



Special Olympics: International Work Force Audit

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ABBREVIATIONS

AAIDD - American Association on Intellectual and Developmental Disabilities

CGT – Constructivist Grounded Theory

EQF – European Qualifications Framework

ID – Intellectual Disability

NGB – National Governing Body

SO – Special Olympics

SPSS – Statistical Package for the Social Sciences

WHO - World Health Organisation (WHO)

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EXECUTIVE SUMMARY

1.1 Introduction

This report is part of the Erasmus Plus funded project of ParaCoach led by Liverpool John Moores University. Specifically, this report focuses on the workforce of Special Olympics and will be key in the development of an eLearning course for coaches as an introduction to Special Olympics.

1.2 Methodology

In order to explore the Special Olympics workforce a two-part methodology was employed. Firstly, an online survey was conducted, consisting of both open and closed questions. Following completion of this, a number of participants were selected to take part in follow-up interviews. These interviews were semi-structured in nature and provided a deeper insight to the coaches working within the context of Special Olympics.

Descriptive statistics were generated from the quantitative survey data using a statistical analysis software. Content analysis was utilised with open qualitative responses. Interview data was examined using constructivist grounded theory (Charmaz, 2006), which involves an iterative process of coding and constant comparison.

Despite there being around 200 million people with an intellectual disability across the globe, they often still face barriers and challenges when seeking sporting experiences. One of these barriers is the stigmatisation of disability and the lack of sufficiently qualified coaches to provide sport participation opportunities. Therefore, this report – as part of the wider ParaCoach project – aims to provide some clarity as to the current coaching workforce of Special Olympics.

1.3 Key Findings

1.3.1 *Survey Findings*

1. Coaching is a blended profession

Over half of the Special Olympics coaching workforce is made up of volunteers at 59% (N=162), 16% (N=45) full time, 8% (N=23) paid at a session or daily rate, 8% (N=21) a combination of status' and 7% (N=18) part-time.

2. A well-educated workforce (not specific to coaching)

The majority of coaches have University level education (Level 6 or above). 43% (N=119) level 6, 23% (N=64) level 7, 16% (N=43) level 5, 5% (N=14) level 8, 4% (N=12) level 4 and 3% (N=8) level 3.

3. Lack of formal coach education

Only 58% (N=159) of participants stated that they hold a formal coach education qualification, with 37% (N=103) stating they did not. However, only 34% (N=93) of participants identified the existence of para specific education and training systems in their country, whereas 42% (N=116) did not. 52% (N=142) of participants had engaged with ID specific education and training.

4. Gaps in Knowledge

Participants* were asked to provide a list of subjects they wish to see on an online education course. The most frequent subject areas reported were; *coaching practice* (N=69), including: communication with athletes (N=24), how to adapt sessions (N=23), planning (N=8), integration (N=4), relationships (N=2) and behaviour management (N=5); *sport*

science (N=47), including: psychology (N=24), health and nutrition (N=8), injury prevention and rehabilitation (N=6), biomechanics (N=2), physiology (N=3), strength and conditioning (N=1) and psychopedagogy (N=1) and *impairment specific knowledge* (N=24) including: information regarding the different types of impairment as well as legal information and *sport specific knowledge* (N=20) which relates to education for specific sports, such as football, gymnastics and athletics. (*only 43% (N=117) of participants provided a response to this question)

5. Coaches work with a wide variety of athletes
This related to the age groups of which participants coach, but also the impairments that their athletes have. 60% (N=165) of participants work with athletes across two or more age groups. In relation to impairments, 38% (N=105) of participants coach an athlete or athletes with more than one impairment.

1.3.1 Interview Findings

1. Coaching Philosophy
When articulating their coaching philosophies, the majority of participants placed emphasis on athletes having fun, enjoyment, knowledge transfer, inclusion and provision of opportunities.
2. More than a coach
Many participants explained that their role entails more than just being a coach and it stretched into the realms of friendship. This also relates to the close relationships a number of the participants had established with their athletes parents and families, seeing them as a vital part of the coaching process and providing athletes with the opportunity to participate in SO.
3. Lack of a clear pathway into coaching
Participants began coaching in SO through professional, personal or familial relations. There is no structured pathway for coaches to follow and they typically begin coaching due to already established connections and links with the context.
4. Informal Learning
Participants acquire most of their knowledge through informal sources such as observing and conversing with other coaches, online resources, from their athletes and respective families. Although this is often the case due to a lack of formal provision for para sport coaches, the participants value this form of learning.
5. Required Knowledge
Participants highlighted the multifaceted nature of knowledge needed by coaches working in the context of SO. Professional knowledge related to sport specific and understanding the nature of athlete's impairments. Interpersonal knowledge refers to knowing your athletes and building effective rapport whilst intrapersonal knowledge is the importance of reflecting on your practice.
6. Gaps in Knowledge
Participants identified a numerous areas of knowledge they wish to develop further including; impairment specific knowledge, coaching techniques and theories, session planning and areas of sport science.
7. Understanding of Disability
Participants expressed a varying degree of understanding of the terms impairment and disability. Disability was understood as; being different to or having different abilities to others, a condition that one has, everyone has some form of disability and there is no big difference between those with and those without one. Impairment was understood as; a limitation or difficulty when completing certain tasks, everyone has some form of impairment and some participants expressed their dislike of the term.
8. Practice structure is similar to that in mainstream sport

Findings show that practice structure is not too dissimilar to that of the mainstream context. Participants stated sessions usually consist of a warm-up, sport specific elements, a game and end with a cool down. One unique element of SO sessions appears to be the social aspect, where they sing songs, chants and perform clapping routines.

2.0 INTRODUCTION

2.1 Context

Special Olympics (SO) is a non-profit, International Organisation that aims to provide sports training and competition for both children and adults with intellectual disabilities (ID) (Special Olympics, 2020). The organisation has a presence in 200 countries, across the 7 SO regions: Africa, Asia Pacific, East Asia, Europe/Eurasia, Latin America, Middle East/North Africa and North America. As of last year (2019), there were approximately 5.8 million athletes participating in SO with 524,506 coaches (Special Olympics, 2019). Typically, in order to compete in ID sport, athletes must meet the following criteria:

1. An IQ of 75 or lower
2. Significant limitations in adaptive behaviour as expressed in conceptual, social, and practical adaptive skills
3. The impairment must have been diagnosed before 18 years of age

Special Olympics defines Intellectual Disabilities or ID through the American Association of Intellectual Disabilities and Developmental Disabilities and the World Health Organization.

Worldwide there is an estimated 200 million people with an intellectual disability (Special Olympics, 2020) and more often than not, they are omitted from participating in mainstream sporting activities (Abells, Burbidge and Minnes, 2008; DePauw & Gavron, 2005) despite the many benefits it can have. Participation in sport for those with intellectual impairments can result in personal and social development as well as benefitting physical and mental health (Grandisson, Tétreault, Freeman, 2012; Harada & Siperstein 2009). Sport also provides people with the opportunity to have fun and develop life skills (Cybulski, Culver, Kraft & Formeris, 2016). Research focussing specially on Special Olympics has highlighted participation can increase athletes self-confidence and competence as well as social skills (Harada, Siperstein, Parker & Lenox, 2011). Special Olympics are trying to bridge the gap between para and mainstream sport and increase social inclusion with their Youth Unified Sports programme. Here, athletes both with and without impairments (named partners), train and compete alongside one another (McConkey, Dowling, Hassan & Menke, 2013). According to Crawford, Burns & Fernie (2012), SO is the foremost movement for supporting sport participation for those with intellectual disabilities. Therefore, it is vital that an evaluation of the current landscape of SO coaches is conducted to further develop the education of these coaches and improve the experiences of the athletes. Hence, this report provides an overview of the global SO coaching workforce and an insight into coaches' experiences within this unique context.

2.2 Coach knowledge and learning

Coach learning, much like the coaching process, is considered to be dynamic and complex (Cooper & Allen, 2018; Nelson, Cushion and Potrac, 2013), yet it is a vital part of developing high-quality coaching experiences (Townsend & Cushion, 2017a).

In order to explore coach learning, we adopted Nelson, Cushion & Potrac's (2006) formal, nonformal and inform learning framework, adapted from the original work by Coombs & Ahmed (1974). Formal learning refers to an "institutionalised, chronologically graded and hierarchically structured education system" (Coombs & Ahmed, 1974, p.8). In coaching this is identified as courses led by National Governing Bodies resulting in certification. Non-formal learning is "any organized, systematic, educational activity carried on outside the framework of the formal system to provide select types of learning to particular subgroups in a population" (Coombs & Ahmed, 1974, p.8). Within the coaching context this can be CPD events, conferences and seminars, as well as training workshops. Informal

learning is defined as “the lifelong process by which every person acquires and accumulates knowledge, skills, attitudes and insights from daily experiences and exposure to the environment” (p8.) For example, coaches learning from each other or from their athletes, with online resources or through reading.

In research, overwhelmingly, the most frequently reported form of learning amongst coaches is informal (Douglas, Falcão & Bloom, 2018; Fairhurst, Bloom & Harvey, 2017; McMaster, Culver & Werthner, 2012; Taylor, Werthner & Culver, 2014). This could be attributed to a lack of formal and non-formal opportunities available to coaches within the para sport context, (Douglas et al, 2018) or as a result of coaching and learning often being a social process whereby knowledge is socially constructed (Lewis, Roberts & Andrews, 2018). This lack of formal opportunities afforded to coaches within para sport could be a reflection of the lack of research that has been conducted in the context (Townsend & Cushion, 2017a; Townsend, Cushion & Smith, 2017b).

2.3 Summary and Aims

In addition to the aforementioned gaps in research, Cybulski, Culver, Kraft and Formeris (2016) noted a scarcity in research focusing on coaches working within the Special Olympics context. It is however important to understand coaches as they play a vital role in athletes’ development, physically, psychologically and socially (MacDonald, Beck, Erickson & Côté, 2016). Therefore, the current report provides an insight into the current coaching workforce and gives an overview of coaches’ learning experiences and knowledge development.

Aims of this study

The aim of this study aligns with the strategic direction of SO which is, to provide an evidence base understanding of the coaching workforce in order to inform policies and practices relating to effectively supporting the education and development of coaches. To achieve this study’s aim, the following research questions will be used as a guide:

1. What is the demographic profile of the coaching workforce?
2. What are the educational and developmental needs of the coaching workforce?
3. What contextual factors influence coaches’ values, beliefs and practice?

Together, these questions have guided the methodological approach taken and provided a lens through which to explore the complexity of coaching within this unique context.

3.0 RESEARCH DESIGN

In order to explore and provide a contextually rich and detailed account of the globally diverse coaching workforce within SO, a mixed-method study design was utilised (Hodge & Sharp 2016). This was achieved during two phases of data collection. The first involved the completion an online survey and second utilised follow up in-depth semi-structured interview.

3.1 Sampling and recruiting the participants

The success of the study was reliant on recruiting a representative sample of coaches with knowledge and experience of coaching within the SO context. A total of 275 participants (49% male, 49% female, 2% not stated) were recruited to complete the online survey using a combination of criterion-based purposeful and snowball sampling techniques (Sparkes & Smith, 2014). Specifically, this meant participants needed to be in an active sport coaching role within the context of SO. To ensure coaches met the research criterion, details of the project and link to the online survey were emailed to regional sport directors who then forwarded the information out to their respective coaching networks. On receipt of the project brief, coaches volunteered to complete the survey by following the link within the email communication. Given the agreed timeline of the project, online data collection ceased after 4 months.

During the follow up phase of the project, criterion-based purposeful and maximum variation sampling was used to recruit 21 participants to be interviewed (Smith & Sparkes, 2014). These coaches met the following criterion:

- Have completed the ParaCoach Special Olympics Survey
- Represent a wide range of sports
- Able to speak and understand English (if not, facilitated by a translator)
- Representative of the differing SOI regions

Participant information and consent forms were emailed to coaches who had completed the online survey and who agreed to be contacted for the follow up phase by providing their email addresses. Interviews were then undertaken with those who had completed and returned the consent forms and were willing to confirm an interview date.

All participant data was stored on an encrypted device and an online data base. No incentives were provided to participate in the study.

3.1.1 Survey participants

At the time of analysis, the survey had 275 participants (49% male, 49% female, 0.4% preferred not to say, 1.5% not stated) with an age range of 17 – 70 (M=44), coaching a range of 43 different sports. Refer to table 2 for further descriptive information regarding survey participants.

3.1.2 Interview participants

Participants were 21 Special Olympics' coaches, (10 male, 11 female) between the ages of 25 and 66 (M = 45), coaching a range of individual and team sports. Special Olympics coaching experience varies from 2 -35+ years. 18 had formal coach education either through a National Governing Body or Special Olympics, whilst 29% (N=6) had an undergraduate degree and 52% (N=11) had a Master's degree, 4 of which are related to the field of sports. Refer to table 2 for further demographic details.

Table 2. Interview Participant Demographics

Participant	SO Region	Age	Sport/s Coached	Ages of Athletes	Years Coaching Special Olympics	Highest Level of Qualification (according to EQF)	Sport Related Qualifications	Coaching Employment Status
1	Europe/Eurasia	25	Basketball	7 to 14	3.5	6	NGB Course/s & S.O. Course/s	Volunteer
2	Africa	26	Young Athletes Programme	2 to 7	2	6	No formal coach education	Volunteer
3	Latin America	48	Swimming and Cross Country Skiing	7 to 26	7	5	No formal coach education	Volunteer
4	North America	60	Track & Field, Cross Country Skiing, Snow Shoeing, Cycling and Cross Country Running	8 to 65	35+	6	NGB Course/s	Volunteer
5	Latin America	64	Rhythmic Gymnastics	8 to 40	33	7 (Masters in Education & Inclusion)	No formal coach education (country has a different system)	Volunteer
6	Africa	39	Badminton and Table Tennis		15	7	S.O. Courses	Full Time
7	East Asia	25	Tennis	9 to 16	2	7	NGB Course/s & S.O. Course/s	Part Time
8	North America	66	Artistic Gymnastics and Figure Skating	9 to 28	10	6	S.O. Course/s	Volunteer
9	North America	64	Swimming and Alpine Skiing	8 to 65	35+	7	NGB Course/s & S.O. Course/s	Volunteer
10	Asia Pacific	27	Athletics and Football	10 to 20	6	5	NGB Course/s	Volunteer
11	Europe/Eurasia	40	Swimming, Basketball, Foundation Skills	4 to 30	9	6	NGB Course/s & S.O. Course/s	Full Time
12	East Asia	40	Badminton	15 to 18	17	7	S.O. Course/s	Volunteer
13	Europe/Eurasia	55	Western Riding	9 to 28	6	7	NGB Course/s	Volunteer
14	Europe/Eurasia	39	Swimming	8 to 27	15	7 (BSc in Physical Education & Sport Science, MSc	NGB Course/s	Full Time

						in Adapted Physical Education)			
15	Latin America	46	Floorball, Football and Athletics	3 to 48	15	7		NGB Course/s & S.O. Course/s	Volunteer
16	North America	43	Swimming, Bocce and Bowling	8 to 18	6	7		S.O. Course/s	Volunteer
17	North America	29	Basketball, Football, Softball, Flag Football and Bowling	3 to 65	7	5		S.O. Course/s	Part Time
18	Asia Pacific	42	Badminton, table tennis, athletics, snowshoeing and bocce		26	7 (Master's degree in PE)		NGB Course/s, & S.O. Course/s	Full Time
19	Europe/Eurasia	54	Gaelic Games, Basketball, Bocce and Young Athletes	4 to 40	10	6		NGB Course/s & S.O. Course/s	Volunteer
20	Africa	54	Floor Hockey, Football, Swimming, Bocce and Athletics	19 to 46	8	5		S.O. Course/s	Volunteer
21	Asia Pacific	58	Basketball, Football, Badminton and Track & Field	4 to 20	15	7		NGB Course/s	

3.2 Data Collection

Prior to data collection ethical approval was approved by the university's ethics committee. The first phase of data collection was undertaken via an online survey and involved 275 participants. The survey was translated into Spanish, in order to accommodate a large number of coaches from the SO Latin America region. The survey consisted of 36 items and included closed questions and open questions. Questions covered four sections relating to the coaching process (Lyle & Cushion, 2017), that is, **the coach** (age, sport/s coached, location, gender, athletic experience employment status), **the athlete** (age group, number of athletes, nature of impairments, assistance required, athlete level, integrated sessions), **coach education and training** (highest level of qualification, para specific coaching standards, coaching qualifications, coaching role, CPD, coach education, mentoring, coaching experience) and **context** (knowledge of impairment and disability and support networks). The survey was developed through a number of iterations between the university's academic staff and the SO team. This collaborative approach ensured the survey was contextually fit for purpose.

Interviews aimed to provide a more in-depth understanding and representation of the coaching workforce and to understand coach's education and development. The semi-structured interview schedule was informed by academic literature (e.g., Cybulski et al., 2016; DePauw & Gavron, 2005; Robbins & Houston, 2010; Taylor et al., 2014; Townsend et al., 2015) and refined in collaboration with the SO team. The final questions structured around the following topics:

- *Introduction and Background* – coaching role, location, sport/s, sporting background, pathway to coaching.
- *Coaching Philosophy* – the values and beliefs of coaches that impacts their practice coaching.
- *Coach development and education* – the learning experiences coaches perceive have shaped their view of coaching, their role and athletes they coach.
- *Coaching knowledge* – coaches' perception of the knowledge needed to coach and current gaps in coaches knowledge.
- *Coaching practice* – how do coaches construct and deliver their practice.
- *Divisioning* – coaches understanding and opinion of the sport classification system within SO
- *Disability and impairment effect* – how disability is understood and the adaptations coaches make to support athletes with ID.
- *Contextual constraints* – what barriers coaches face to their education and development.

Interview participants were from a range of Special Olympics regions (n = 6), countries (n = 16) and sports (e.g. basketball, athletics snowshoeing, table tennis). Elicitation and semi-structured interview techniques were adopted, prompting participants to reflect on their experiences of coaching and to provide a consistent approach to questions, while offering flexibility to generate further and in-depth data (Sparkes & Smith 2014). A conversational approach to interviewing was adopted which supported the development of rapport with the majority of participants and the second author. However, where English was not the participants first language the interviewer perceived developing rapport to be a challenge. That said, the use of probes, opportunities for clarification and increased time given for participants to respond, did provide some rich responses.

Given the international profile of the coaching cohort, interviews were conducted through the use of online applications (e.g., Zoom, Skype and WhatsApp). The use of the aforementioned online platforms enabled access to international participants who may have been difficult to reach otherwise (Sparkes, Smith & Caddick, 2014). Interviews were audio recorded, stored in a secured encrypted location and transcribed verbatim. Interviews lasted an average of 80 minutes (range = 54 - 147 minutes).

3.3 Data Analysis

3.3.1 Survey Data

Completed survey data was exported from the online platform (Online Surveys) into a Microsoft Excel file. Here responses to questions were checked for accuracy and where needed, translations to English were made. The completed data set was then entered onto the SPSS statistical software package for analysis. In order understanding the profile of the coaching workforce, descriptive statistics were generated and represented as means/SD, percentages and / or frequencies. Where coaches were asked to respond to open ended questions, content analysis was carried out to ascertain the most common responses.

