaching; (2) The holistic nature of coaching journeys; (3) Coach education and development for orienteer coaches; and (4) Continuing and ending coaching journeys. For each of these themes, a summary paragraph is provided below to highlight the key findings. Following this conclusion, 10 practical implications and recommendations for British Orienteering and the Scottish Orienteering Association are provided in the next section.

## Journeys into coaching: Summary

The coaches within this research project became orienteering coaches for a variety of reasons. Predominantly, the athlete-to-coach transition was seen as a natural progression for some participants, while others had a more passive entry into coaching through being invited and encouraged to adopt such as role. Participants also highlighted how incidental events and being in the right place, right time resulted in their coaching journeys commencing, alongside demonstrating a desire to 'give back' to the sport. Individuals who were already involved in teaching and outdoor education also described how orienteering coaching seemed a somewhat natural and easy role to begin.

The findings also demonstrated how coaches do not commence their coaching journeys as a blank slate, rather, their previous athletic experiences significantly influence their perceptions towards good and bad coaching, in addition to their mannerisms and behaviours. Previous experiences competing as an orienteer proved vital for enabling coaches to demonstrate complex technical skills, while allowing them to relate and emphasise with their athletes, having 'been there' already. Furthermore, participants discussed how previous athletic experiences away from orienteering have structured the development of specific attitudes and beliefs towards coaching, while teaching and coaching roles across other sports and domains have also proved useful.

To conclude the first theme, the notion of having a coaching philosophy was discussed, with many participants being able to articulate the values and beliefs which inform their coaching practice, while identifying the factors which have shaped the development of their coaching philosophy. Values such as inclusion and participation for all, adopting a holistic approach, meeting individual needs, and fun were cited as key aspects underpinning the participants' coaching philosophies. Nonetheless, several coaches did not see the need for a coaching philosophy, in addition to simply stating that they do not have one.

## The holistic nature of coaching journeys: Summary

Orienteering coaching cannot be 'boxed' off and considered a compartmentalised part of an individual's life. Consequently, the participants within this research explained how they have been able to learn *for* coaching through experiences and events throughout their life course. For example, the coaches described how their previous experiences in full-time occupations outside of coaching have helped to shape their practices and beliefs. Moreover, wider life experiences such as additional roles in coaching, outdoor education, and family life (both as a child and adult) proved both a facilitator and hindrance to learning *for* coaching.

Indeed, while wider life experiences impacted upon coaching journeys, the findings within this research outline how coaching journeys also influence wider life experiences, demonstrating how coaches can learn *from* coaching. Several interpersonal (e.g., communication) and broader soft (e.g., leadership, organisation, decision making) skills were transferable between participants' full-time occupations and their part-time coaching roles. Furthermore, individuals were able to apply their learning *from* coaching into other aspects of their lives, especially if they were working within other educational contexts.

# Coach education and development for orienteer coaches: Summary

Participants within this research highlighted several critical incidents which they felt have significantly influenced their learning and coaching journeys. Primarily, coaches alluded to having access to a mentor, either formally or informally, as a critical incident informing their development. Moreover, participants highlighted how discussions with peers and other coaches within formal coach education qualifications and other CPD courses proved insightful, alongside reflecting on specific events which had happened during their practical orienteering coaching.

Coaches were also able to positively describe their experiences of engaging with formal coach education delivered by both British Orienteering and the Scottish Orienteering Association. It was suggested that course content increased coaches' knowledge, confidence, while also enhancing reflective practice skills. Furthermore, the informality within formal learning situations e.g., networking and discussions with other coaches was highly valued, while coaches also spoke favourably of the online learning opportunities provided during lockdown.

However, in addition to these positives, coaches also provided a critique of the provision they had attended. Coaches were critical of British Orienteering's and the Scottish Orienteering Association's prescriptive and traditional approach to coach education, where course content was generic and irrelevant to the needs of coaches. As a result, participants suggested that course content did little to enhance their learning and development as orienteering coaches. In building upon these critiques, participants provided several recommendations to enhance current provision further. Recommendations centred around changes to terminology, content, providing optionality, recognising prior learning, introducing more informality and practical sessions, while also providing more online learning opportunities and resources.