3.3.2 Interview Data

In order to store and manage coaches' interview responses, interview transcripts were uploaded into the *Nvivo* analysis software package. In acknowledging that inductive and deductive approaches are involved in qualitative data analysis process, Charmaz (2000) constructivist grounded theory (CGT) was viewed as an appropriate method to move iteratively between the two approaches. Therefore, *initial codes* were identified through 'word by word', 'line by line' and 'paragraph by paragraph' analysis (Charmaz, 2000, 2006). The codes that were most relevant to the research or the most frequent were combined into *focus codes* or categories, through a process of constant comparison (Charmaz, 2012). The final stage involved identifying *theoretical codes* that were consistent with the social relational model of disability. Together, the application of CGT's analysis process meant that the analysis was grounded in participants data.

3.4 Research quality

In considering the quality of this research, criteria were selected from Tracy's (2020) list of characteristics that were perceived to reflect the nature of the study. These characteristics included:

- Worthy topic – the absence of research in this international context provides a timely and significant contribution to knowledge about the coaching workforce within the SO. The findings of which will support the development of policies and educational provision.
- Rich rigor – this was achieved by the collaborative approach taken between the academic and SO team in the design of the study and data collection methods. The lead and second authors were familiar with both the academic literature and key issues within disability sport. The third author was also experienced in delivering project-based research within sport coaching. Furthermore, there was alignment between the study's research question, sampling criterion and the participant cohort.
- Resonance – given that SO sport is embedded within the wider disability sport context and the coaching cohort share practices commonly viewed as coaching, the generated data may be transferable to other contexts, as determined by the reader.

4.0 RESEARCH FINDINGS

The findings of the research are presented in two sections. The first section consists of findings generated from analysis of coaches' responses to open and closed questions on the online survey. The findings generated from the semi-structured interviews are presented in the second section.

4.1 Analysis of Survey Data

4.1.1 Demographic Information

A total of 275 participants completed the Special Olympics ParaCoach online survey: gender (49% female, 49% male). The youngest participant was 17 with the eldest aged 70, ($M = 44$, $SD = 12.75$). The most populated age range was 31-40, with 28% ($N=76$) participants, whilst the least populated was 17-20, with only 3% ($N=7$) of participants fitting into this age range.

Participants coach across 43 different sports with athletics being the most common ($N = 88$). Table 3 lists all sports coached by participants.

Table 3. Sports coached by Participants

Alpine Skiing	Handski
Artistic Gymnastics	Judo
Artistic Speed Skating	Karate
Athletics	Kickball
Badminton	Netball
Basketball	Physical Education
Bocce	Powerlifting
Bowling	Rhythmic Gymnastics
Cheerleading	Rugby
Cricket	Shotput
Cross Country Skiing	Snowshoeing
Curling	Snowboarding
Cycling	Softball
Dragon Boat Racing	Speed Skating
Equestrian	Swimming
Fitness	Table Tennis
Flag Football	Tennis
Floorball	Triathlon
Football	Walking Race
Futsal	Volleyball
Golf	Special Olympic Sports
Handball	

In-keeping with previous sport coaching research (e.g., Douglas et al., 2017) this coaching cohort had a variety of previous athletic experiences across the domains of sport. For instance, 28% ($N=76$) competed at national level, 26% ($N=71$) at International level, 23% ($N=64$) at recreational and community level and 19% ($N=52$) at and Regional level.

All 7 Special Olympics regions were represented as depicted in Figure 1. Specifically this meant Africa 10% ($N=27$), Asia Pacific 15% ($N=40$), East Asia 10% ($N=27$), Europe/Eurasia 6% ($N=16$), Latin America 45% ($N=124$), Middle East/North Africa 1% ($N=2$) and North America 12% ($N=33$).

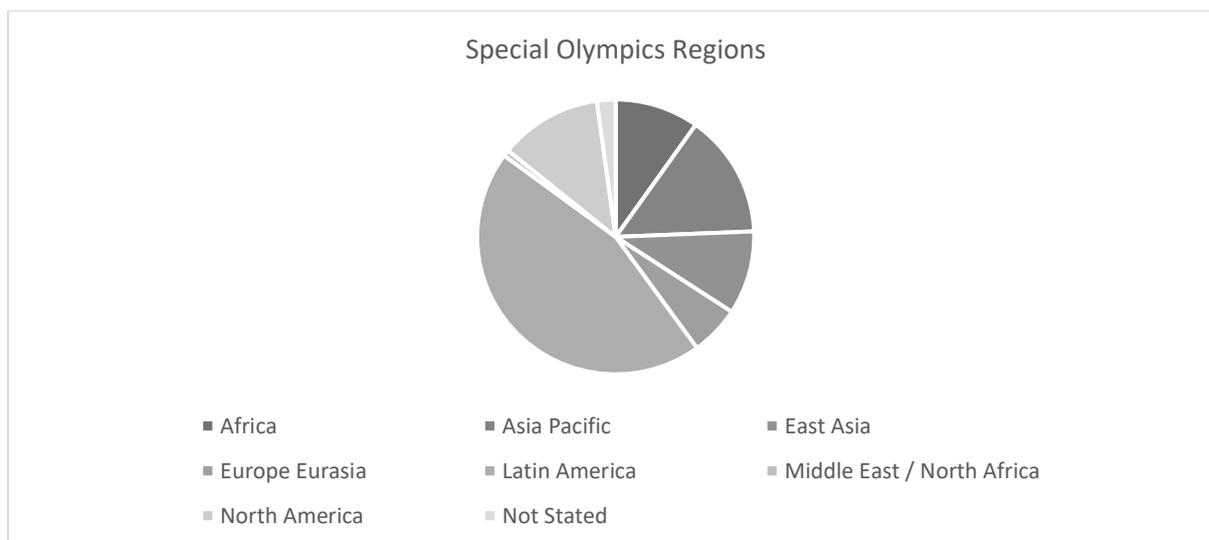


Figure 1. Special Olympics Regions Represented in the Survey

As well as reporting regional variations, survey data presented in Table 4 revealed the distribution of participants according to countries and their regional locations. Analysis showed the majority of participants were located in 6 countries; Panama 14% (N=38), United States 12% (N=32), Brazil 9% (N=24), China 8% (N=23), Venezuela 8% (N=22) and Peru 7% (N=20), whilst there were representations from a further 47 countries.

Table 4. Breakdown of participants origin countries and respective Special Olympics Regions

Special Olympics Region	Countries	Number of Participants	
Africa	Burkina Faso	9	
	Mauritius	3	
	Zambia	3	
	Tanzania	2	
	Zimbabwe, Uganda, South Africa, Seychelles, Malawi, Madagascar, Guinea-Bissau, Ghana, Ethiopia, Botswana	1 (from each country)	
	Asia Pacific	India	11
	Pakistan	8	
	Singapore	5	
East Asia	Indonesia	4	
	Australia	3	
	Malaysia, Fiji	2 (from each country)	
	Timor Leste, Sri Lanka, Papua New Guinea, Japan, Bangladesh	1 (from each country)	
	Europe / Eurasia	China	23
	Taiwan	4	
	Cyprus	4	
	Estonia	3	
Not Stated	Malta, Belgium	2 (from each country)	
	Uzbekistan, Slovakia, Lithuania, Ireland, Iceland	1 (from each country)	

Latin America	Panama	38
	Brazil	24
	Venezuela	22
	Peru	20
	Country Not Stated	7
	El Salvador	4
	Puerto Rico, Guatemala, Mexico	2 (from each country)
	Uruguay, Honduras, Dominican Republic	1 (from each country)
	Middle East / North Africa	Iran, Syria
North America	United States	32
	Cayman Islands	1

Coaching Experience

Coaching experience is considered a valuable commodity within the coaching field, with over 10 years' experience being considered as evidence of attaining expertise (Cote & Gilbert, 2009). Analysis of the survey data highlighted that coaches had 11 (\pm SD = 9) years of coaching experience, with the majority of coaches (69%) reporting having over 5 years. Of interest, when coaches were asked to state how long they had held their current positions, the findings suggested these positions were relatively long-term. For instance, 51% of the cohort were in their position for over 5 years, with 22% in position for 3 to 5 years and 24% in position for 0 to 2 years. Participants also reported working for a variety of organisations including Special Olympics (N=35%), schools (N=9%), Sport Governing Bodies (N=7%), sports clubs (N=4%), Ministry of Education (N=3%), academies (N=2%), Paralympic Associations (N=2%), University/college (N=1%).

4.1.2 Coaching Role

Participants were also asked to select which of the coaching roles - as defined by the International Coaching Council for Excellence guidelines, (please refer to table 5 for role descriptors), (ICCE, 2013) – best described their current position.

Table 5. Role Definitions according to ICCE

Role Descriptor	Knowledge and Competence
Coaching Assistant (Note: the term Assistant coach, as opposed to the role of coaching assistant may be applied at a number of levels. For example, an Assistant Coach in high performance might be operating at the level of the Advanced/Senior Coach)	Assists in the delivery of sessions. Plans, delivers and reviews basic coaching sessions, sometimes under supervision . Basic level of knowledge, competence and decision making to deliver the primary functions with guidance
Coach	Plans, delivers and reviews coaching sessions and over a season and sometimes part of a wider programme. Extended level of knowledge, competence and decision making to independently deliver the primary functions. Supports the engagement and development of pre-coaches and Coaching Assistants.
Advanced / Senior Coach	Plans, delivers, leads and evaluates coaching sessions and seasons. Extended and integrated knowledge, competence and decision making to deliver the primary functions and to mentor others. Works independently and plays a leading role in the structure of the programme. Manages the develop of Coaches, Coaching Assistants and pre-coaches.
Master / Head Coach	Oversees and contributes to the delivery review and evaluation of programmes over seasons in medium to large-scale contexts, underpinned by innovation and research. Specialist and integrated level of knowledge and competence, recognised as an expert with highly developed decision-making skills. Often involved in designing and overseeing management structure and development programmes for other coaches.

Reflecting the roles in table 5 and in descending order of knowledge and competence, 26% (N=72) of coaches perceived their role to align with the label of Master or Head Coach, 17% (N=48) perceive their role to be a Senior or Advanced coach, 32% (N=88) perceive their role to be a coach and 18% (N=49) believe their role aligns with Assistant coach, with 7% (N=18) not stating their roles, as represented in Figure 2.



Figure 2. Participant Coaching Roles (in line with European Coaching Council for Excellence Guidelines)

Coaching literature has suggested that male coaches often hold higher positions when compared to female coaches (Darvin, Pegoraro & Berri, 2017). This gender disparity was also consistent within this study’s cohort (Figure 3) whereby, male coaches were 11% more likely to report holding a Master/Head coach position when compared to their female counterparts (32% and 21% respectively). However, this trend appeared to even out across the descending positions and reversed in the position of assistant coach (12% and 24 % respectively).

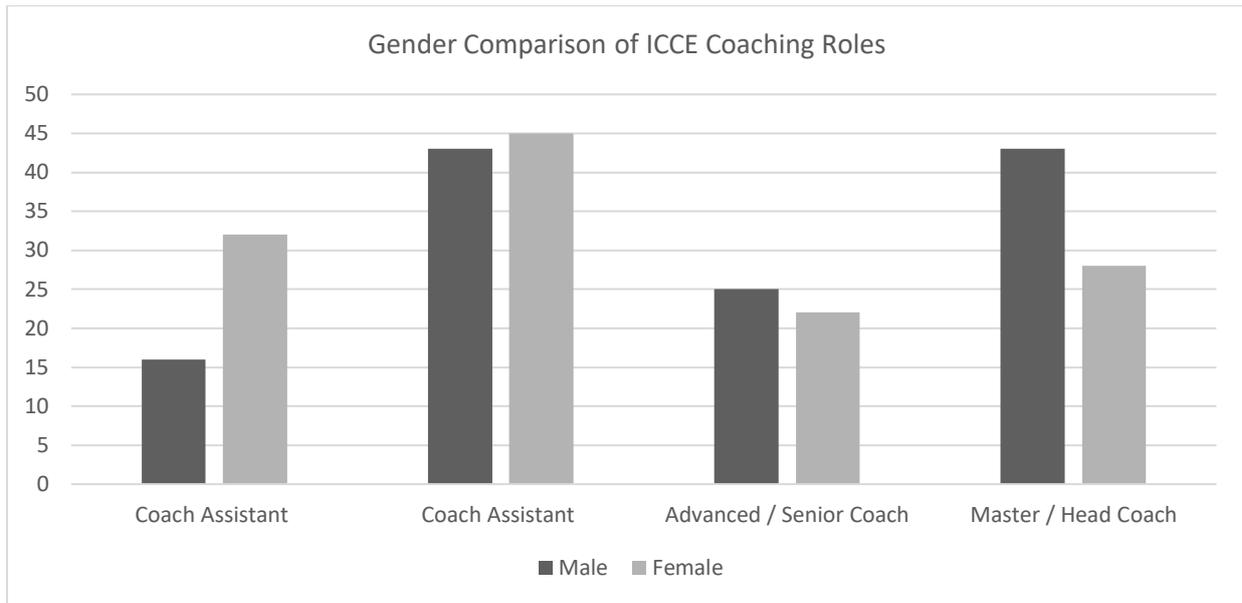


Figure 3. Gender Comparison of Coaching Roles (in line with European Coaching Council for Excellence Guidelines)

4.1.3 Employment status and income

The majority of coaches in this study reported being volunteers (59%, N=162), with 16% (N=45) holding full time positions. Next, similarities existed between coaches being paid for sessional work (8%, N=23), holding part-time positions (7%, N=18) and holding a combination of the two (8%, N=21). 2% (N = 6) participants did not answer this question.

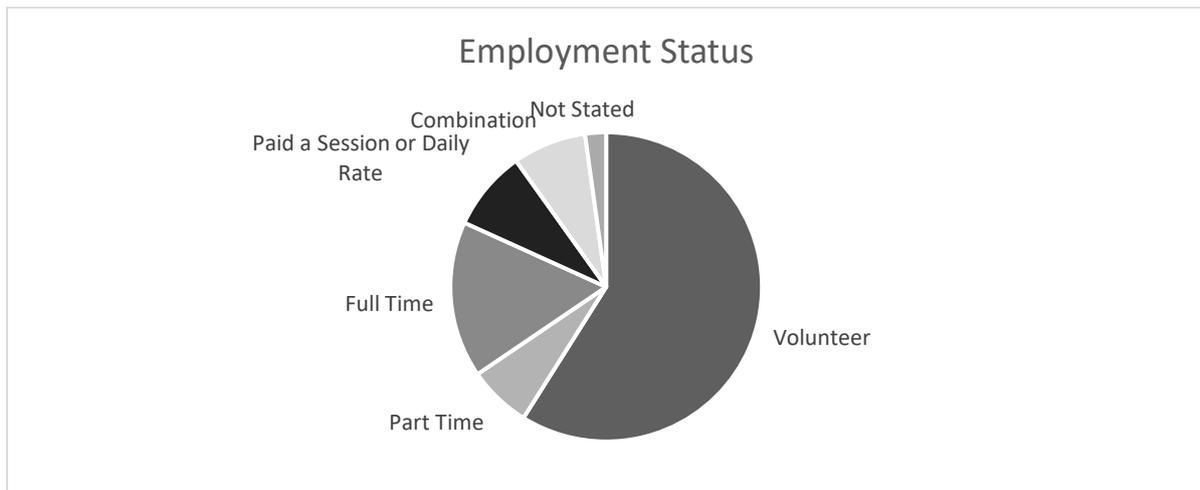


Figure 4. Participant Employment Status

Coaches were asked to compare their income from coaching against national average salary of their corresponding countries. Of the coaches that responded to this question, 30% (N=83) identified that their income was below national average, with 26% (N=72) reporting that either income was equal to the national average, whilst 24% (N=67) said their income was above the average. The number participants who did not answer this question was 53 (19%).

4.1.4. Education, Training and Qualifications

Qualifications

The European Qualifications Framework was used as a guide to understand the level of qualifications held by coaches across the SO global context (see Table 6).

Table 6. European Qualification Framework

Level	Example	Description
Level 3 or Below		
Level 4	Secondary school equivalent education	Factual and theoretical knowledge in broad contexts within a field of work or study. A range of cognitive and practical skills required to generate solutions to specific problems in a field of work or study
Level 5	Further education equivalent education, following secondary education	Comprehensive, specialised, factual and theoretical knowledge within a field of work or study and an awareness of the boundaries of that knowledge. A comprehensive range of cognitive and practical skills required to develop creative solutions to abstract problems.
Level 6	Normally completed Bachelors Degree or Equivalent	Advanced knowledge of a field of work or study, involving a critical understanding of theories and principles. Advanced skills, demonstrating mastery and innovation, required to solve complex and unpredictable problems in a specialised field of work or study.
Level 7	Masters or Equivalent	Highly specialised knowledge, some of which is at the forefront of knowledge in a field of work or study, as the basis for original thinking and/or research. Critical awareness of knowledge issues in a field and at the interface between different fields. Specialised problem-solving skills required in research and/or innovation in order to develop new knowledge and procedures and to integrate knowledge from different fields
Level 8	PhD or Equivalent	Knowledge at the most advanced frontier of a field of work or study and at the interface between fields. The most advanced and specialised skills and techniques, including synthesis and evaluation, required to solve critical problems in research and/or innovation and to extend and redefine existing knowledge or professional practice.

The analysis presented in figure 5, revealed that the majority of coaches were qualified to level 6 or degree level (43%, N=119) and above (level 7 or master's qualification 23%; 5% holding a doctoral qualification). Of the coaching cohort, 16% (N=43) were qualified to Level 5, whereas similar findings existed for level 3 (4%, N=12) and 4 (3%, N=8) respectively. A further 5% (N=15) of participants did not answer this question. These qualifications were not specific to sport coaching but rather reflected general educational attainment.

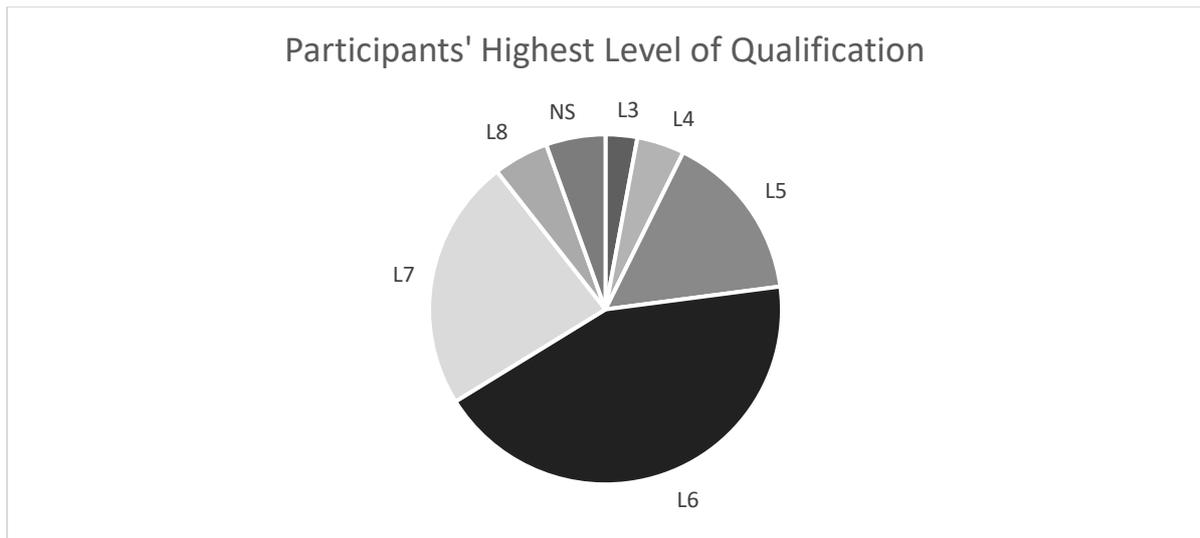


Figure 5. Participants' Highest Level of Qualification According to the European Qualifications Framework

With gender representation a focus of contemporary coaching research (Rankin-Wright, Hylton & Norman, 2019), the survey data presented in figure 6, revealed an equitable distribution of general education qualifications by gender.

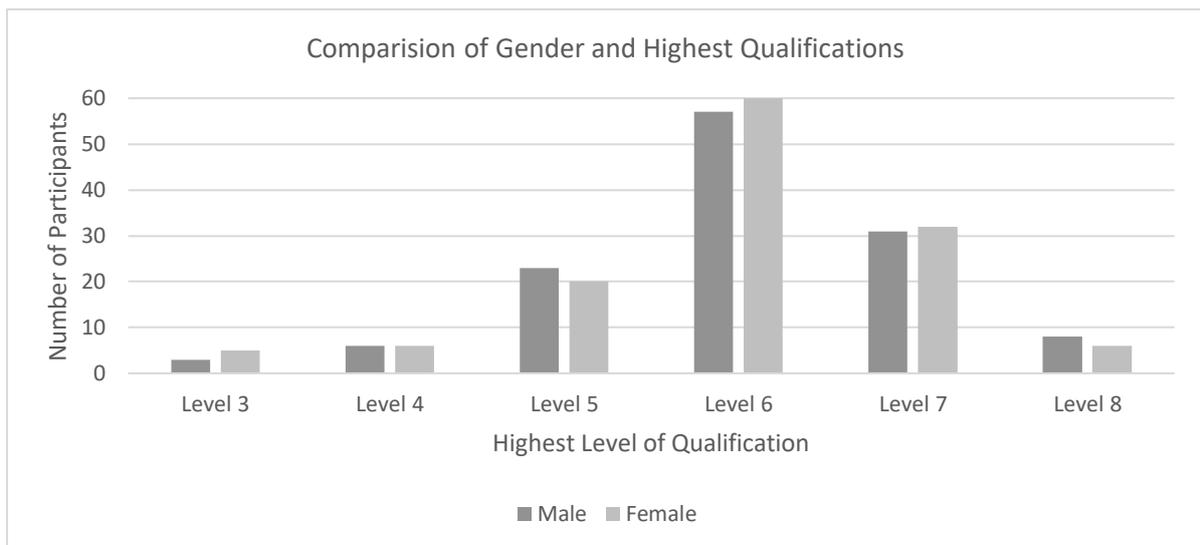


Figure 6. Comparison of Gender and Highest Level of Qualification

Participants were asked also to share information on coaching related qualifications. Overall, results revealed a diverse range of qualifications, which is to be expected when undertaking international data collection. However, only 33% (N=92) of participants stated they were currently undertaking a qualification, with 64% (N=175) not and 3% (N=8) providing no response. Of the participants currently undertaking a qualification, 45% (N=44) stated the level: 5% (N=2) were undertaking Level 4, 2% (N=1) were undertaking Level 5, 32% (N=14) were undertaking Level 6, 50% (N=22) were undertaking Level 7 and 11% (N=5) were undertaking Level 8.

Furthermore, the number of coaching related qualifications held by participants varied from 1 to over 100 as represented in Figure 7 and included courses conducted by Special Olympics, Teaching qualifications and sport specific qualifications, for example, *Boccia Level 1 Coaching Certificate* and *Athletics Level 2 Coaching Certificate*. 60% (N=164) of participants did not respond. The most frequent number of qualifications held was 2, as reported by 12% (N=34) of participants, followed by 1 qualification 9% (N=25) and 3 qualifications 8% (N=21).

Of the 25% of participants that responded to this question 87% (N=60) found these coaching specific courses to be effective with a small number 9% (N=6) stating coach education was not effective in preparing them for coaching athlete with impairments.



Figure 7. The Number of Coaching Related Qualifications held by Participants

Formal education refers to “institutionalised, chronologically graded and hierarchically structured education system” (Coombs & Ahmed, 1974, p.8). Within the coaching context, formal coach education is defined as courses led by National Governing Bodies resulting in certification. As represented in figure 8, over half of survey participants 58% (N=159) hold a recognised coaching qualification from a sports organisation in their respective countries, 37% (N=103) do not and 5% (N=13) of participants did not answer this question.

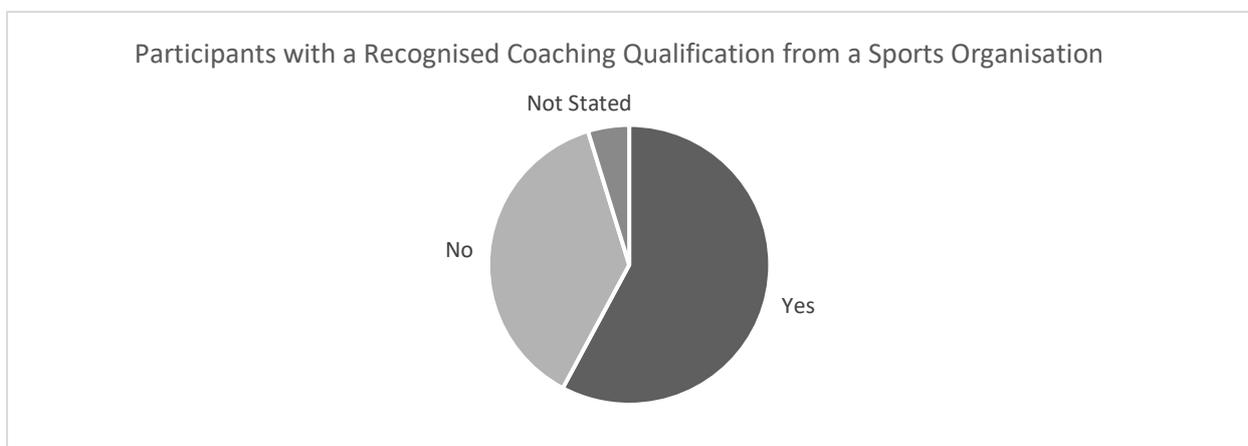


Figure 8. Participants with and without a recognised coaching qualification from a sports organisation

Learning and Development

Within the literature, coaches learning is often associated with 3 sites; formal, informal and non-formal (Nelson, Cushion & Potrac, 2006). In contrast to the research, coaches in this cohort perceived formal coach education to be the most effective form of learning, as highlighted in Figure 9. Specifically, formal education was reported as the most effective form of learning by 39% (N=108) of participants, second most effective was a combination of methods 26% (N=71), third most effective was non-formal 19% (N=53) and the least effective was informal 7% (N=18). 9% (N=25) of participants did not provide a response.

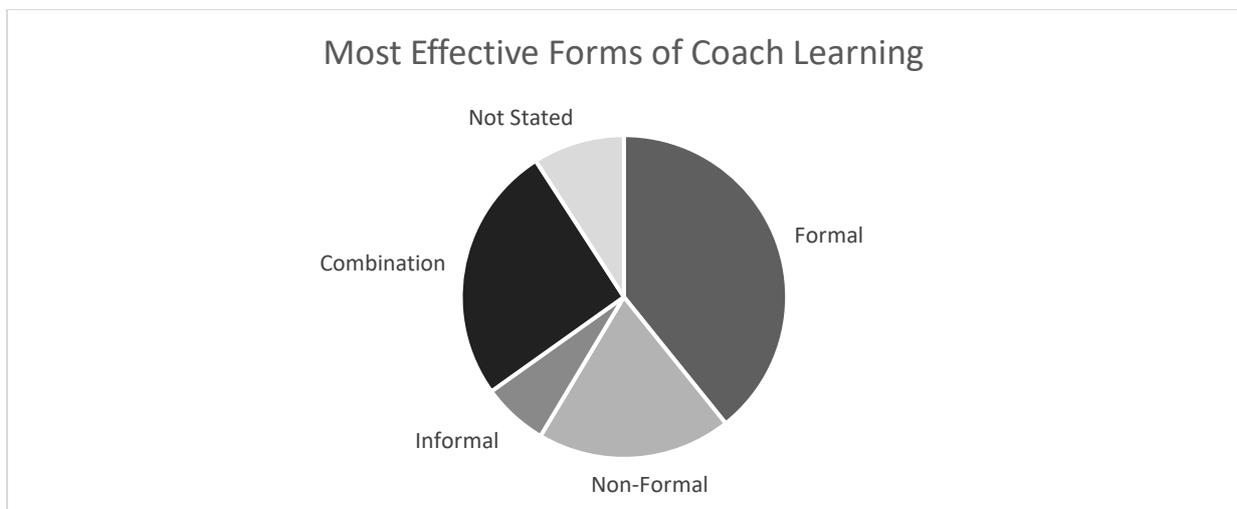


Figure 9. Most Effective Forms of Coach Learning

4.1.5 Continuous Professional Development

Since starting to coach, 69% (N=189) of participants had undertaken CPD, 22% (N=60) of participants had not undertaken CPD, whilst 9% of participants did not answer the question. 63% (N=173) of coaches had undertaken CPD within the past 12 months, 31% (N=86) had not and 6% (N=16) of participants did not answer.

Figure 10 highlights the various types of CPD undertaken by participants. The most frequent types of CPD were workshops/training/courses with 60% (N=164) of participants engaging with this type of CPD, observing/working with other coaches with 44% (N=12) of participants engaging, online learning with 42% (N=115) of participants engaging and coaching conferences with 41% (N=114) of participants engaging with this type of CPD.

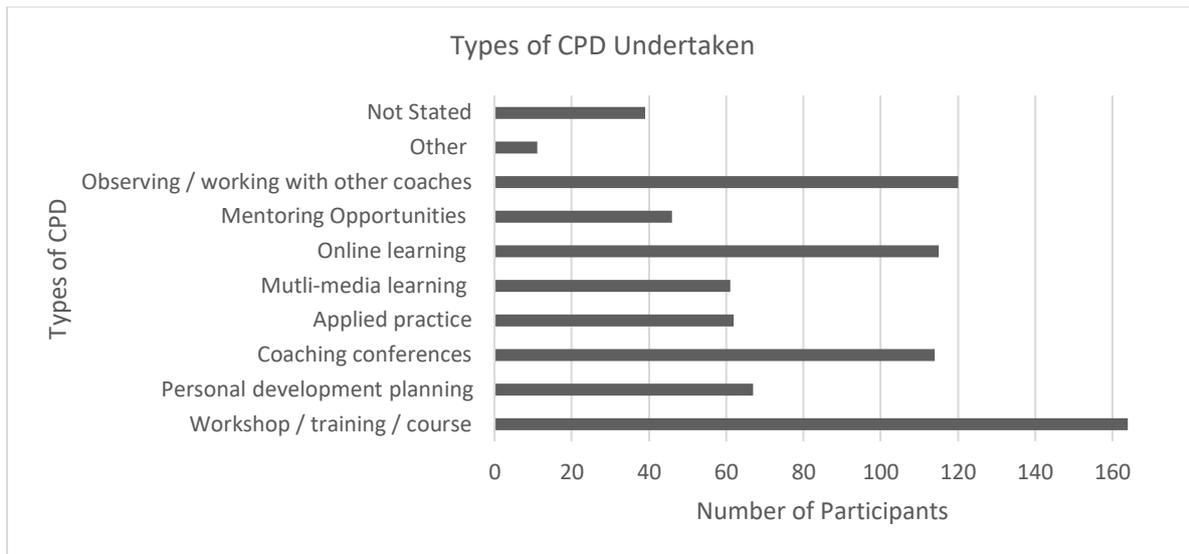


Figure 10. Types of CPD undertaken by Participants

The large majority of participants engaged with 2 or more types of CPD 64% (N=176). 8% (N=22) engaged only with workshops/training/courses, less than 1% (N=2) undertook solely personal development planning, 3% (N=7) engaged solely with coaching conferences, 3% (N=9) engaged solely with online learning and further 3% (N=9) engaged solely with observing/working with other coaches. None of the 275 participants engaged solely with applied practice, multi-media learning or mentoring opportunities. Figure 11 shows the number of different CPD types that coaches accessed. One type 20% (N=54), two types 14% (N=39), three types 18% (N=50), four types 14% (N=39), five types 7% (N=18), six types 4% (N=11), seven types 4% (N=11), eight types 4% (N=10) and nine types less than 1% (N=2). In total, 66% (N=180) coaches accessed more than one type of CPD.

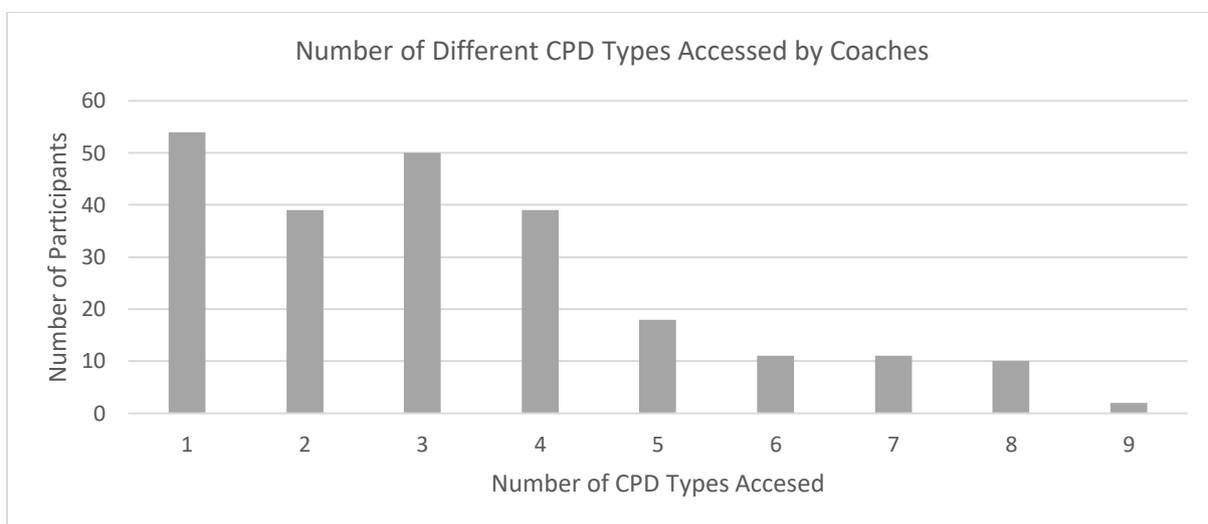


Figure 11. Number of Different CPD Types Accessed by Coaches

4.1.6 Para Specific Education and Training

Participants were asked if their country or sport had any para or disability specific coaching standards or assessment systems refer to figure 12. Specifically, 34% (N=93) stated that there were systems in place. This included Special Olympics education, Paralympics courses and specialist university courses. 42% (N=116) of participants stated there was no Para specific standard or assessment, 3% (N=7) were unsure and 25% (N=59) of participants did not provide a response.

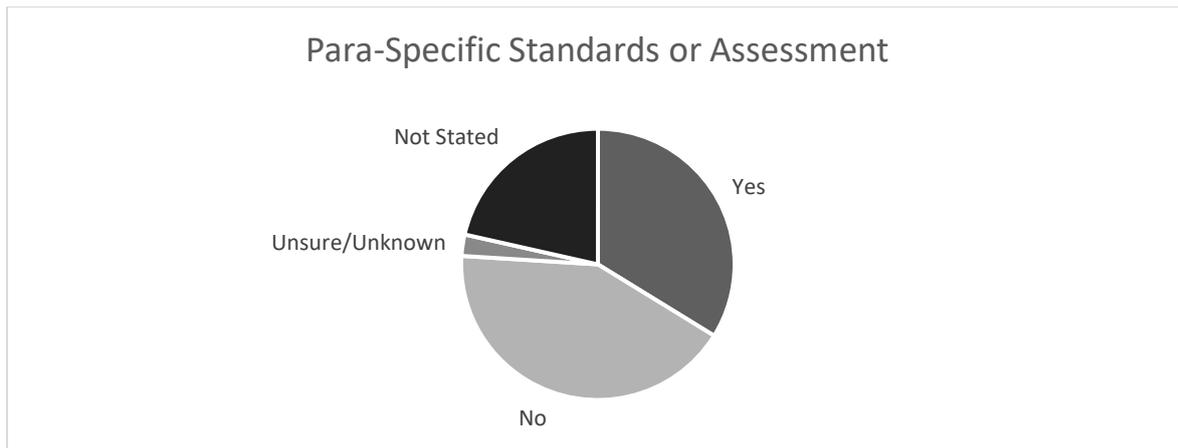


Figure 12. Para-Specific Standard or Assessment for Coaches

Figure 13 outlines the number of participants that have and have not engage with training specific to coaching athlete with an intellectual impairment. 52% (N=142) coaches had undertaken the training, whilst 25% (N=69) had not and 23% (N=64) of participants did not answer the question.

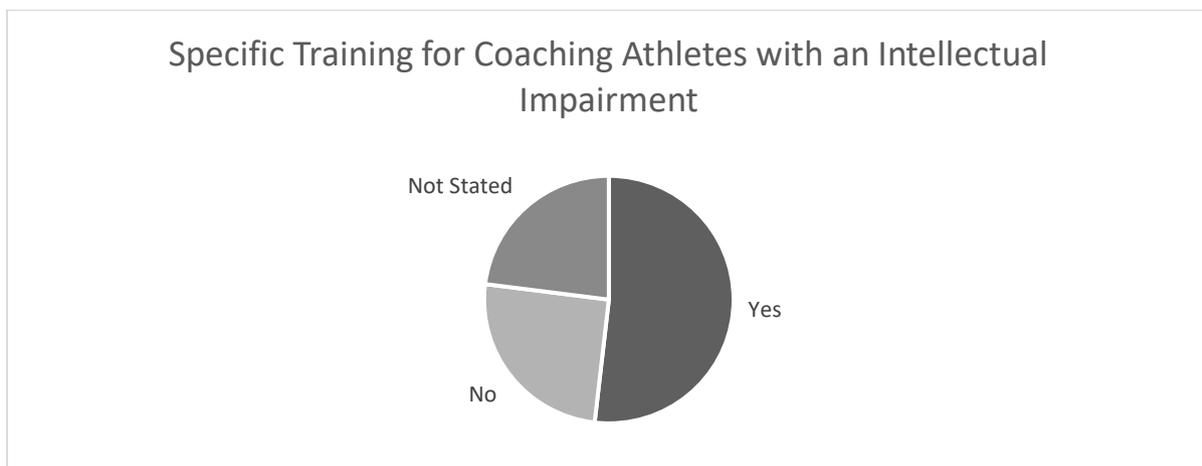


Figure 13.. The number of participants that have and have not undertaken training specific to coaching athletes with an intellectual impairment

Furthermore, 52% (N=142) of participants had engaged with CPD relating to coaching athletes with impairments. 39% (N=106) had not and 10% (N=27) of participants did not provide a response. Refer to figure 14. Participants had numerous reasons for not partaking in CPD relating to coaching athlete with impairments, the most common being; a lack of opportunity (N=22), availability of courses (N=13) and lack of time (N=7).