## Continuing and ending coaching journeys

Within the final theme, participants outlined their primary reasons for their coaching journeys ending, or instead transitioning and evolving to different roles. Time and family were often key factors behind the need to end coaching roles, while participants' age and health, in conjunction within internal club challenges were also cited as primary reasons to stop. Challenges

associated with maintaining and obtaining coaching qualifications were also outlined as negative aspects impacting upon coaching journeys.

Moreover, the availability or not of opportunities (in some capacity) influenced whether coaches decided to stay in their roles. For example, the lack of paid coaching roles, cost of courses, and limited promotion of the sport were argued to 'close doors' on coaching journeys. In contrast, some participants spoke positively about wanting to continue coaching due to having a desire to provide opportunities for others to enjoy and benefit from orienteering.

To conclude the final theme, several participants spoke of the need to 'pass the baton' on to younger coaches. Due to the aging workforce of orienteering coaches, participants suggested that rather than ending their coaching journeys, they saw their roles as evolving and transitioning. Thus, if they were not practically coaching, participants had a desire to transition into coach developer and mentor positions, or other voluntary roles within their local club contexts, so they could support the next generation of orienteering coaches.

### RECOMMENDATIONS

Based on the findings of this research project, several recommendations can be made to both British Orienteering and the Scottish Orienteering Association. It is hoped these recommendations will act as a catalyst for reflection on current practice, while also providing some practical implications and suggested changes to enhance and improve current provision. After each recommendation, the theme/s where the associated data can be found is highlighted in the title (if applicable). It is also worth noting that the following recommendations are not listed in order of priority.

# 1. Aging orienteering coaching workforce (Continuing and ending coaching journeys)

- when looking at the participant analysis section, in addition to the perspectives of the participants themselves, the aging coaching workforce is a current concern for many UK orienteering practitioners. Indeed, the average age of the participants within this research was high (59.1 years old) when compared to other sports in the UK and is a key factor behind coaching journeys ending or transitioning (e.g., coaches moving to coach developer/mentor roles). Moreover, 35.7% of participants were over the age of 65, which is significantly higher than the 10% figure within UK Coaching's (2019) survey. Building upon this, only 13.1% of the orienteer coaches participating in this research project were under the age of 44, which is considerably low when compared to the 74% of Christian et al. (2022) and 61% of UK Coaching's (2019) survey and might suggest a lack of younger coaches coming through the system. Consequently, both British Orienteering and the Scottish Orienteering Association may wish to consider how they can identify, recruit, and developer younger orienteering coaches to ensure there is a constant flow of coaches to maintain, succeed, and grow local clubs. Information needs to be disseminated to target groups or demographics. Examples might include targeting students on sports-based university degree programmes, targeting primary/secondary school PE teachers, targeting talented/upcoming orienteers, and targeting parents of young orienteers.
- 2. *Diversity within the orienteering coaching workforce* it is acknowledged that the 84 participants who took part within this research project cannot be seen to accurately represent the whole orienteering coaching workforce in the UK. However, the participants and their views can be used as a guide to reflect on and consider future initiatives. Within this research, 40.5% of the participants were female, which is aligned

with the general UK coaching population which is stated to be 43% (UK Coaching, 2019). However, problematically, only 1.2% of the coaches participating in this research project (1/84) suggested they came from an ethnic background other than White (e.g., English, Welsh, Scottish, Northern Irish, British, Irish, or Other). This figure is significantly low when compared to the 24% reported within the UK Coaching (2019) survey. Thus, while British Orienteering and the Scottish Orienteering Association may wish to consider how to identify, recruit, and develop younger orienteering coaches, they also might want to explore devising programmes and initiatives to increase the number of qualified and active Black, Asian, and minority ethnic (BAME) coaches within the sport.