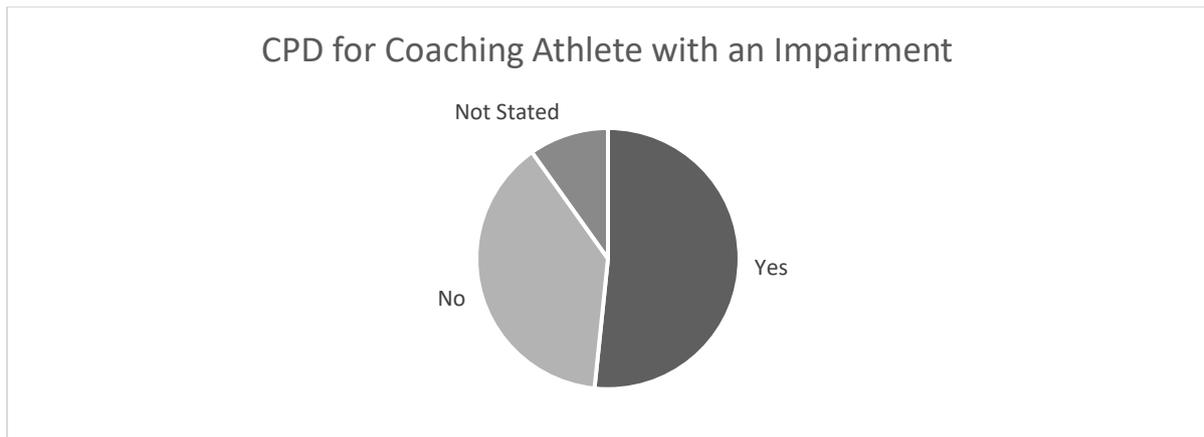


Figure 14. The number of participants that have and have not engaged with CPD relating specifically to coaching athletes with an impairment.

4.1.7 Mentoring

With regards to mentoring, participants were asked if they received and were provided (see figure 17) support. Specifically, 42% (N=116) of participants had received formal or informal mentoring support, 18% (N=50) had not and 40% (N=109) of participants did not answer the question as represented in figure 15. Figure 16 represents participants providing mentoring support, 36% (N=100) participants had done so, whilst 19% (N=51) had not and 45% (N=124) did not answer.

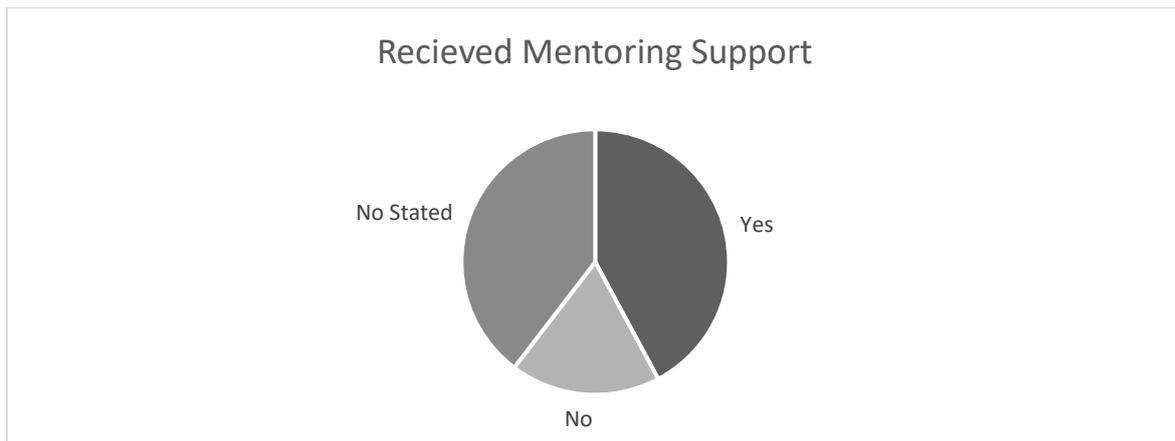


Figure 15. Participants that have and have not received mentoring support

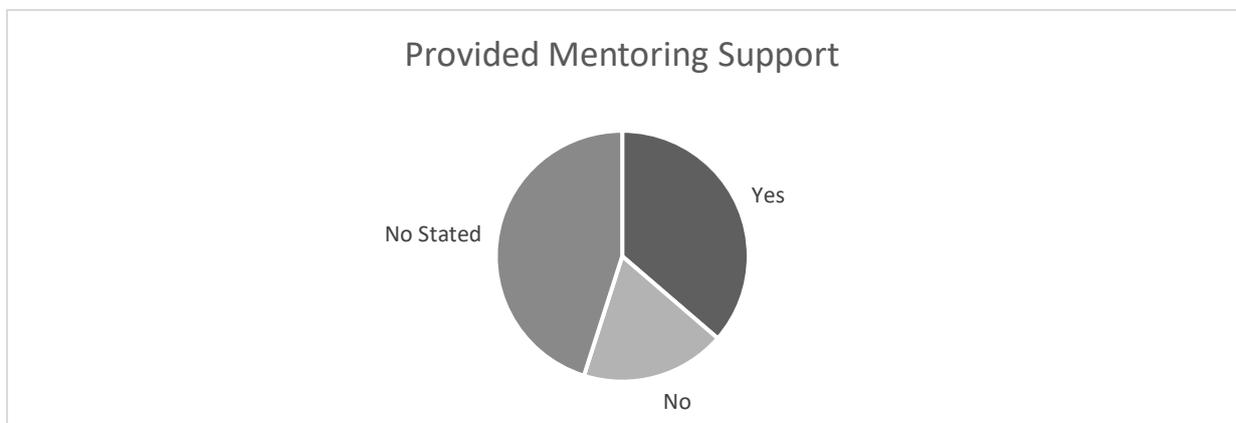


Figure 16. Participants that have and have not provided mentoring support

4.1.8 Desired Knowledge

Knowledge is often represented in three forms, intrapersonal relating to self-awareness and experiences, interpersonal, which is based maintenance of relationships and emotional intelligence and professional knowledge, meaning sport specific knowledge and expertise (Gilbert, & Côté, 2009; Quinaud, Backes, Nascimento Junior, Carvalho & Milistetd, 2020).

Participants were asked to provide a list of subject areas they would like to see on an online coach education course for Para coaches. 43% (N=117) of participants provided a response to this open question. The most frequent subject areas reported were; coaching practice 59% (N=69), including: communication with athletes 21% (N=24), how to adapt sessions 20% (N=23), planning 7% (N=8), integration 3% (N=4), relationships 2% (N=2) and behaviour management 4% (N=5); sport science (N=47), including: psychology 21% (N=24), health and nutrition 7% (N=8), injury prevention and rehabilitation 5% (N=6), biomechanics 2% (N=2), physiology 3% (N=3), strength and conditioning less than 1% (N=1) and psychopedagogy less than 1% (N=1) and impairment specific knowledge 21% (N=24) including: information regarding the different types of impairment as well as legal information and *sport specific knowledge* (N=20) which relates to education for specific sports, such as football, gymnastics and athletics.

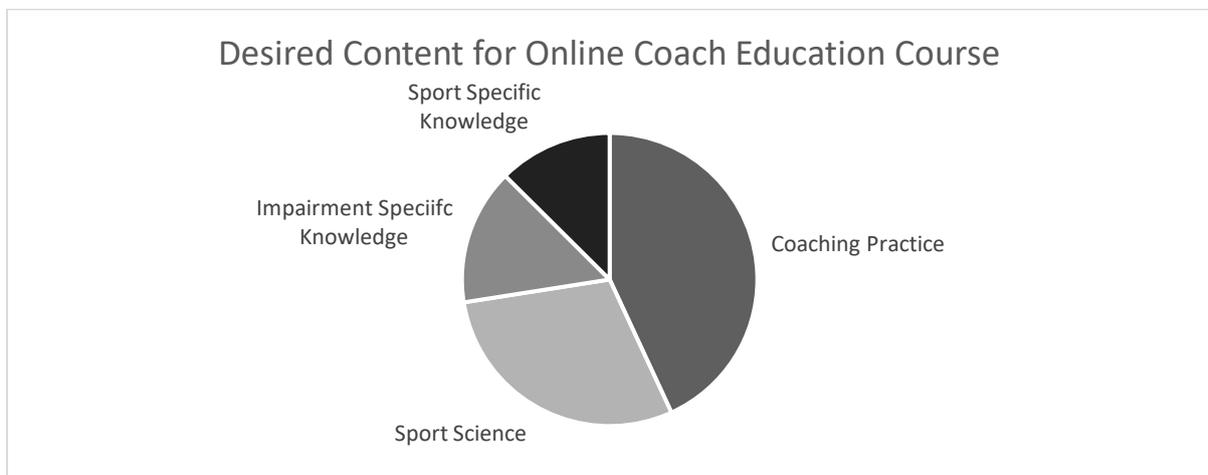


Figure 17. Desired content for online coach education course

Additionally, when asked what areas participants wished to develop as coaches of athletes with impairments, the most frequent area reported was sport psychology 7% (N=18), followed by how to coach athletes with impairments (including adapting sessions, 5% (N=14), impairment specific knowledge 4% (N=10), communication with athletes 2% (N=5), physical development 2% (N=5) and behaviour management 2% (N=5).

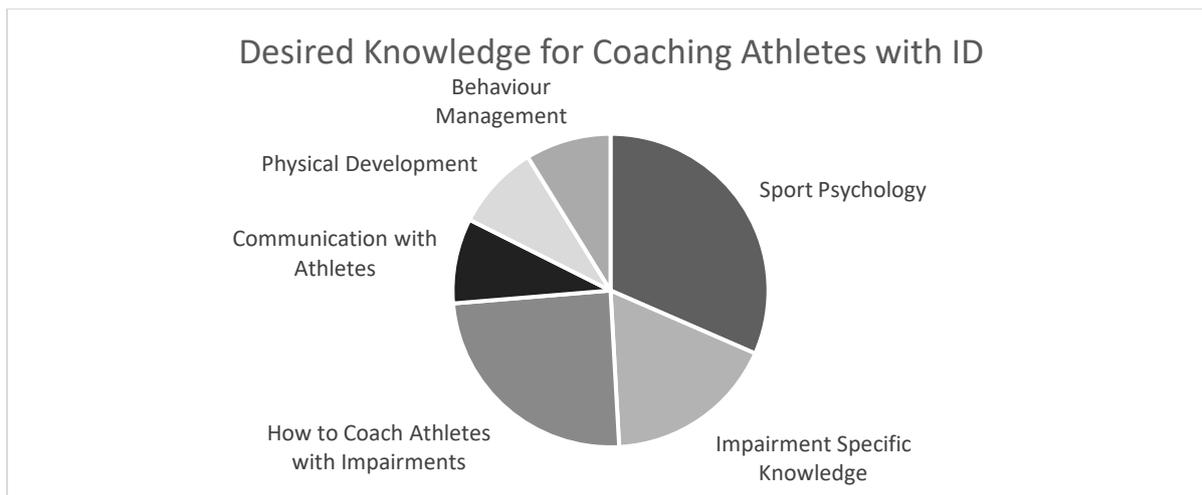


Figure 18. Desired Areas of Knowledge for Coaching Para Athletes

Desired knowledge is where coaches seek new knowledge from when faced with challenges. When faced with coaching specific challenges such as communication and feedback with new athletes, coaches reported a number of places from where they seek guidance. The most commonly reported was speaking with other coaches 19% (N=52) followed by the use of online resources 11% (N=30). Other methods included talking with colleagues 10% (N=27), talking with athletes 7% (N=18), talking with parents/carers 6% (N=16), talking with programme leaders/directors/co-ordinators 6% (N=16), talking with school personnel/teachers 3% (N=8), talking with experts/professionals 3% (N=8), from personal experience 3% (N=7), the use of technology 1% (N=4) and reading 1% (N=4).

Additionally, when faced with impairment specific challenges, coaches reported a number of place from where they seek guidance. The most frequent source of guidance was from professionals/experts 12% (N=34) followed by other coaches 11% (N=29), athletes' parents/guardian/family 9% (N=24), supervisors/programme leaders/directors/co-ordinators 8% (N=23), online sources 6% (N=16), teachers of the athletes 4% (N=12), colleagues 3% (N=9), personal experience 1% (N=3) and athletes 1% (N=3).

4.1.9 Coaching Practice

ICCE define coaching as “a process of guided improvement and development in a single sport and at identifiable stages of development” (ICCE, 2020), therefore it is vital we understand the nature of coaching practice within the Special Olympics context. Coaching practice as we understand it consists of the coach, the athlete and the context. It is crucial we understand the important features of their practice and the extent to which coaches integrated SO athletes alongside mainstream / non-disabled athletes or if they coach them separately.

Weekly Coaching Hours

We wanted to understand the number of sessions that are delivered by coaches on a weekly basis as this may give us an indication of the amount of time they spend with their athletes. Survey data as represented in Figure 19 outlines the average number of hours' participants coached on a weekly basis, this varied between 0 and 40 + hours. The most frequent average hours coached weekly was between 1 and 5 hours, 46% (N=126).

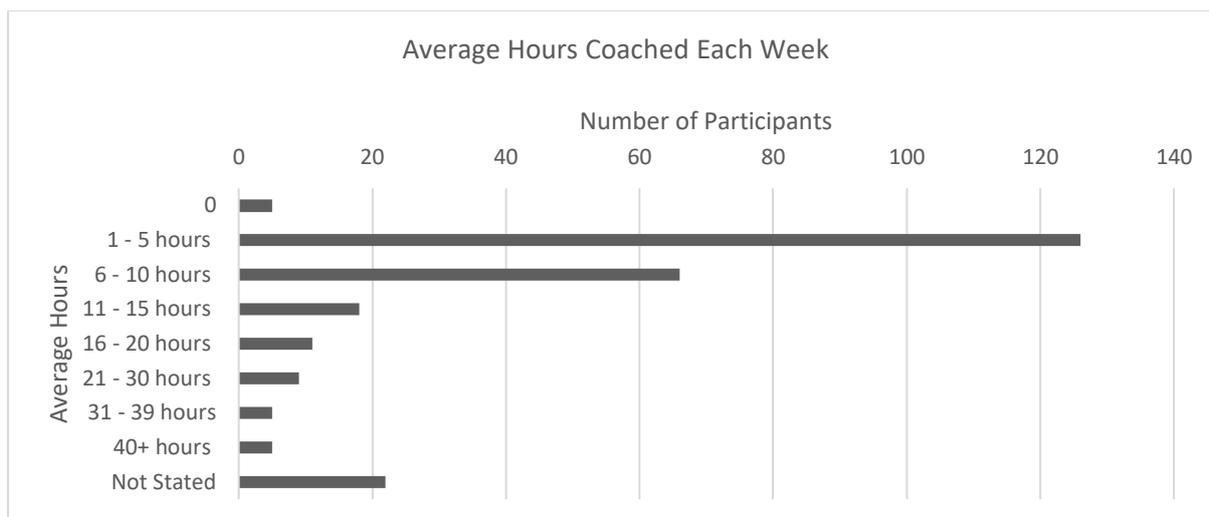


Figure 19. Average Number of Hours Coached by Participants on a Weekly Basis

Aligned to these delivery hours, coaches were asked the extent to which their practice integrated athletes with an intellectual impairment alongside non-disabled athletes. The majority of participants reported that they delivered integrated sessions 60% (N=166). However, 37% (N=101) of participants suggested that they delivered their coaching to athletes with intellectual impairment separately. Coaches who reported their sessions were integrated were also asked to suggest how this was undertaken. Analysis revealed that integration was achieved by numerous approaches as outlined in Table 7 below. 3% (N=8) of participants did not answer this question.

Table 7. Methods of Integration used by Participants

<i>Methods in Integration used by Participants</i>	
Athletes can invite peers / family to sessions	Unified Sport
Athletes with and without impairment train together in the same session	Athletes with an impairments are partnered with an athlete without (referred to as support athletes or unified partners)
Specific inclusive activities	Link with local schools, colleges and community clubs
Training according to age and ability	During games, there are athletes with and without impairments participating

Irrespective of whether the sessions were integrated or delivered separately, coaches reported taking into account a number of athlete characteristics as they adjusted their training sessions. The key characteristics as reported in figure 20 were skill level 26% (N=72), age and skills level 10% (N=28) impairment 10% (N=27) followed by age and impairment 6% (N=17).

Participants make adjustments based on a variety of factors such as age, skill level, impairment and gender. Figure 19 represents the factors that participants base their adjustments on.

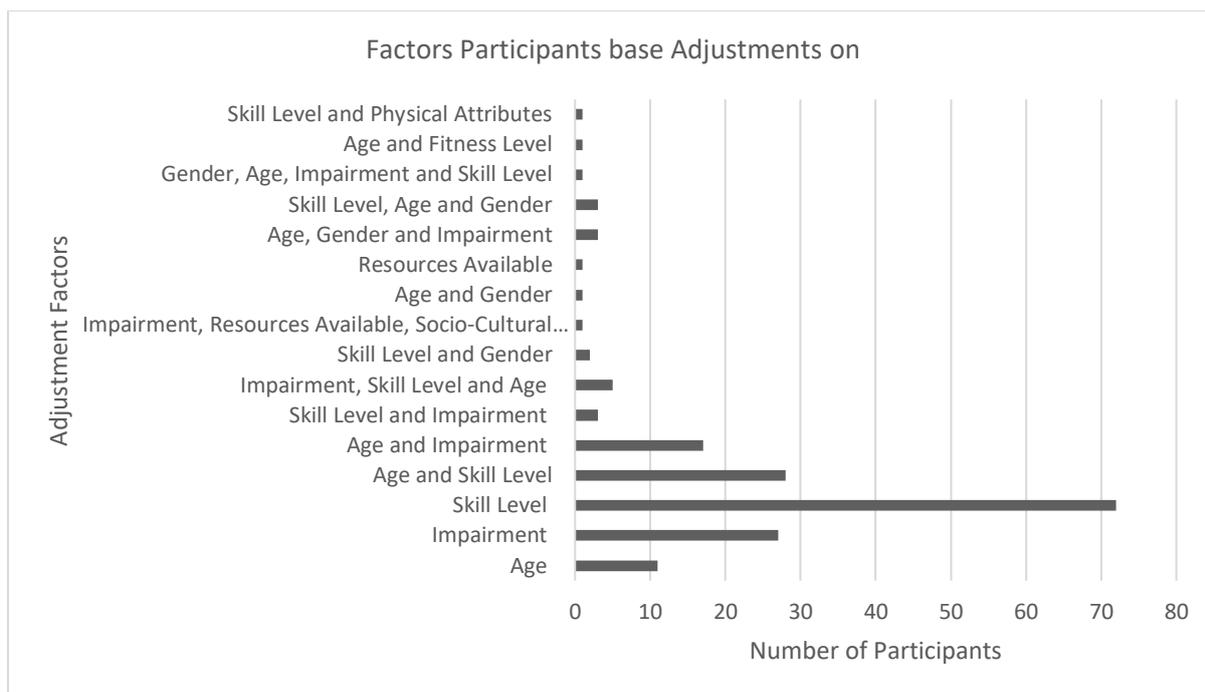


Figure 20. Factors of which participants base adjustments to coaching sessions on

4.1.10 Athletes

It is vital to understand the athletes of whom coaches are working with in order to offer the most effective support so coaches can meet the needs of their groups. Participants coached a variety of age groups, the youngest ages 6 to 12 and the eldest 50+. The majority of participants coaches multiple 60% (N=165) or all 22.0% (N=63) age groups. The most common individual age group coached was 6 to 12 years 7.6% (N=21). Refer to Table 8 for further details. The number of athletes that attending training sessions varies between participants from 1 to 200 athletes.

Table 8. Age groups coached by participants of the survey

Age Groups	Frequency	Percentage
6 – 12 years	21	7.6
13 – 15 years	6	2.2
15 – 18 years	4	1.5
19 – 21 years	3	1.1
22 – 29 years	9	3.3
30 – 50 years	2	0.7
50 + years	1	0.4
Multiple Age Groups	165	60.0
All Age Groups	63	22.9
Not Stated	1	0.4
Total	275	100.00

In addition to age, coaches must also have knowledge of their athletes' impairment/s. Figure 21 shows 78% (N=214) of participants coached a group of athletes with a range of intellectual impairments* (e.g. Down Syndrome, Autism, Fragile X Syndrome), whilst 13% (N=35) of participants coached a group of athletes with intellectual and physical impairments. 2% (N=6) of participants coached athletes with only

Down Syndrome and 1% (N=3) of participants coach athletes only with Autism. 6% (N=17) did not answer this question. Table 9 represents the impairment groups most frequently reported by coaches.

*Specifically, just over half of the participants 57% (N=156), reported coaching athletes with Down Syndrome, 46% (N=127) coached athletes with autism, 5% (N=15) coached athletes with Cerebral Palsy and a further 5% (N=13) coached athletes with Fragile X Syndrome.

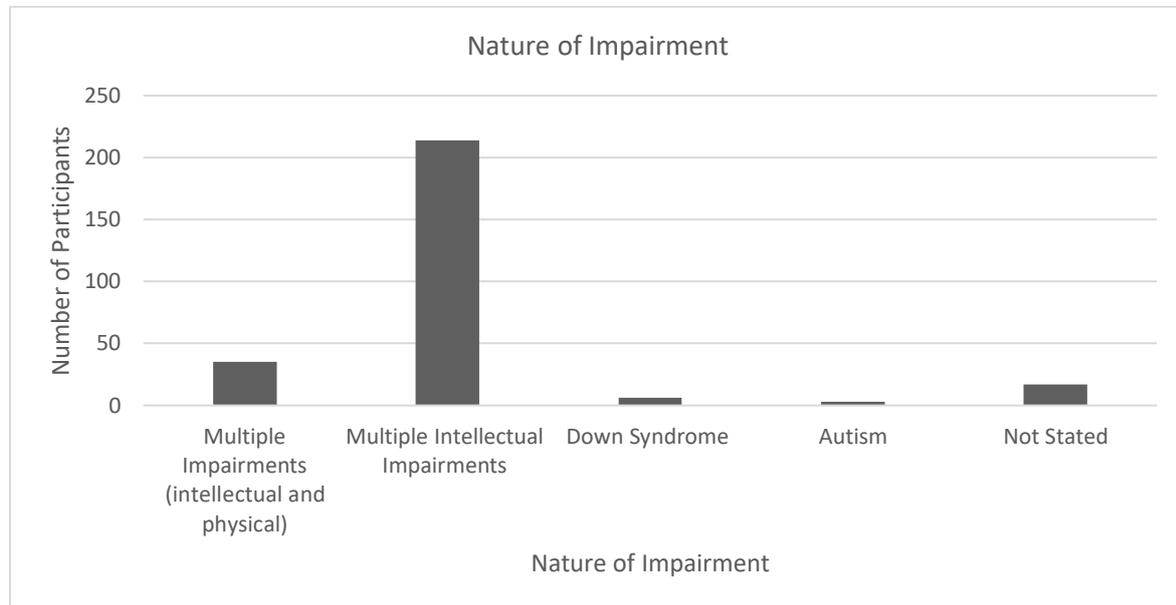


Figure 21. Nature of Athletes Impairments

Table 9. Impairments that appear together most frequently.

Combination of Intellectual Impairments	Number of Participants that Coach a Group Including Athletes with these Impairments
Autism, Down Syndrome, Other ID	61
Down Syndrome, Other ID	24
Down Syndrome, Autism	16
Autism, Other ID	8
Autism, Down Syndrome, Fragile X Syndrome, Other ID	7
Cerebral Palsy, Down Syndrome, Autism, Other ID	7

It is also important to consider if athletes have more than one impairment. 38% (N=105) of participants reported coaching athletes with more than one impairment, whilst 62% (N=170) did not coach athletes or did not answer the question. Table 10 highlights the combination of impairments where athletes have more than one.

Table 10. Combination of Impairments where Athletes have more than One

Combination of Impairments	
• Intellectual and hearing impairments	• Intellectual and unspecified impairments
• Intellectual and motor impairments	• Intellectual impairment and scoliosis
• Intellectual impairment and short stature	• Intellectual and visual impairment
• Intellectual impairment and quadriplegia	• Intellectual and developmental impairments
• Intellectual impairment and Spina Bifida	• Intellectual impairment and paraplegia
• Intellectual and speech impairments	• Multiple intellectual impairments

Level of athletes

Figure 22 highlights the different domains in which participants coach. 35% (n=96) of participants coached athletes in the community domain, 8% (N=21) coached in the talent domain and 6% (N=16) coached in the high-performance domain. The majority of participants coached athletes across multiple domains, 47% (N=130). 4% (N=12) of participants did not answer this question.

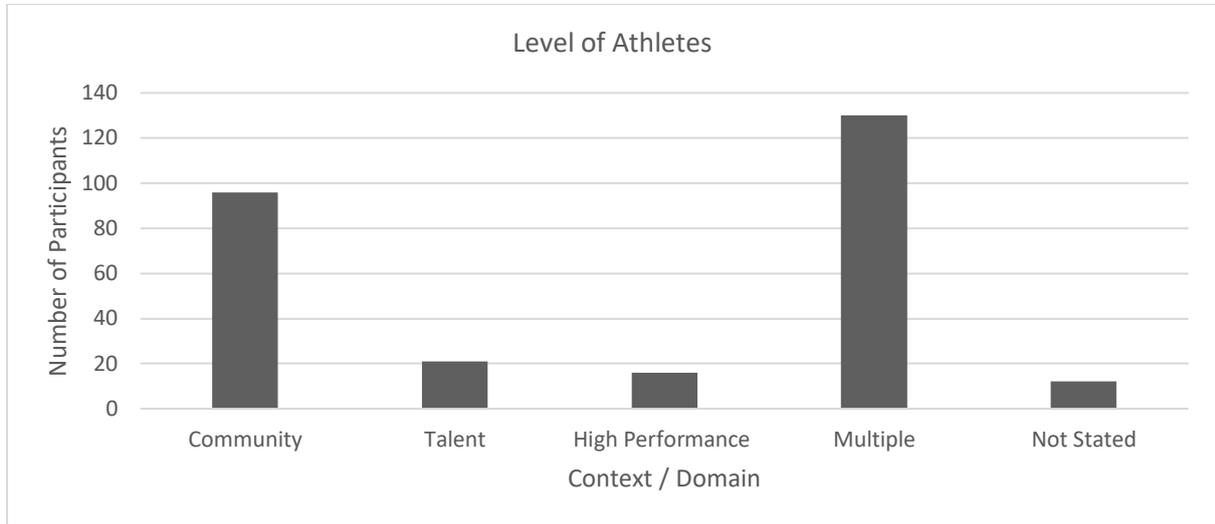


Figure 22. Domains in which participants coach

4.1.11 Assistance

Assistive Technology

The majority of participants 57% (N=156) stated their athletes do not use assistive technology, with 12% (N=33) not answering the question. However, 31% (N=86) of participants highlighted that either one or more of their athlete require assistive technology. Figure 23 outlines the types of assistive technology used by athletes. The most common type of assistive technology used by athletes was wheelchairs, with 17% (N=47) of participants reporting this, followed by hearing aids 8% (21).

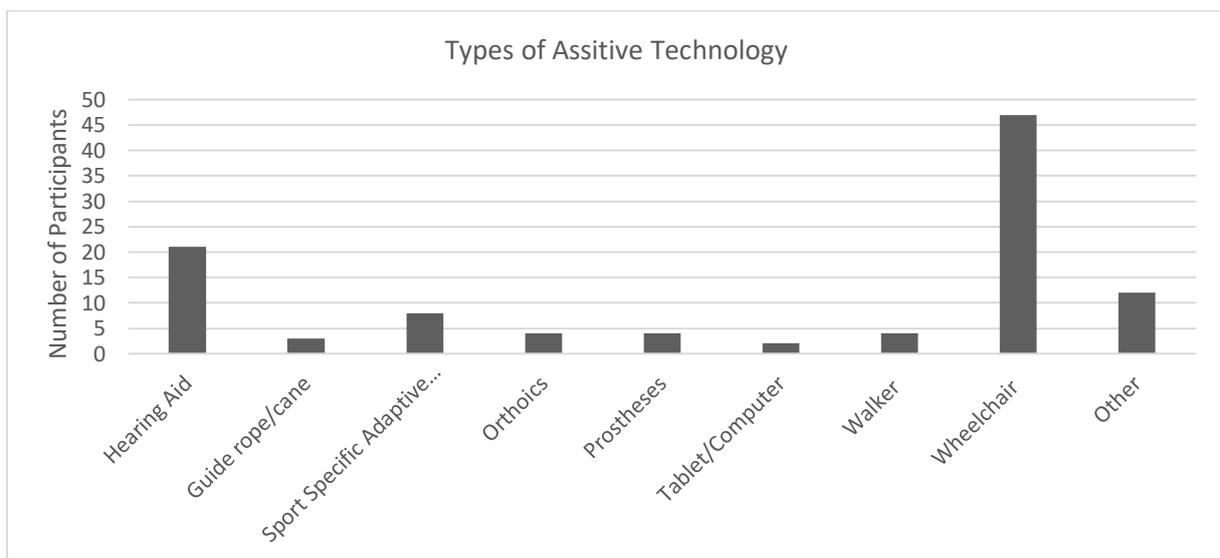


Figure 23.. Types of Assistive Technology used by Athletes

Additional Support

36% (N=98) of participants stated their athletes require additional support or assistance. This includes: carers, 1-to-1 coaching, visual or audio support, sign language, volunteers, parental supervision, help with personal care and help with wheelchairs. 51% (N=141) of participants stated their athletes do not require additional assistance, 13% (N=36) of participants did not provide an answer.

Participants were also asked if their athletes required additional assistance or modifications when travelling and using accommodation. 46% (N=127) of participants stated they did not, 20% (N=55) did not answer, whilst 34% (N=93) of participants stated their athletes do need this type of assistance. There were various forms of additional assistance/modifications required, relating to: carers, guides, supervision, wheelchair access, help with medication and sign language.

4.1.12 Summary of Survey Data

This section has provided detailed findings from the workforce audit. Specifically; demographic information, coaching role, employment status and income, education, training and qualifications, continuous professional development, mentoring, desired knowledge, coaching practice, athletes and assistance. The following section will provide an overview of qualitative findings taken from follow-up interviews.

4.2 Analysis of Qualitative Interviews

Upon completion of the workforce survey, twenty-one follow-up interviews were conducted with coaches representing twenty-one countries. Participants coached a variety of sports, worked with multiple age groups and had differing employment statuses. On completion of the analysis process, five categories were identified: contextual considerations, understanding the coach, coaches learning and development, practice design and implementation as well as competition and divisioning. These categories will now be elaborated upon.

4.2.1 Contextual Considerations

Coaching, coaches, and athletes are situated in different contexts, each with specific and unique cultural and social norms, expectations and understanding. This section presents the contextual influences on coaches understanding and knowledge of disability and impairment. Additionally, the cultural and societal barriers coaches face will also be identified.

Knowing Disability

Consisting of social, psychological, biological, political, and historical dimensions, disability is a highly contested term within the coaching literature (Townsend et al, 2015). That being said, understanding disability and impairment within the sporting field is vital for coaches if they are to effectively meet the needs of their athlete and provide meaningful experiences. Analysis of interview data revealed the socially constructed nature of disability:

I think I kind of define it as a different ability (Participant 9)

it's just a different way of doing something, right, so they have a different way of processing, they might have a different way of learning (Participant 16)

different abilities and that's kind of how I look at it (Participant 17)

it's a different person, for me, I learn that...they are only different, they think slow but they can think, they do in a different time but they can do it so it's not really a great difference for me now (Participant 3)

Evident in the above quotes' coaches perceived disability to be 'different' and these differences related to athlete's 'ability', to 'learn' and 'process' at a 'slower' pace. However, for some coaches' disability was also considered a 'condition' as expressed by participant 2, "*I would say it's a condition that someone has*" and further elaborated by within the following excerpt:

Some kind of condition...that is not standard, not usual, for an individual or group...physical impairment, cognitive, sensory (Participant 1)

Indeed, a number of participants, as demonstrated by the above interview response, highlighted that athlete's 'condition' or 'disability' was different from the norm for an individual or group. However, whilst some coaches were keen to highlight these differences others felt the need to nullify difference, as exemplified by the following quotes:

We all have disabilities you know (Participant 11)

I would say everybody is disabled in some way, everybody, even me (Participant 14)

Here these interview responses continued to illuminate the ways coaches made sense of disability based on the experiences they had coaching and interacting with the athletes with ID. It appeared that coaches did not have a universal understanding and consequently either recognised or nullified difference. The challenge is adopting both positions without question could have unintended consequences for the experiences of their athletes.

Knowing Impairment

Much like the term disability, impairment is also complex and evoked various responses from coaches. For example, participant 2 suggested, "*It's something that makes it difficult for a person with a condition to do something*", whilst others described impairment as a 'limitation', as alluded to in the following excerpts:

Only a limitation...to develop some activity (Participant 3)

It's by being some limitation or limitation of their life (Participant 7)

Contrastingly, two participants explained that they believed everyone has a form of impairment, as demonstrated in the following quotes:

We all have an impairment somewhere, some it's more obvious, some it's less obvious (Participant 8)

Everybody has something that they are impaired with" (Participant 20)

In addition to the varied understandings, some participants drew negative connotations from the term impairment. For example, participant 16 stated "*It's interesting, we don't really talk about impairment*" with participant 17 explaining, "*I have a hard time cos I look at each individual person and don't group them, so that's a hard term for me*". This is further exemplified in the following quotes:

Automatically my mind thinks of it [impairment] as a negative connotation whereas disability I don't (Participant 16)

I don't like to focus on impairment or disability, for me, people are people (Participant 20)

Discourse related to everyone being disabled or having an impairment, denotes that we are all the same, that all athletes are the same. A number of participants shared this view, some even comparing their Special Olympics athletes to able-bodied athletes, for example participant 11 stated "*I see them as individuals and not different from others*". This is further demonstrated in the below excerpts:

Personally, I view them as a normal child, as any other participant (Participant 10)

I see them as any other child, they are not, they are not that special, they are just like any other kids (Participant 2)

I would view my athletes like any other athlete. They need to be respected, they work hard for it and they work hard for what they've got. So I would view them as able, very able and capable people (Participant 20)

They're normal people, they just got a few challenges to work with (Participant 8)

So nobody gets treated differently. Everybody gets, goes through the same paces, gets, given the same tasks, given the same responsibilities (Participant 20)

Like coaches understanding of disability, impairment also evoked a range of responses as they attempted to make sense of their subjectivities. In other words, impairment could be viewed as a practical reality that impacts an athlete's function, be thought of as having negative associations or like disability be nullified. To nullify impairment, coaches either considered everyone to be impaired, pushed it to the background or adopted athlete first language.

This section has provided an overview of participants' understanding of disability and impairment. These findings reflect the complex and often subjective nature of what can be considered biological and social phenomena. Left unchecked these differing perceptions/interpretations, may negatively and positively impact upon coaching practice and athletes' experiences.

Cultural and Societal Barriers Facing Athletes with Intellectual Disability

The global representation of participants in this study identified various cultural and societal barriers they experienced in sport. For instance, stigma associated with having an intellectual disability appeared to be a societal barrier that coaches were keen to identify; "In my country, people with intellectual disability are seen as an outcast in society, they're not supposed to go to school, they are not supposed to get into sports" (Participant 2). This stigmatisation is further exemplified in the following excerpts:

Some people are trying to avoid Special Olympics because they are special needs kids and because they don't know how to communicate with them and get in touch with them (Participant 1)

In my country, we still have stigmatisation and we are advocating for the stop of some of that, advocating for people to stop the stigmatisation of people with disabilities and advocating for people to stop the discrimination against persons with disabilities (Participant 6)

I'd say because most of the time I am coaching people who have been told most of the time, unfortunately, have been told that they're not good enough (Participant 11)

Not only was sigma associated with cultural values, it also had some real effects on coaches ability to provide practice and their need to consider the safety of their athletes. For example, several coaches highlighted that funding, facilities and equipment were not readily available to support athletes' access to sport.

Unfortunately, our athletes don't have proper equipment... We don't have facilities... We are not Government funded, we are not supported by the Government. We have very few, very limited financial resources and budgets (Participant 18)

Trainers, racquets, shuttlecocks, these things that are needed for the athletes... sports equipment and sports wears would go a long way in motivating our athletes and supporting our coaching training sessions (Participant 6)

Equipment is extremely expensive so we, but we adapt, we use cricket pads and we use, soccer shin pads... as much as we can and we use broomsticks ... adapt it and make it as, you know, accessible to everybody but I find that hockey's just like any other sport, when you start off you can start off very cheap, you know, you just need a broomstick and a puck but as the athletes develop and you know, when you're looking at competitions and provincials and that, then there's mandatory items that they must have" (Participant 20)

Here, we demonstrated a number of societal and cultural barriers discussed by participants, which is an important factor to highlight given the international nature of this research.

We always, 'as soon as you get home, phone me' or 'as soon as you get home send me a What's App so I know that you guys are safe', you know, it's that concern. The transport is a concern. That's my biggest worry (Participant 20)

4.2.2 Understanding the Coach

Understanding the coach is vital if we are to effectively support them in meeting the needs of and developing their athletes. The following section will explore coaching philosophy, values and beliefs, coaching characteristics and coaching knowledge.