- 3. Accessibility of formal coach education provision (Coach education and development for orienteer coaches; Continuing and ending coaching journeys) - while appreciating the logistical aspects involved in designing and delivering formal coach education provision, participants within this research project had some perspectives on how courses could be made more accessible. For example, the price of courses was considered a barrier for obtaining certification, with several coaches recommended that bursaries or subsidies could be made available to support continued coach development, perhaps with a set criterion to obtain funding. Furthermore, participants spoke highly of the benefits associated with online coach learning opportunities, which were considered especially useful during phases of COVID lockdowns in the UK. While acknowledging that face-to-face interaction within formal coach education cannot be beaten, it was argued that British Orienteering and the Scottish Orienteering Association could continue to provide a range of online learning opportunities and resources. These were considered beneficial due to their increased accessibility and learner autonomy, while helping to overcome financial, geographical, and time constraints.
- 4. Facilitating informality within formal coach education (Coach education and development for orienteer coaches) when discussing their positive perceptions and experiences of formal coach education, many participants alluded to the benefits of collaborating, networking, and sharing ideas with fellow learners. This apparent informality, within a formal learning situation, was desired by participants, who suggested such discussions often proved meaningful for their personal development.

While 'taught' content and curriculum has its role and importance within qualifications, British Orienteering and the Scottish Orienteering Association should reflect upon the design and structure of current provision and identify spaces where more 'informality' could be included. Such informality may take the shape of practical coaching opportunities, group-based tasks, problem-based learning scenarios, role playing, questions and answers, collaborative small-group projects, and peer observations and feedback, to name just a few.

- 5. Developing formalised mentoring support (Coach education and development for orienteer coaches) – when reflecting upon critical incidents or events which have significantly influenced their coaching journeys, several participants highlighted the importance of having access to mentors, both formally and informally. This aspect, coupled with the fact participants stressed their desire for more bespoke, contextualised, and practical learning opportunities suggests that orienteering coaches in the UK would benefit from a structured and formalised mentoring programme in some capacity. Depending upon a coaches' needs, desires, and wants, they could be paired with a British Orienteering or Scottish Orienteering Association recognised mentor within their geographical region. These mentors would be able to provide X amount of support to coaches over a set period. Furthermore, mentors may also help to bridge the gap between formal coach education qualifications, enabling post and pre course support to enable a smoother transition and progression between qualifications. The exact structure, logistics, and aims of the mentoring programme would require detailed planning, however, the benefits are evident, and it is something that orienteering coaches themselves have recommended.
- 6. Optionality and choice regarding course content (Coach education and development for orienteer coaches) coaches within this research project were critical of the bureaucratic nature of formal coach education, arguing that very often course content was devoid from the realities of practice and did little to change or develop their ideas and beliefs towards coaching. Consequently, some participants recommended that an element of optionality and a modular approach towards coach education could be included in some capacity. From this perspective, formal coach education would include several 'core' modules, which all learners would need to enrol in to obtain that specific qualification. However, on top of the core modules, learners would be able to

select X number of optional modules, allowing them to tailor their learning experience to meet their individual needs and interests. While appreciating such an approach would involve a significant revamp of the existing formal coach education provision, initially British Orienteering and the Scottish Orienteering Association may wish to trial and explore how this could be designed and developed in an online format or within additional CPD opportunities, before expanding into face-to-face formal qualifications.

- 7. Recognition of prior learning and wider life experiences (Journeys into coaching; Coach education and development for orienteer coaches; The holistic nature of coaching journeys) as stressed throughout this research project, orienteering coaches have idiosyncratic coaching journeys and learning pathways. Their coaching practice is influenced by a range of wider life experiences, with the findings demonstrating how orienteer coaches can both learn from and for coaching. Subsequently, several participants recommended that prior learning and wider life experiences should be recognised in some way either before or during formal coach education provision delivered by British Orienteering and the Scottish Orienteering Association. Indeed, it is suggested that tutors and coach developers delivering formal coach education recognise that no learner arrives as a blank slate, and instead comes with a wide range of embodied beliefs, attitudes, and perspectives towards orienteering coaching. The role of coach education, therefore, should be to encourage learners to critically reflect upon these pre-dispositions towards coaching, to enable meaningful learning and development to occur in the future.
- 8. *Embedding coaching philosophies within formal coach education (Journeys into coaching)* current coach education provision across most sports fails to adequately dedicate time to critically deconstructing coaches' philosophies, while understanding the factors which have shaped their development. Indeed, as evident within the findings of this research, some coaches do not understand what a coaching philosophy is or entails, nor do they see the relevance of it for their coaching practice. This is surprising, as a coaches' practice is underpinned by their implicit values and beliefs e.g., what they think is important within coaching, and why they believe those values to be important. Therefore, it is recommended that British Orienteering and the Scottish Orienteering Association reflect upon their current formal coach education pathway and review the content of each course, to understand at present how much time is spent reflecting on

and developing a coaching philosophy. If little to no content exists on this area, future provision may wish to be modified or indeed further CPD opportunities could be designed to allow coaches to understand, explore, and critically analyse issues related to values, beliefs, and ethics in orienteering coaching.