Coaching Philosophy, Values and Beliefs

Coaching philosophy is considered to be an influencing factor on coaches' practice (Cushion & Partington, 2016). However, coaching philosophy is also a contested phenomenon and includes coaches' subjective experiences, values and beliefs. That said, through exploring coaches' perceptions of coaching philosophy, values and beliefs, we can also begin to understand the nature and values associated with the social context. Therefore, it was unsurprising that analysis of interview data revealed an array of individual and shared interpretations and appreciations relating to coaching in this context.

Most participants alluded to having a personal philosophy of lifelong learning and continued development, with participant 13 stating "*you must learn day by day*". This is further depicted in the following excerpts:

"I always wanna learn... I can't imagine not, if I'm not learning I'd be bored"
(Participant 9)

“the most important thing is the motivation to always learn more and to be better in this field” (Participant 1)

“there is always something new to learn about...something developing, ...it’s an ongoing learning experience”(Participant 11)

Indeed, one of the primary considerations coaches expressed was the need to provide inclusive opportunities to participate in sport, as exemplified in the following coaches excerpts:

That’s one of the most important part of my philosophy, you know, the empathy, the inclusion, the same opportunities to all (Participant 15)

My coaching philosophy is accepting and understanding the kids with intellectual disability, giving them an opportunity in society because they can always, they can also make a difference in society. So giving them opportunities, that’s my philosophy (Participant 2)

My coaching philosophy is to provide maximum level of participation to my athletes in an inclusive environment (Participant 10)

In addition to providing inclusive opportunities for disabled athletes, several coaches were keen to express the importance of valuing close friendships with their athletes, as expressed by participant 1 “*to be a good friend for them*” and participant 18 “*a coach should be a very good friend of the athlete*”. Furthermore, participant 14 went further by suggesting that friendship had replaced the ‘coach athlete’ relationship, “*there’s a friendship, it’s not a coach athlete situation anymore, it’s more like friendship*”. This is further elaborated in the following interview excerpt:

Me being there for them once they are in trouble or maybe they have issues at home, me getting to give them, to deal with their issues and train to come up with a solution for them. I think it’s quite important, er, because they see me as, they see me as a step parent. So being there for them, being, listening to them (Participant 2)

As well as discussing the importance of friendships with their athletes, some participants referred to their athlete as family:

“I am a good team member with my kids...I will go out and eat with them, I will take them somewhere...I go to the birthdays, I will go to their funerals if they have” (Participant 14)

“Like my own kids...I teach 40-50 kids with special needs every week and I never get tired of them... I always say I prefer to have 10 kids with special needs rather than 1 without any needs. So I see them as my own” (Participant 14)

“I see my athletes as family, because, like I say, you know, I get to know them” (Participant 9)

Moreover, in keeping with positive youth development, providing fun and enjoyable experiences appeared to be a hallmark of the ‘coach athlete relationship’ or ‘friendships’. For instance, participant 11 suggested that, “*What is most important is that they enjoy it, they enjoy, that it’s fun*”. This similar view of foregrounding enjoyment was also evident in this more detailed interview response:

If my athlete is enjoying my training programme I achieve and if he or she is not enjoying my training programme everything is useless (Participant 18)

Whilst fun and enjoyment was consistent across coaches' interviews, for some, this also included references to performance outcomes. For example, a number of coaches suggested that winning and having fun were important features of their coaching philosophy, as exemplified by the following quotes:

The most important thing is enjoyment because if they enjoy competition and it's technically good and we are second or third because somebody was faster we need to go back home and practice and come next time and beat the others because without, without joy, without passion, we cannot compete (Participant 13)

Not just about fun but to compete and to win...they should have the winning mindset, that has been my philosophy (Participant 6)

In addition, in keeping with athlete-centred coaching, some coaches expressed a value for developing athletes holistically (Cassidy et al, 2014). Indeed, participant 10 suggested a desire to "*nurture them [athletes] holistically*", whilst participant 14 reported their role was to "*improve their way of life, their lifestyle, their way of thinking, adding sport or physical activity in their lives*". Appreciating a holistic approach to coaching, and recognising the importance of sport in fostering life skills was exemplified by the following interview responses:

At the end of the day that's what we're doing, we're building confidence because I do think that, like, it translates into other parts of life, you know, the skills and the ability that they learn through sports translates into other things, listening to adults, listening to people who aren't your parents, respecting other people that, you know, if you're playing against, it all comes out in life (Participant 16)

Sport transcends everything, it, it's just such a big part I think of life and if you can learn through sports and be a good team mate, to always give 100%, to try new things to better yourself, to encourage others, to be a good team mate, that's got to count towards everything you do in life, from your family, your relationships, your job, from your schooling, just from everything. (Participant 9)

I want to help our athletes to believe that they are capable, they have something to give to the world and they are important human beings who positively impact the people around them (Participant 11)

Of interest, holistic coaching is a cornerstone of Special Olympics values, to which a number of coaches made reference to, as an influential factor in the development of their own coaching philosophy. For example, participant 18 suggested that as a result of coaching within Special Olympics positively impacted their beliefs, "*it transforms our lives, my thinking perception, my way of living, all things are now changed*". For participant 5 coaching experience resulted in being "*more respectful with the differences [disabled participants] and being more patient*". Indeed, such was a positive impact of coaching in this context, that one coach integrated the values of Special Olympics directly within their broader coaching practice, as suggested by the follow response:

I have managed to...adapt the Special Olympics philosophy into my general philosophy and even with the 'normal kids' I use a lot of the Special Olympics philosophy (Participant 14)

In addition to embodying the philosophy of Special Olympics through experience, coaches were also able to associate the development of their coaching philosophy to prior experiences with coaches (Carless & Douglas, 2011). For some coaches their coaching philosophy was shaped by a need to counter negative experiences of coaching, which included shouting, punishment and being overtly competitive, as alluded to by the following quotes:

“I remember when I was young I had a coach, he used to yell at us [laugh], that was something I really didn't like. He was so competitive, and I remember saying to myself that if, one day, I will be a coach that is something I will never do and, erm, I think that is something that always motivate me” (Participant 11)

“I knew some things that I can do better than him because he was like very strict coach, he often did ... punishments and like if you do something wrong you had to do, like, 100 push ups or, like, etc but and I always, I always thought 'okay, I think I could do better, I could get the team more involved and to get, like, more of a friendly environment” (Participant 1)

“I would say I have...had the experience of coaching from a very young age, both positive and negative coaching, I had, I have seen both positive and negative role models, I always, I catch myself, even today when I coach and I'm, like, I have to shout and my mind goes back to 24 years ago, saying 'oh, I sound like this coach who used to coach me then'. So, it all adds up” (Participant 14)

In contrast, for other coaches, their philosophy was shaped by positive experiences with coaches relating to creating welcoming environments, social support and positive encouragement.

If I look back there was one coach, very early in my coaching...he created a nice atmosphere for us to come in which was welcoming and a lot of counselling, off the pitch, making sure that we stayed on track...and that would be something I try to do with my athletes today” (Participant 21)

I think my mom, my mom was a horse coach, basically a riding coach and a lot of that, I think, was her philosophy too, erm, she wanted us to enjoy what we were doing and we did show and if we won great, if we didn't win that was okay too. We were expected to have a good experience and to enjoy it, erm, and I guess maybe that's where it [coaching philosophy] comes from, (participant 8)

However, in keeping with the subjective nature of coaching philosophy, analysis of one coaches' excerpt revealed the influence of wider cultural norms. Here participant 14 perceived authoritarian coaching practice to be enjoyable and also effective, and in doing so replicated this approach within his practice:

I had a [country] coach, he was tough. He was strict, he was demanding, even though I was 14-15 years old, he treated me like a 25 year old and I loved his style... having this you need to stand on the line to coach and all this, I love this. So I catch myself doing the same things with the young [participants] saying “line up, stand there, do that”... So, yeah, it has affected my teaching a lot and coaching.

In summary, this section has illuminated how coaching philosophy was influenced by coaches' experiences in and through sport. This resulted in the appreciation of individual and shared understandings of how coaching is constructed within the context of Special Olympics sport. Here coaches valued inclusive practice, friendships, fun and enjoyment and a focus developing the athlete as a whole.

Coach Characteristics

To further understand the key values that are attributed to coaching in this context, participants described a range of personal characteristics they felt were of vital importance. It is important to note that whilst coaches may describe certain characteristics, these may be difficult to observe in practice. Nevertheless, demonstrating a desire and passion to coach athletes with a disability was commonplace amongst participants' responses:

First, you need to love what you do, you need to be very passionate (Participant 5)

The first thing is that you must be a coach because you want to be there. You must be a coach because you really want to coach our athletes. I think if it's just a job that was given to you you're not passionate about it and then you don't bring out the best in the athletes (Participant 20)

Having the passion to be there every day, to handle situations as they progress and then having the compassion to understand where your athletes are coming from, their frustration (Participant 17)

In addition to having a passion for coaching in this context, coaches reported having patience to be of significant value, as suggested by participants 18 "*the only thing required is patience*" and 5 "*patience is extremely important to be a coach in the Special Olympics*". With participant 10 providing an explanation as to why patience is needed: "[As a] *Special Olympics coach you need to have patience because not all athletes are alike*".

Furthermore, given that characteristics often describe the nature of a person or personality, it was unsurprising that coaches expressed interrelated descriptions of what it takes to be Special Olympics.

"Adaptability, patience, communication, empathy, these are the skills that will be very much important for Special Olympic coaches and not to be afraid to also challenge the athlete and push them to try and achieve more than what they can" (Participant 21)

"A good attitude, erm, empathy, erm, we need coaches with big smile and with a big soul" (Participant 15)

"I think you need to have a sense of humour, you need to know how to have fun" (Participant 9)

"I think [a coach] must be a motivator, have empathy whilst being a good listener and also let me say any good attitude, must have a good attitude towards the athletes too" (Participant 6)

Evident within these interview excerpts, coaches' characteristics included the need to be adaptable, to have empathy, to have a good sense of humour and a positive attitude towards

athletes. Taken together, these coaching ideals continue to evidence the relational and developmental focus required within this unique context.

Coaches Knowledge

Exploring coaching knowledge is a key feature in understanding the coaching process and how this meets the needs of the context and athletes. Here knowledge can be divided into professional, interpersonal and intrapersonal (Gilbert & Côté, 2013). Therefore, when analysing coaches' responses, the aim was to identify the key areas of knowledge that were valued under the headings set out by Gilbert and Côté, (2013).

Professional knowledge provided was considered by coaches to be a cornerstone of the coaching processes exemplified by participant 6 "*I should have knowledge of the sport*" and participant 13 "*You must be good in your sport*". Additionally, participant 8 in highlighting that "*it helps to have some individual knowledge of the sport*" lamented that her lack of sport specific knowledge could have been detrimental to her athletes:

I realised there was a whole lot of basics that she should have been getting to get to the level that she was at that we never did. So that was frustrating, and I think if ...she had had a real gymnastics coach she'd have done better or she'd have been able to do better

Within the context of Special Olympics, professional knowledge extended to include the need to understand the nature of athletes' disabilities, medication and effect on practice (see section 5.2.4). In doing so, coaches appeared to acknowledge the diverse individual needs of athletes as exemplified within the following coaches' excerpts:

There's understanding, you know, the difference between their diagnoses, so someone who is autistic handles a situation and even a sensation, the texture of a ball very differently than someone who has Downs Syndrome. So understanding that context as well as their diagnosis (Participant 17)

Disabilities, that is very important, disabilities and even then, apart from being knowledgeable about the disability of the person, even how to implement and plan and adapt techniques ... to people with ID (Participant 11)

I think medically there's a few things that you need to be aware of anyway because some athletes, I mean, typically a lot of our athletes are on medication (Participant 4)

It is important for Special Olympics coach to, to understand the athletes because sometimes it's hard for them to follow the instructions so it's important to, be really familiar with the athletes (Participant 12)

Importantly, areas of knowledge are interrelated which meant that some coaches reported both professional and interpersonal knowledge as holding value. For instance, participants 20 and 21 highlighted the importance of knowing the sport and your athletes:

You've [got to] have both, you've [got to] have knowledge about the sport but you also have to have knowledge about the athletes because you must be able to know that today this athlete is not in a good space (Participant 20)

The first thing is to have a good knowledge based on their own sport that they are involved in and the second thing is to have a knowledge of how children, er, respond to coaches in Special Olympics (Participant 21)

Furthermore, several other participants were keen to consider athletes backgrounds and acknowledge how life outside of sport might impact their coaching process

I'm thinking the knowledge that's most beneficial is understanding the different aspects of athletes, different components of where they come from in their daily lives and different ways of addressing athletes (Participant 17)

The background of the child as well, where that child is from and what interest they have in (Participant 10)

Finally, in some case coaches were able to identify an ability to reflect which is related to intrapersonal knowledge, as exemplified in the following quotes:

I reflect on my sessions and see how my sessions, especially when I'm working with my special athletes and how was it, has the session benefited every single person there, have they come in there and have I been able to make sure that every one of them were able to achieve something of meaning in the session? (Participant 21)

I would like to gain knowledge on how to, how to get the society to understand more on people with intellectual disabilities (Participant 2)

This section has demonstrated the multifaceted nature of knowledge needed by coaches in order to be successful in their roles and to provide quality and meaningful experiences to all participants. The following section will explore how coaches acquire and develop this knowledge.

4.2.3 Coaches' Learning and Development

Understanding coach learning and development is paramount if we are to effectively support coaches in the provision of meaningful sporting experiences for athletes. This section aims to describe the developmental pathways and learning experiences that have shaped coaches' practice and knowledge.

Coaches' Biography

A coach's lived experiences will ultimately influence their coaching learning processes. Analysis of interview data revealed that the majority of participants had been involved in sport from a young age. Participants describe how sport had been part of their lives, for example participants 21 stated "*sports have been a very big part of my life*" and participant 5 described her passion "*I've always been passionate about sports*". Family involvement was an influential factor in participants taking part in sport, as demonstrated in the following quotes:

I come from quite a sporting family, my dad was a physical education teacher, erm, my brothers were very, erm, sporty, they did a lot of rugby and athletics and so, you know, it's just been part of my, you know, my whole life (Participant 20)

When I was a child, my life was full if sports activities, in my family we were always motivated to practice exercises and at least carry them out for 2 years each (Participant 15)

Although many participant had grown up being surrounded by a family heavily involved in sport, participant 19 described her involvement began through school and with the encouragement of her teachers:

When I was younger I played virtually anything that I was allowed to play so, erm, you know, people started saying ‘were your parents involved?’ but neither of my parents, erm, were involved in sport. My mother played a bit of sport when she was younger but not really organised sport and my father played a little bit at school but again not organised sport at all. So when I started, I started in primary school and I was lucky to have teachers who were interested in it and got me interested in it (Participant 19)

Indeed, all of the participants partook in some form of organised sport during their childhood and time at school or college. This is in keeping with research in that coaches often use their previous athletic experience to develop their coaching knowledge. This is exemplified in the following excerpts:

I was a swimmer, so I, so growing up I always swam, I was on all the different swim teams, erm, going through grade school and high school, I did both lapped swimming and, er, synchronised swimming, erm, in high school and, erm, and through college (Participant 16)

I swam when I was in high school, erm, but I’ve always, you know, been interested in sports and, erm, you know, kind of a tom boy growing up so I, erm, you know, kind of been involved in a lot of different ways. (Participant 9)

I play football in primary school and in my high school I played badminton and table tennis (Participant 2)

When I was younger I played netball and, erm, hockey. So hockey’s been, high school hockey, university hockey, so it’s always been hockey so when the opportunity to learn about floor hockey came about it just was second nature, you know, cos I was passionate about hockey as well. (Participant 20)

Of interest, Participant 17 also stated her experience as a Unified Partner, “I’ve also played as a unified partner for Special Olympics since I was 8”.

Summary

This exploration of participants’ biographies reveals how participants can learn and be influenced through previous sporting experiences, without necessarily being fully aware that learning is taking place.

Pathway into Coaching

The following section will explore how participants began their coaching journey. Analysis of interview findings revealed idiosyncratic and serendipitous entry pathway into coaching, with the majority of participants having a connection to Special Olympics through either professional, social or familial relationships.

Professional relationships related to participants being approached to coach in Special Olympics through either school or college, where their roles were teachers or students. participant 2, a student and explained “*I got into coaching as a volunteer, I was a volunteer while on campus, so this programme about the Special Olympics, it was a project so that’s how I got, I got the opportunity of coaching*”.

Similarly, three participants who were teachers also began coaching their coaching journey through a professional relationship. This is highlighted in the following excerpts:

I got posted in specialist school in 2014 and since then I got attached to children with special needs and I like working with them...they are so interested in taking part in...and since then I with Special Olympics [country] doing coaching the athletes. (Participant 10)

I'm a teacher and I used to teach in a mainstream school, I was assigned to students with learning difficulties and one of my students who was participating had just returned from the Special Olympics World Games and this was the starting point, I loved sports and I started to ask about SO, I was approached by his parents if I wanted to help out with the Special Olympics". (Participant 11)

A professor called me because he told me that, kids laugh with me and they love me when I teach because I am a joking person so, I'm going to be a good teacher for these, different athletes. (Participant 3)

Social relationships related to participants friends and others they are socially connected to, encouraging participants to start coaching within the SO context. Participant 9 stated she, "*was asked to volunteer at a swimming pool and help handicapped people, I know from the second I got into that pool that that's what I was supposed to do for the rest of my life*". The following experts demonstrate how friends had encouraged participants to begin their SO coaching journey:

A friend who was working with the children...asked me to help in one of the trainings (Participant 1)

A friend of mine was a Special Olympics coach and he kind of roped me into helping him out and since then I just got more and more involved (Participant 4)

Familial relations involved a family member of the participants, having some form of connection with Special Olympics, be it a relative with a disability or family involvement within the context. Both examples are demonstrated in the following quotes:

I'd been a unified partner for so long that the transition to coaching was fairly simple and was an easy transition for me, so I just took on that role, that's all (Participant 17)

I was the parent that showed up at every practice with my daughter and for gymnastics the coach we had moved out of State and so in order to keep a programme going I became certified by Special Olympics (Participant 8)

Her brother, actually, has [an intellectual] disability and she was just trying to understand better how she could use the sports to, engage him more into society and, [it] was a love at first sight with this combination between sports and, children with disability by using these sports to encourage them and to make them more part of society (Participant 5)

In contrast to having a prior connection with SO and engaging with coaching in this context as a result of professional, social or familial relations, yet still in keeping with the serendipity of the pathway, one participant began coaching solely through personal desire to work within this context:

Then I went to this foundation and I went through the door and I said I want to start doing swimming for kids with special needs (Participant 14)

This section has stressed the serendipity of entry pathways to coaching in Special Olympics, yet highlights how the majority of participants have a prior connection with the context

Coach Learning

Coaching literature commonly affords coach learning to three sites with varying degrees of formality: formal, informal and non-formal (Nelson, Cushion & Potrac, 2006). The most frequently reported within interview data was informal learning, which is in keeping with wider research. Participant 9 stated *“I’ve learned so much from being around coaches”* with participant 4 highlighting *“A lot of it is through watching other coaches, learning, we learn from each other”*. A large proportion of the participants described learning from other coaches, through either observation or conversations, as depicted in the following quotes:

“Some of the coaches they are really specialised in specific sports so it’s a great approach to learn from them” (Participant 12)

“From other coaches, observe how the others coach [work] and this can provide some learning” (Participant 7)

“You gain it from other coaches, right by observing and having a conversation” (Participant 17)

“Watching other coaches work and helping them” (Participant 1)

In addition to learning from other coaches, participants reported learning from their athletes, referring to notions of athletes teaching them, as suggested by participant 17, *“I could teach them how to dribble but they’re teaching everybody how to be accepting and understanding”* and participant 20 *“I think that the athletes have taught me a lot as well”*. The following quotes exemplify learning from athletes further:

I learnt a lot from my athletes themselves, especially about their disability, how they work and what are the things they would like to get in a particular period of time (Participant 10)

I think you gain knowledge from an array of people, one obviously is your athletes (Participant 17)

Furthermore, participant 19 described learning from their athletes’ parents *“it’s vitally important that the parents are actually there because, apart from the fact that we use their skills, erm, in the drills, we actively encourage them to become part of the coaching team, erm, but also even for their knowledge of the child’s specific requirements”*. Besides learning about impairment from the athletes and their parents, participants also described reading articles in order to develop their disability knowledge, for example participant 3 explained, *“I read articles about Downs Syndrome, or different disabilities and I try to learn about what more can I do”*. Similarly, participant 6 stated they read in order to develop sport specific knowledge *“by reading books, you know, books on specific sports”*.