- 9. Supporting the athlete-to-coach transition (Journeys into coaching) while the findings from this research project indicate that coaching journeys commence for a variety of reasons, it was evident that many orienteers transition into a coaching role alongside or after their athletic careers. Indeed, while previous athletic experiences within orienteering may help coaches at the start of their journey, it is not always a prerequisite for success, as coaching is a complex and nuanced process. Therefore, prior to embarking in a coaching role either in conjunction or instead of competing as an athlete, relevant support mechanisms need to be put in place to enable new coaches to deal with the complexity of the role. In building upon recommendation 5, British Orienteering and the Scottish Orienteering Association could develop a formalised mentoring scheme to provide contextualised, bespoke, and tailored support to enhance the learning of new coaches who may be coming to the end of their athletic career. Alternatively, workshops, resources, shadowing/observation opportunities, and informational drop-ins (either online or face-to-face) could be designed and provided to help current orienteers who are interested in becoming a coach appreciate what effective coaching entails. These learning opportunities may also encourage interested coaches to reflect upon how their athletic experiences have influenced and shaped their perceptions towards coaching practice. Such an awareness may lead to positive and meaningful changes in the future.
- 10. Supporting the coach-to-mentor transition (Continuing and ending coaching journeys) rather than ending their coaching journeys, participants within this research outlined how their journeys evolved or transitioned from being a coach to a coach developer or mentor, either informally or formally, within their local club settings. Such a transition is vital, as these coaches will be able to harness the power of their experience to support the learning and development of younger coaches. Nonetheless, there is an assumption here that if you are an experienced coach, you will naturally be able to mentor and provide meaningful coach developer support to others without any formal training or support. Thus, while formal coach education and CPD opportunities

are vital for coaches, British Orienteering and the Scottish Orienteering Association need to consider what training and support they can provide to individuals undertaking a mentoring or coach developer role. Indeed, resources and support will be available for employed tutors who deliver formal coach education courses e.g., level 1's and 2's. Therefore, such provision could also involve those informal coach developers and mentors who continue to stay involved in the support to facilitate the progression of younger coaches.

#### REFERENCES

- Baxter, P., & Jack, S. (2008). Qualitative case study methodology: Study design and implementation for novice researchers. *The Qualitative Report*, 13(4), 544–559.
- Bergström, M., Jong, M., & Sæther, S. A. (2021). Orienteering from cradle to grave How a sport could offer lifelong participation. *Social Sciences*, *10*(146). DOI: 10.3390/socsci10050146
- Blackett, A. D., Evans, A. B., & Piggott, D. (2018). "Active" and "passive" coach pathways: Elite athletes' entry routes into high-performance coaching roles. *International Sport Coaching Journal*, *5*(3), 213–226.
- Braun, V., & Clarke, V. (2021). One size fits all? What counts as quality practice in (reflexive) thematic analysis? *Qualitative Research in Psychology*, 18(3), 328–352. DOI: 10.1080/14780887.2020.1769238
- 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.
- Braun, V., Clarke, V., Boulton, E., Davey, L., & McEvoy, C. (2021). The online survey as a *qualitative* research tool. *International Journal of Social Research Methodology*, 24(6), 641–654. DOI: 10.1080/13645579.2020.1805550
- British Orienteering. (2022). *What is orienteering?* Available at: <a href="https://www.britishorienteering.org.uk/newcomers\_guide">https://www.britishorienteering.org.uk/newcomers\_guide</a>, accessed March 23<sup>rd</sup>, 2022.
- Chapman, R., Richardson, D., Cope, E., & Cronin, C. (2020). Learning from the past; A Freirean analysis of FA coach education since 1967. *Sport, Education and Society*, 25(6), 681–697. DOI: 10.1080/13573322.2019.1654989
- Christensen, M.K. (2013). Outlining a typology of sports coaching careers: Paradigmatic trajectories and ideal career types among high-performance sports coaches. *Sports Coaching Review*, 2(2), 98–113. DOI: 10.1080/21640629.2014.898826
- Christian, E., Kelly, J. S., Piggott, L. V., & Hoare, J. (2022). A demographic analysis of UK adventure sports coaches. *Journal of Adventure Education and Outdoor Learning*, 22(1), 24–37. DOI: 10.1080/14729679.2020.1854099
- Chroni, S., & Dieffenbach, K. (2021). Facilitating and supporting the elite athlete-to-coach transition: lessons learned from Norwegian coaches and federations. *Journal of Sport Psychology in Action*. DOI: 10.1080/21520704.2020.1861145
- Cope, E., Cushion, C. J., Harvey, S., & Partington, M. (2021). Investigating the impact of a Freirean informed coach education programme. *Physical Education and Sport Pedagogy*, 26(1), 65–78. DOI: 10.1080/17408989.2020.1800619
- Creswell, J. W. (2013). Qualitative inquiry and research design (3rd Ed.). London: Sage