Sport specific knowledge is a vital component needed to be an effective coach and to provide meaningful sporting experiences. Participants described using *“the internet to do research”* (Participant 2) and using online resources such as *YouTube* as a learning platform, enabling them to develop specific sporting knowledge. For instance participant 8 stated, *“I think the YouTube type thing have been quite*

helpful”, with partner 12 agreeing “search on YouTube to see the sports skill demonstration videos”. Furthermore, one participant stated, “*The internet is your friend and looking to see, there’s no reason to recreate the wheel if something out there exists*”.

This section highlights the vast network of people and resources that coaches use to learn and develop their knowledge and practice. In keeping with literature is the commonality of learning through informal means, often a resulting factor of the lack of disability specific coach education available.

Desired Coach Knowledge

Participants were also asked what knowledge they like to develop further in order to provide the most effective support for their athletes. Many of the participants expressed their desire to develop more in-depth sport specific knowledge, relating to the specific nature and techniques of their sport/s. In addition, participants highlighted the importance of developing their impairment specific knowledge and the impact on practice:

I would still like to get more knowledge and more information on a specific disability of the child (Participant 10)

I need more information about disability and impairment (Participant 15)

I think more information about training and disabilities (Participant 3)

People’s disabilities are and physically what they can do and what you can expect of them (Participant 20)

As well as knowledge regarding impairments, a number of participants explained the yearning for more knowledge relating to coaching techniques and theory:

I need training on how to train and the coaching theories (Participant 2)

I would still like to, learn more about coaching techniques (Participant 20)

I want to learn more with new training models. I want to learn more, techniques (Participant 18)

Another area of knowledge participants reported wanting to further develop, was effective planning, as depicted in the following quotes:

I still strive to try to find a really great lesson plan or coaching plan” (Participant 16)

How to develop the plans, the coaching plans (Participant 1)

In contrast to practice knowledge, another area that participants emphasized as wanting to develop relate to various sport science discipline such as nutrition, maturation, injury prevention and physical development:

Biological changes... male athletes 14-16 year and girls 12-15 years, this is the most, crucial part for our athletes. We normally, don’t address these things. In our country this is a taboo to discuss about biological things so these things are avoided but I think, as a female, as a mother now, as a coach now I must, understand my athletes especially their biological changes and their mood swings (Participant 18)

more conditioning of athletes, you know, techniques of, developing skills, working on certain muscles to be able to do certain things better...it's something like bio-kinetics (Participant 20)

4.2.4 Practice Design and Implementation

Practice design and implementation relates to both how the participants coach and outlines what their training sessions look like in relation to how they plan sessions, structure the coaching environment, and take into consideration any adaptations they may need to make in order to meet the needs of their athletes and inclusive practice. The aforementioned factors will be explored within this section.

Session Planning

Session planning is a vital component of being an effective coach and aiding your athletes in achieving their goals and reaching their full sporting potential. When describing their planning process, participants reported several different factors, including the number of athletes that will be attending, their ability level, their age, impairments that the athletes have and competition schedule. For example, participant 7 said, *“based on the students’ age, ability”*, whereas participant 14 stated, *“I plan my practices depending on their competitions”*. See additional illustrative quotes below:

Assess their skill level that will help me planning the training session for them (Participant 6)

The first thing we need to know is the number of participants you are conducting the training for and the type of disability they have (Participant 10)

I make a plan for according to the levels, the abilities (Participant 5)

However, participant 20 described how they tend not to plan, *“To be honest with you, when we do it, on the day...I don’t really have a specific sort of ‘this week I’m gonna do this and this and this”*.

Practice Structure

When asked about practice structure, the majority of coaches described a similar pattern to their sessions, including a warmup, sport specific elements, a game, ending with a cool down. See below excerpts:

“We start with warm up exercise and then after warm up exercise to stretching and then specific sports training, for different skills instructions. After skill instruction then we go to practice game and then cool down exercise” (Participant 6)

“First it starts with warming up...then it’s the, the know how hitting the ball of playing badminton and then,...the movement, the steps and then...the competition, so it allows the athletes to really play badminton and, , during the competition and yes, they review the, review their competition and show what the athlete should improve and then, finally is the cooling down” (Participant 12)

“So basically it’s are these three main parts of sessions, warm-up, stretching and then the exercise routines that are repeated during the session time sessions” (Participant 5)

In addition to the basic structure of sessions, six of the participants discussed their sessions having a social element. A number of participants explained the routines they follow at the start of sessions, sometimes including clapping and singing:

“once we arrive, we get to do warm ups by running around, jogging on the spot, then afterwards we get to sing songs, get to give [the athletes] roles by them participating in singing songs” (Participant 2)

“We start with the routines, how we say ‘hi’ to each other, [say] the slogans, so first of all we start our practice with that, some kind of clapping” (Participant 1)

“We always start out practices with reintroducing each other and then telling some interesting fact. It takes time but it’s also helpful because it’s a social component for our individuals” (Participant 17)

“The first thing we do...is greetings ‘hi everybody, oh I saw something you did on Facebook’, you know, chit chat, very informal ‘hi, hi, hi, I love you’ types of things” (Participant 9)

Participant 11 explained she has an end of session routine with here athletes where the discuss topics such as nutrition:

“at the end of the session, circle time, stretches and we will discuss then what we are going to eat back home, what we’re going to eat before, how many, how much water we should drink during the day and that is practically what’s, educating even when it comes to food and leading a healthy lifestyle” (Participant 11)

Coaching Environment

Creating a safe and encouraging environment for athletes to participate in sport is crucial if they are to have positive and meaningful experiences. The environment of which a coach creates (Bailey, Cope & Pearce, 2013) will affect an athletes’ motivation for continued participation, which can be of great benefit to athletes, socially, physically and psychologically. When discussing the coaching environment, two key aspects of safety and positivity were highlighted by participants, as can be seen in the following interview quotes:

“What is most important is that they enjoy it, they enjoy, that it’s fun, that they feel that the environment where they are practicing the sports, it’s a safe environment” (Participant 11)

“You’ve gotta be safe. I’m all about safety. I always wanna make sure I have the shepherd’s hook within arm’s reach wherever I’m at so that I can do that.” (Participant 9)

“At each practice we want to be sure that something positive happened” (Participant 8)

“When the people [athletes] is happy around me, when the people is positive I, I’m so comfortable with them so I think that is important” (Participant 3)

Impairment Effect, Differentiation and Adaptation

Impairment effect is the resulting impact that an impairment may have on a person and their functioning. It is therefore a responsibility of the coach to adapt their practice, if necessary to meet the needs of each individual athlete.

Throughout the interviews, participants alluded to how they change their practice to meet the individual needs of their athletes. However, they specifically were asked how they adapt their coaching sessions in relation to equipment, coaching style as well as rules and complexity of training and games. In relation to equipment, the majority of participants explained that they have to make adaptations in order for their athletes to participate in the sport, based on age, impairment and ability. This is demonstrated in the following interview quotes:

“For example in athletics, rubber javelin, is used with SO athletes just to safeguard our athletes. We also use a modified balls for football and for other activities as well. We always focus on the safety of the child first and we modify equipment accordingly, according to the level of the athlete” (Participant 10)

“One in particular is basketball, dribbling a basketball a lot of times, the texture of the ball can affect them, okay, the density of the ball can affect them, the ball is heavier, obviously, you push down hard and it comes up. Well a lot of my guys don’t have those motor skills developed, so we use balloons, I’ll blow up a balloon and teach them that, just in the repetitiveness using a balloon to where we start to transition to...actual sporting equipment and the basketball” (Participant 17)

“for example, if you are having a special athlete who is coming in and let’s say it’s a combination of cerebral palsy and also intellectual disability and [they are] not able to shoot a ball upwards and they want to be [play] basketball how are we going to modify that? So I’m going to be able to set a basket up in front of a bin and give her the ball and ask them to just try it and push the ball down towards a bin and just chuck it into the bin” (Participant 21)

“For bocce we have different equipment for, different ages, right, so the younger kids, or if they don’t have any ability that they use smaller bocce ball sets, for bowling, we have ramps” (Participant 16)

Whilst most participants had to make changes to their equipment, one participant 14 stated they make no changes to the equipment they use:

No because, erm, I’ve taught them from very young ages that this is a pool buoy, this is a kick board and these are your things that we will use at the swim centre (Participant 14)

In addition to making changes to equipment in order to suit athletes, some participants explained the changes they make to their coaching practice in order to meet athlete needs. This is exemplified in the following excerpts:

“So we definitely have to change the complete way of teaching, from how we teach the others [able-bodied athletes]” (Participant 21)

“Sometimes [the athletes] have problems with communicating or some kind of problems with mental health or learning...from the one who has only some movement issues and physical disability and the other who has, like, great motor

skills but some kind of problems communicating. So I really have to change the style and adapt” (Participant 1)

“I think the most important thing is to try and get, as I say, to understand them. So, erm, it’s the tone at which you talk, erm, quite often is, how you organise it” (Participant 19)

Contrastingly, participant 16 felt there was no need adapt her coaching practice and that she treats all of her athletes the same, “*I have the same, for all of them, so I’d like to think that that helps them. I mean, I hear it from parents that they appreciate how I’m, you know, kind of consistent and I’ve seen the results so I don’t change my coaching styles for them. I mean, I might adapt to their individual needs or something, right, in order to teach something but my expectations and my procedures of everything is the same*”.

Despite some participants making only slight or no changes to their coaching practice, the quotes below demonstrate the effect coaching athletes with an impairment can have on practice:

“I think it’s very important, especially with, with people with special needs, they have to have, like, erm, routines” (Participant 1)

“If we have autistic rider you must, you must work him much more different than, like, the Downs Syndrome rider, then when just Downs Syndrome rider in the arena they are, er, there must be 10 people around the arena involved but if you have autistic you cannot have that 10 people in the arena, you must, er, you must think about the disability, about the rider and, er, so you change your practice” (Participant 13)

“the biggest thing you have to be very careful is those kids who are not able to do things by themselves” (Participant 2)

Inclusive Practice

In this context, inclusive practice refers to athletes with an intellectual impairment training and competing together with athlete without disabilities. One method of inclusive practice that is unique to SO is the concept of Unified Partners. This involves pairing an SO athlete with an athlete without an impairment. When asked about inclusive sessions, the majority of participants stated that this is something they do.

“This is where the mainstream athletes and Special Olympics athletes come together. We also have teams that are unified teams, say for example if we have a 7 a side football team we can have four athletes with disabilities and 3 athletes without disabilities” (Participant 10)

“yes, even if we have a small group not in partners, for example, groups of four and you have two and two” (Participant 11)

“Yeah, because we decided to, this is the best form to ensure, er, empathy and inclusion, work together with or without disabilities, you know. So, er, we receive kids between 3 and 9 years and they work all the time together and the most important thing here is to not only the disability kids learn, you know, the kids

without any disability learn together with the other kids and are a social group” (Participant 15)

“I also coach part of the hockey team, we have able bodied athletes playing with the other disabled athletes as well.” (Participant 20)

Although not referred to by all participants as unified partners, many expressed the effectiveness of having able-bodied athletes partner with their athletes partner with their Special Olympics athletes during training sessions.

“We also bring in unified partners from mainstream schools and we partner them up with our special athletes and we can always train and participate together in any tournament that’s coming up” (Participant 10)

“So they’re an added benefit and resource to use because I don’t like to tell my athletes I have eyes in the back of my head but they’re actually my partners’ eyes, for me, the athletes don’t know that yet and I don’t plan on ever divulging that but they’re around in the middle of everything. So having their input is valuable in a sense I could never describe” (Participant 17)

“it’s important for the other ones [able bodied athletes] as well who are volunteering or, like siblings of, of children with needs, just to see that they’re not that different and the communicating and being and playing with them is not that difficult and like you shouldn’t try to avoid it” (Participant 1)

“I make them realise that these are athletes, they are partners and as you can, yes, there is ability in what they are doing and they join us and be part of what we are doing” (Participant 6)

Indeed, Unified Partners play a valuable role within the coaching practice, but some participants also described the involvement of parents in their coaching practice and how often they are vital. This is demonstrated in the following quotes:

“[Parents play] a very important role. Erm, we have some kids, that require some assistance while training. So we have, like, 3 kids that, that parents should always be here, in touch, to also participate in, like, the training and practices so it’s very important role and also...we’re going to, like, trips and the parents always are coming and when they’re active, kids, all of them, kids, also tries to be more active and engaged” (Participant 1)

4.2.5 Competition and Divisioning

Central to the mission of Special Olympics is the provision of opportunity for people with an intellectual disability to develop through participation in sport training and competition.

Competition v Development

Aligning with the values and philosophy of Special Olympics, the majority of coaches viewed competition as an opportunity for athletes to develop rather than placing emphasis on results and winning. This is exemplified by the following excerpts:

I guess one of the things in Special Olympics that we really look at is trying to improve, cos we have athletes from all different levels, from developmental level, erm, in all those sports up to very high performance. So, erm, we try to take a look at where athletes are when they start and try to get them to progress and improve throughout their sports season and because we see them for years and years on end, hopefully they're improving in that time span too (Participant 4)

With us in Special Olympics we don't really look into the medals, winning is not everything for us. As long as the child participates and as long as they are happy (Participant 10)

I think I tell my athlete to try their best, that is the, it is very important. So we not producing in, yeah, the competition of games so I will tell my athletes 'try your best, any time, try your best, I want you to try your best but if you don't get a medal that's fine because we is pleased with the games, that's enough so don't worry, just try your best (Participant 12)

I speak with them that it's not the most important thing to win every time. Sometimes it's, like, more important to learn (Participant 1)

In contrast to both other participants and the values and philosophy of Special Olympics, one participant described their desire to win and get results:

I'm also results orientated, it's not just about doing it, it's about getting the results (Participant 6)

Divisioning

Specific to the context of Special Olympics competition, is the process of divisioning. Divisioning categorises athletes into equitable divisions based on their skill level, age and gender. Participants were asked about divisioning within Special Olympics, specifically their knowledge and experience of the system, what factors do they feel is prioritised and if they feel the system could be improved.

The majority of participants had some experience with divisioning, but it could be argued that their understanding of how the system works varies. Participant 8 stated, "so I'm not too sure how that all works. Like I say, I've never really consciously thought of that area" whilst two other participants even describe the divisioning process as 'voodoo':

I don't know all the voodoo that they do behind the scenes with all the divisioning (Participant 16)

Well the formula for divisioning is some voodoo [both laughing] magic (Participant 4)

Interviews revealed participants had mixed opinions of the division process and its effectiveness. They offered varying opinions of whether or not the system could be improved, which is exemplified in the following excerpts:

Just I think we can improve the divisioning and in some sport we can maybe in some competition we can use this, er, divisioning after (Participant 13)

There is a division but it's not effective enough, if you ask me because you have to do with mental, er, mental disability, you can't really, er, you can't really be based on questionnaires and level of perception and all this (Participant 14)

So I think, like, the division system, divisioning system works pretty good (Participant 1)

So for me this is great, you know, because this is important for every athlete in the world to have the opportunity to compete, you know and this is great (Participant 15)

4.3 Summary

In this section, we have detailed the findings from both the workforce audit and follow-up interviews. The data in this report encompasses findings from coaches across the globe, working within the context of Special Olympics. The next section will provide a discussion of these findings intertwined with literature in order to provide a deeper understanding of coaches and coaching within Special Olympics.

5.0 COMMENTARY ON THE KEY FINDINGS

The purpose of this research was to explore the demographics of the Special Olympics coaching workforce. This included an exploration of their learning; in particular their education, developmental characteristics, gaps in knowledge as well as presenting initial insights into coaching practices. To do so, a two-phased research designed (e.g., online survey followed by semi-structured interviews with a representative sample) was employed and generated both quantitative and qualitative data. Therefore, this commentary will review the key themes identified through the analysis of the data. These themes are aligned to a coaching process considered to be a social phenomenon that is guided principally by the articulation between the coach, athlete and context. Importantly, this commentary will inform the development of the Coaching Developmental Sports eLearning course.

5.1 Special Olympics Coaching as a blended profession

There is increasing global awareness that coaches play a pivotal role not only in the lives of athletes but also in transmitting social virtues relating to how people with disability access and experience sport (Huntley et al., 2019; Special Olympics, 2021). Given the importance of coaching, it is vital to understand the nature of the workforce to best support their education, learning and development. Analysis of the survey data revealed that coaches within SO were positioned across a range of coaching roles (e.g., head or senior coach - 43%; coach – 32% and assistant coach - 7%) positions. However, given the various contexts coaches operate within across the globe these values are to be taken with some caution. The workforce also consisted of full (16%), part-time (7%), sessional (8%) and volunteer (59%) coaches. Despite the predominance of volunteer coaches in the community sport domain, the majority of the workforce could be regarded as being highly educated with 43% holding a minimum of an undergraduate degree. Here, three assumptions may help explain the higher level of educational attainment of this workforce. Firstly, there may be a need for coaches to have a minimal level of education to coach within some countries (e.g., some Latin American Countries). Secondly, coaches with an identified specific interest in coaching athletes with intellectual disability early on (e.g., transitioning from athlete to coach) may have sought out degree programmes that provide specialist knowledge and an associated career path (e.g., teaching adaptive physical activity). Finally, coaches without sport related degrees – as well as coaches with degrees – may be representative of the middle class in society, who have time and financial resource to support voluntary work in this context. However, it is important to recognise that whilst having a well-educated coaching workforce is desirable, greater consistency is needed to ensure that a minimum qualification standard exists at the entry level to encourage more volunteers to take up coaching in SO sport.