- Cushion, C. J., Armour, K. M., & Jones, R. L. (2003). Coach education and continuing professional development: Experience and learning to coach. *Quest*, *55*(3), 215–230. DOI: 10.1080/00336297.2003.10491800
- Cushion, C., Nelson, L., Armour, K., Lyle, J., Jones, R., Sandford, R., & O'Callaghan, C. (2010). *Coach learning and development: A review of literature*. Leeds: Sports Coach UK.
- Cushion, C., & Partington, M. (2016). A critical analysis of the conceptualisation of 'coaching philosophy'. *Sport, Education and Society*, 21(6), 851–867. DOI: 10.1080/13573322.2014.958817
- Cushion, C. J., Stodter, A., & Clarke, N. J. (2021). 'It's an experiential thing': The discursive construction of learning in high-performance coach education. *Sport*, *Education and Society*. DOI: 10.1080/13573322.2021.1924143
- Driska, A. P. (2018). A formative, utilization-focused evaluation of USA Swimming's nationwide online coach education program. *International Sport Coaching Journal*, 5(3), 261–272.
- Gurgis, J. J., Kerr, G. A., & Stirling, A. E. (2020). Investigating the Barriers and Facilitators to Achieving Coaching Certification, *International Sport Coaching Journal*, 7(2), 189–199.
- Hesse, D., & Lavallee, D. (2012). Career transitions in professional football coaches. In R. Schinke (Ed.), *Sport psychology insights* (pp. 107–125). New York, NY: Nova Science.
- Holmes, P., Light, R. L., & Sparkes, A. (2021). The influence of early life experiences on English and Australian Super League coaches' learning. *Sport, Education and Society*, 26, 202–213. DOI: 10.1080/13573322.2019.1710698
- Jones, I., Brown, L., & Holloway, I. (2013). *Qualitative research in sport and physical activity*. London: Sage.
- Leeder, T. M., & Beaumont, L. C. (2021). Lifestyle sports and physical education teachers' professional development in the United Kingdom: A qualitative survey analysis. *Education Sciences*, 11(10), 642. DOI: 10.3390/educsci11100642
- Leeder, T. M., & Sawiuk, R. (2021). Reviewing the sports coach mentoring literature: A look back to take a step forward. *Sports Coaching Review*, 10(2), 129–152. DOI: 10.1080/2164 0629.2020.1804170
- Lorimer, R., & Holland-Smith, D. (2012). Why coach? A case study of the prominent influences on a top-level UK outdoor adventure coach. *The Sport Psychologist*, 26(4), 571–583.
- Lyle, J., & Cushion, C. (2017). *Sport coaching concepts: A framework for coaching practice* (2<sup>nd</sup> Ed.). London: Routledge.

- Nash, C. S., Sproule, J., & Horton, P. (2008). Sport coaches' perceived role frames and philosophies. *International Journal of Sports Science & Coaching*, *3*(4), 539–554. DOI: 10.1260/174795408787186495
- Nash, C., Sproule, J., & Horton, P. (2017). Continuing professional development for sports coaches: A road less travelled. *Sport in Society*, 20(12), 1902–1916. DOI: 10.1080/17430437.2017.1232414
- Nelson, L. J., Cushion, C., & Potrac, P. (2013). Enhancing the provision of coach education: The recommendations of UK coaching practitioners. *Physical Education and Sport Pedagogy*, 18(2), 204–218. DOI: 10.1080/17408989.2011.649725
- Palmer, C. (2016). Ethics in sport and exercise research: From research ethics committees to ethics in the field. In B. Smith & A. C. Sparkes (Eds.), *Routledge handbook of qualitative research in sport and exercise* (pp. 316–329). London: Routledge.
- Paquette, K., & Trudel, P. (2018). Learner-centered coach education: Practical recommendations for coach development administrators. *International Sport Coaching Journal*, 5(2), 169–175.
- Piggott, D. (2012). Coaches' experiences of formal coach education: A critical sociological investigation. *Sport, Education and Society*, 17(4), 535–554. DOI: 10.1080/13573322.2011 .608949
- Piggott, D. (2015). The open society and coach education: A philosophical agenda for policy reform and future sociological research. *Physical Education and Sport Pedagogy*, 20(3), 283–298. DOI: 10.1080/17408989.2013.837435
- Purdy, L.G., & Potrac, P. (2016). Am I just not good enough? The creation, development and questioning of a high-performance coaching identity. *Sport, Education and Society*, 21(5), 778–795. DOI: 10.1080/13573322.2014.941795
- Ronkainen, N. J., Ryba, T. V., McDougall, M., Tod, D., & Tikkanen, O. (2020). Hobby, career or vocation? Meanings in sports coaching and their implications for recruitment and retention of coaches. *Managing Sport and Leisure*. DOI: 10.1080/23750472.2020.1803108
- Sparkes, A. C. & Smith, B. (2014). *Qualitative research methods in sport, exercise and health: From process to product*. London: Routledge.
- Statista. (2022). Number of people participating in orienteering in England from 2016 to 2021. Available at: <a href="https://www.statista.com/statistics/899276/orienteering-participation-uk/#:~:text=In%202021%2C%20approximately%2022%2C500%20people%20participated%20in%20orienteering%20in%20England, accessed March 30th 2022.">https://www.statista.com/statistics/899276/orienteering-participation-uk/#:~:text=In%202021%2C%20approximately%2022%2C500%20people%20participated%20in%20orienteering%20in%20England, accessed March 30th 2022.</a>
- Stodter, A., & Cushion, C. J. (2014). Coaches' learning and education: A case study of cultures in conflict. *Sports Coaching Review*, *3*(1), 63–79.

- Stodter, A., & Cushion, C. J. (2017). What works in coach learning, how, and for whom? A grounded process of soccer coaches' professional learning. *Qualitative Research in Sport, Exercise and Health*, 9(3), 321–338. DOI: 10.1080/2159676X.2017.1283358
- Stoszkowski, J., & Collins, D. (2016). Sources, topics and use of knowledge by coaches. *Journal of Sports Sciences*, *34*(9), 794–802. DOI: 10.1080/02640414.2015.1072279
- Tomlinson, A., Ravenscroft, N., Wheaton, B., & Gilchrist, P. (2005). *Lifestyle sports and national sport policy: An agenda for research. Report to Sport England*. London: Sport England.
- Tripp, D. (1993). *Critical incidents in teaching: Developing professional judgement*. London: Routledge.
- Watts, D. W., & Cushion, C. J. (2017). Coaching journeys: Longitudinal experiences from professional football in Great Britain. *Sports Coaching Review*, 6(1), 76–93. DOI: 10.1080/21640629.2016.1238135
- Webb, K., & Leeder, T. M. (2021). Dispositions and coaching theories: Understanding the impact of coach education on novice coaches' learning. *Sport, Education and Society*. DOI: 10.1080/13573322.2021.1887846
- Werthner, P., & Trudel, P. (2009). Investigating the idiosyncratic learning paths of elite Canadian coaches. *International Journal of Sports Science and Coaching*, 251(4), 433–449.
- UK Coaching. (2019). Coaching in the UK, 2019: Coach survey. Leeds: UK Coaching.