Surprisingly, there was a dearth of disabled coaches who participated in this study and this may indicate the dominance of non-disabled people influencing this specific context. While there is evidence to suggest that sporting structures (e.g., schools and sports clubs) have complied with social model requirements to provide access for people with ID in sport (Townsend et al, 2015), this is yet to explicitly translate to coaches with ID transitioning into coaching roles. As such, the SO context may be missing out on valuable athlete experiences and knowledge (Douglas et al., 2018), and thus warrants further exploration. On a more positive note, and in contrast to some wider coaching research (e.g., Haan & Norman, 2020), analysis of survey data revealed a gender balance between male and female coaches (49% alike). This equal gender representation maybe attributed to SO sport being associated with a care for the development of disabled people through sport, rather than having an elite sport focus.

The diverse coaching population presented in this section and operating across the athlete pathway could be considered a ‘blended profession’ (Duffy et al., (2011). In conceptualising SO coaching as a ‘blended profession’, the report moves on by considering the different mediators that influence the formation of this unique workforce and associated practices. In doing so, it is important to recognise that the blended profession of SO coaches may not fit with traditional models of professional identity (e.g. teaching or medicine) but still requires recognition and investment at all levels (Duffy et al., 2011; North et al., 2019).

5.2 Coaches’ biographies and Serendipitous encounters with disability

Analysis of coaches’ interview data highlighted the role that family play in mediating early positive sporting experiences. Indeed, learning theorist Jarvis (2009) argued that it is during these early life experiences that ‘values’ – in this case a joy of sport – are internalised and often remain a lifelong habit. Therefore, it was unsurprising that the majority of coaches in this study had pursued sport participation as a part of their development with 54 % having competed at national level or above. Thus, the coaching workforce reflected a group that were socialised in and through sport as athletes, and in so doing were in position to take a step into coaching. This is a trend reflected in the broader literature in parasport coaching (e.g. Duarte & Culver, 2014; McMaster et al., 2012). However, despite their previous experiences in sport, coaches’ entry into SO coaching happened serendipitously – for the most part - in line with other sport coaching research (e.g. Cregan et al, 2007; McMaster et al, 2012). Meaning that for most coaches entry into SO and coaching was not a planned process but facilitated through social relationships within the family (e.g., child or sibling with ID), workspace (e.g., teaching) or school / club / university programme (e.g., volunteering opportunities). After stepping into SO sport, the results highlighted that these coaches were committed long term to coaching athletes with ID (11 years on average) with 69% having coached longer than 5 years. A challenge however, is the attrition of coaches and lack of ‘succession plan’ for many SO programmes that rely on long term commitment from their coaches (Townsend and Peacham, 2021). As such, the serendipitous entry into coaching SO athletes suggest a coherent developmental pathway does not exist and consequently may constrain coaches’ desire to make SO coaching a direct career choice. As such, the SO sport context maybe undervalued by some coaches, sporting agencies and sport funding bodies. Hence, validating the need to understand the workforce further and to continually promote SO coaching as a blended profession with learning support (e.g. coach education, mentors, and CPD) being made available and aligned accordingly along the coach development pathway.

5.3 Coach education, learning and knowledge acquisition

Nelson, Cushion and Potrac (2006) suggested that coaches learn through engaging with three different sites, considered as *formal*, *nonformal* and *informal*. As such, the combination of coaches’ biographies and time spent accessing knowledge and gaining experience within these sites means that there are no such things as one kind of learner, one way to learn or one setting in which learning takes place (Kilgore, 2001). Instead, each site serves a function which researchers suggest both facilitates and to a certain extent constrains knowledge acquisition and its application in practice (Cushion, 2011). Within this study, 58% of coaches held a recognised *formal* coaching qualification in their respective countries, whilst 37% reported not holding a *formal* qualification. The range of qualifications varied across several levels (e.g., level 1 (4%), level 2 (8%), level 3 (10%) and level 4 (5%). However, given that various qualification frameworks exist across differing national contexts, it is difficult to assume these levels of

CE attainment are associated with a standardisation of coaches' knowledge (Mallett, Trudel & Rynne, 2009). Furthermore, coaches reported the vast majority of *formal* coach education courses were designed for 'mainstream' (i.e. able-bodied) sport, meaning they included limited (if any) content specific to coaching athletes with ID. This is indicative of a broader issue identified in disability sport research where general coach education programmes tend to overlook issues related to disability (e.g. Fairhurst et al, 2017; McMaster et al, 2012; Townsend et al, 2017b, 2021). This may help explain why coach education is often portrayed as individually, contextually and practically irrelevant (McMaster, et al., 2012; Tawse et al., 2012; Douglas et al., 2018) for coaches in disability sport. However, surprisingly, for this sample of coaches, 39% still viewed formal coach education to provide the most effective site of knowledge acquisition. That said, the number of non-certified coaches operating across SO highlights the need for a global regulatory body and coaching framework to help create a more encompassing coach education curriculum that is infused with disability (Townsend et al., 2021).

The lack of specific formal coach education relating to coaching SO athletes meant that participants in this study relied on an array of resources and contexts to learn and develop their coaching knowledge. Here, *non-formal* sites of learning – those that fall outside of formal coach education – provided additional learning support. For instance, since starting to coach 69% of coaches had accessed CPD opportunities, of which 63% of the cohort attended one in the last 12 months. These nonformal opportunities included workshops and training courses (60% of coaches), online learning (42% of coaches) and conferences (41% of coaches). However, how many of these CPD specifically related to coaching within the context of SO is unclear. Indeed, only 34% of coaches suggested that courses relating to disability were available in their country (e.g., SO education, Paralympic courses, and University courses) which may help explain why only 50% of coaches received any training related to coaching athletes with intellectual impairment. It is important to note, this figure may differ in certain national and regional contexts and in some cases constrain the knowledge of coaches (39% reported no engagement with specific CPD). This lack of CPD opportunities continues to reflect disability sport as an under resourced learning landscape (Cregan et al., 2007; McMaster, et al., 2012; Duarte & Culver, 2014). Furthermore, it is important to note at this juncture that whilst non-formal learning sites are often valued for their subject specificity, whether such sites impact coach learning is questionable (Townsend et al., 2017b, 2021). As such, given the diverse contexts coaches are situated in it may be useful to audit CPD courses specific to coaching in SO and develop a range of opportunities that suits the needs of coaches. Here interactive online courses and connected communities may prove beneficial.

As reflected in the literature, coaches also reported learning through *informal* sites (Duarte & Culver, 2014; Douglas et al 2018, McMaster et al, 2012; Taylor et al, 2014; Townsend et al, 2021). Informal learning refers to knowledge that is acquired through life experiences (Coombs & Ahmed, 1974), where engagement in coaching practice forms a tacit framework for knowledge, the development of which often goes unnoticed (Cushion et al, 2010). Consistent with MacDonald, Beck, Erickson and Côté's (2016) study in SO, analysis of this study's coaching cohort identified that coaches valued learning through their practice and more experienced coaches. However, like the broader para coach literature which highlights the lack of mentoring opportunities for coaches (Duarte & Culver, 2014; Fairhurst et al, 2017), only 42% of coaches in this study reported they had received any form of mentoring from other coaches. This despite research emphasising the positive benefits of mentoring (e.g., Douglas et al, 2018; Fairhurst et al, 2017; MacDonald et al, 2016), such as developing training plans (Taylor et al, 2014), enhancing coaching knowledge (Duarte & Culver, 2014) and increasing self-confidence (Douglas et al, 2018). Therefore, developing coach mentoring programmes could be beneficial for coaches in this context.

Learning from the athlete (Carter & Bloom, 2009) was also reported as being an important source of knowledge, especially with reference to the nature of impairment effects on practice (Cregan et al., 2007; McMaster, et al., 2012; Tawse et al., 2012; Wareham, et al., 2017). Similarly, parents were also viewed as valuable sources of knowledge about how to effectively adapt to the athlete's disability. Here it is evident that *informal* sites of learning are valued for their focus on 'practice' – that is learning effective adaptive approaches to coaching athletes with ID. However, within the disability coaching literature (e.g., Townsend et al., 2018), *informal* sites of learning are critiqued for simply reproducing instrumental knowledge about the technical / tactical aspects of the sport without considering historical and sociocultural inequalities or how power is played out in the coach-athlete relationship. Consequently, without effective coach education and development, coaches may be socialised into valuing knowledge about the sport whilst leaving implicit views about disability unchecked. This is important, because fear and stigma associated with the 'disabled population' are often the drivers for their exclusion from sport. Henceforth, there is a need to support coaches, athletes, and parents in becoming more aware about the ways social norms about disability may impact and be enforced within sporting practice. To do so, would also require an informed and effective coach development workforce (Huntley, 2020).

According to Côté and Gilbert (2009), the integration and application of *intrapersonal* (self-awareness), *interpersonal* (relationship with others) and *professional* (sport specific) knowledge defines effective coaching. Consistent with *interpersonal* knowledge, analysis data suggested that coaches were aware of their need to continually 'learn' and develop personal skills such as, 'empathy', 'patience' and 'creativity' (Culver & Werthner, 2018; Hanrahan, 2015; Patatas, De Bosscher & Legg, 2018), to effectively meet the needs of athletes with ID. Furthermore, these coaches were also able to identify gaps in their knowledge. Under the umbrella of *interpersonal* knowledge, being able to understand and communicate effectively with their athletes was considered vital to developing more effective coaching. Coaches also described the need to establish close relationships with their athletes, with some going further, describing their relationship with athletes as a 'friendship'. The overarching sense that coaches valued and desired close relationships with athletes may be symptomatic of the developmental focus that typifies SO sport programmes.

Coaches in this study also identified limitations in their *professional* knowledge. These limitations centred on disability specific knowledge (Fairhurst et al., 2017) resulting from the disruptive nature of 'impairment' (Townsend et al., 2015) and the various effects it had on coaching athletes with ID. For instance, coaches were keen to learn more about the characteristics associated with particular types of impairments, in order to get a better understanding of "what they can do and what you can expect of them" (participant 20). Furthermore, additional areas of *professional* knowledge discussed were how to develop more effective coaching practice, how to teach technical development, how to plan coaching sessions and the sport science and developmental considerations needed to support their athletes with ID. This range of knowledge gaps further supports the notion of a diverse coaching workforce that requires a range of development and educational support. That said, the positive attitude towards learning and knowledge acquisition demonstrates a workforce that cares about the inclusion and development of their athletes. However, in supporting this workforce (and respective athletes), whilst respecting the disruptive nature of 'impairment' to coaches' knowledge (*intrapersonal*, *interpersonal* and *professional*), it is important to mention that the inclusion of understanding 'disability' will ensure that coaches and agencies also work towards the removal of social barriers to sport.

Cote and Gilbert (2009) also acknowledged the application of knowledge needs to be context specific. In considering context, Cushion and Lyle (2017) suggest that performance outcomes – a

measure of coaching effectiveness – may be impacted by the availability of ‘resources’ or lack thereof, which in this case is clearly the lack of coach education, mentoring and CPD opportunities for coaches. Furthermore, this lack of a coherent educational pathway for coaches may explain why coaching in SO is not viewed as a career or vocational choice. Thus, their needs to be progress towards the professionalization of SO sport coaching, and coaches must be supported by ‘the state’ as a ‘central driver of coaching change’ (North, 2019, p. 14). Indeed, several participants within this sample referred to the lack of financial support framing their coaching context. Consequently, coaches may know what knowledge they need to be effective but are constrained by the context in which they operate. As such making educational resources freely available could provide more coaches with access to key knowledge thereby improving practice for athletes with ID.

5.4 Disability and coach philosophy

Coaching in Special Olympics is shaped by social norms and values that are inherent within coaches’ *tacit* knowledge. Here *tacit* knowledge refers to the often unnoticed, unexplained, and unexplainable nature of coaches’ intuitive responses that are influenced through experiences in differing contexts (Cushion & Partington, 2014). Therefore, exploring coaches’ *tacit* knowledge can provide explanations as to why coaches place values on certain beliefs, behaviours, and actions. Given that ‘disabled’ people have been historically marginalised from society and sporting opportunities, how coaches - as gatekeepers to coaching opportunities in this social context - understanding disability is of importance (Townsend et al., 2018). As such, understanding the collective “values, beliefs, assumptions, attitudes, principles and priorities” that comprise coaches’ philosophies in SO may provide a detailed understanding of the ideas that influence their coaching practice (Lyle & Cushion, p. 235; Cushion & Partington, 2014).

Exploring coaches’ understanding of ‘coaching philosophy’ was not an explicit focus of this research, that said, some coaches were able to describe philosophical beliefs perceived to shape their practice experiences. The analysis suggested some coaches expressed the need to adopt a ‘person’ or ‘athlete’ centred approach – a discourse often reported as empowering within the literature (Cushion et al., 2021), which in this case, included making sessions inclusive and fun, and in two cases this extended to help athletes develop a sense of worth in society. However, in contrast, one coach was keen to emphasise the importance of winning being part of their coaching philosophy. This view also contradicts the findings of Cybulski et al (2016), with participants in their study expressing that winning was not meant to be the focus of SO sport. This means that coaching philosophy is largely subjective and may require more exploration. That said, several participants discussed how their own coaching philosophy was influenced by the philosophy associated with Special Olympics, and in this case, was clearly exemplified by one coach’s who stated that they their philosophy included how to be “more respectful with the differences...and developing potential” (Participant 5). Consequently, it may be worth considering how coaches may develop their coaching philosophy to reflect the values that are desired within SO sport.

In keeping with the Para coach literature subjective and societal views about disability and impairment were apparent within this study (Townsend et al., 2018). Of significance, some coaches reported that in their culture, people with ID were still stigmatised (Hassan, Dowling, McConkey and Menke, 2012), as exemplified by participant two’s interview excerpt “people with ID are seen as an outcast in society”. Additionally, another coach was keen to highlight how it was unsafe for athletes with ID to travel alone on public transport in their country. These explicit negative cultural views and behaviours go against the United Nations Policy on the inclusion of disabled people in society and the values of SO. However, the social model of disability points to more subtle barriers that people with disability face. Indeed, several participants in this coaching cohort felt it important to identify that delivering effective coaching to athletes with ID was constrained by a lack of government funding and

support, and a lack of facilities and equipment. Thus, it appears that coaches are confronted with some of the barriers that disable people with impairment and therefore, need support in tackling such barriers. Doing so will ensure that people with ID have full access to quality sporting opportunities.

Understanding disability is crucial for any practitioners committed to working within an inclusive agenda (Townsend et al., 2015). One way of explaining disability is using the social relational model (SRM) (Thomas, 1999, 2007). The SRM emphasises the constructed nature of disability, while recognising the direct, everyday impacts of impairment on individuals. In the absence of effective coach education and learning support, coaches in this study found describing disability and impairment a challenge. For instance, many coaches defined disability according to “difference”, specifically difference in athletes’ ‘ability’ and how they ‘learn’ and ‘process’ information. Within the SRM, consideration of ‘impairment effect’ is crucial for acknowledging that intellectual impairments – while different – can and do require adaptations to practice environments, communication patterns and training structures. However, coaches need to be aware that to only focus on athletes’ impairment as a means to overcome disability, may align implicitly with medical model values. Medical model values are those that treat disability as a ‘problem’ or holding ‘lessor’ value when compared to ‘non-disabled’ practices’, which often leads to the exclusion of athletes with disability (Huntley, 2020, Townsend et al., 2017b). Here within the interviews of some coaches, there were attempts to depoliticise disability (e.g., we are all disabled or differently abled and they are all children or athletes), push it to the background (it’s not a focus) and in some cases reject the term because of negative associations (Cushion et al., 2021; Townsend et al., 2018). In other words, it may be argued that coaches were aware of the negative social connotation associated with the identity of ‘disability’, and in response were attempting to show value for the athletes by removing this ‘perceived negative’ identity. However, the SRM highlights that disability may be constructed in a way that reflects an ableist world. In other words, it is society that places negative associations or problematises the identities of those living with a disability. Therefore, when intellectual ‘disability’ is the defining feature of SO sport and underpinning the values of “inclusion, respect and dignity”, the question is, why do coaches feel the need to disassociate their athlete’s identity and themselves from disability? Furthermore, to adopt a ‘person centred’ approach to coaching requires coaches to embrace and value all aspects of an individual’s identity, not remove it. The important point here is the reliance on informal and experiential learning means that these coaches are unable to make a “social and cultural sense of disability” (Cushion et al., 2021, p. 132). Instead, coaches are simply reflecting societies’ negative associations of disability. Arguably then, there needs to be a clear focus on valuing ‘disability’ and those who live with disability (Shakespeare, 2014). To do so, the SRM, also highlights the need to understand the lived experiences of people with disability and to recognise that the ‘values’, ‘beliefs’ and ‘practices’ – philosophy – of coaches impacts athletes psychosocial and emotional wellbeing (Thomas, 2007).

In summary, considering coaching within SO sport through the perspectives of the social relational model provides a more rounded overview of disability that can help identify and overcome explicit and implicit barriers to quality sporting opportunities. For example, identifying the ‘disabling’ barriers such as a lack of access to sporting opportunities, facilities and equipment, a lack of funding and a lack of or difficulty implementing inclusive policies in mainstream sports. Additionally, Thomas (1999) draws attention to the impact of relational barriers in constructing disability. Related to SO coaching, these might include disabling stereotypes, lack of coaching knowledge about adaptations to practice, and behaviours that inhibit full inclusion of disabled people (exclusive and disabling language, inflexible or complex patterns of communication, negative attitudes towards inclusion) (Cushion et al., 2021). Finally, coaching shaped by the social relational model emphasises the need to learn from athletes, parents, support workers and coaching and support staff to understand athletes’ individual needs and to create person centred support systems. Such an approach promotes full participation and autonomy while avoiding criticisms about prescriptions for coaching based on generalised assumptions about impairment.

5.5 Practice design, competition and delivery

Planning is a central feature within the coaching process and will often vary according to the nature of coaching roles and contextual considerations (Lyle, 2010). Given we know little about the coaching process and practice of coaches within SO, this section highlights the considerations coaches undertake when planning effectively to meet the needs of athletes under their care.

Coaches in this study reported that they considered the number of participants, their ability level, age, nature of impairment and the competition schedule when planning their coaching sessions. In line with previous research (Allan et al, 2020), the importance of detailed planning and the need to provide athletes with ID clear expectations and consistency was conveyed by most coaches. However, one coach did state that they did not plan their sessions but rather reacted within the session. Nevertheless, the delivery of coaching sessions – warm up, sport specific skills, game and cool down, appeared to follow that of mainstream coaching. That said, additional needs of athletes with ID meant that coaches needed make adaptations to their sessions (May et al., 2019). This included using modified equipment such as moving from balloons to balls to progress that athlete's level of competency. Some coaches also were keen to highlight the importance of modifying 'able bodied' approaches, particularly, their communication to be effective. Perhaps unique to the SO context, coaches highlighted the importance of creating an engaging and positive social environment (Morgan, 2017), using singing, chanting slogans, and clapping at the start of sessions. Furthermore, creating a safe place for athletes was an important consideration within their practice sessions (Hassan & Morgan, 2015).

Inclusion and inclusive practice have long been a topic of debate within sport and sport coaching (Hayes & Killingley, 2015). With inclusive practice considered to be extremely important to the social integration of athletes with an intellectual disability in sport (Siperstein & Hardman, 2006). The survey results showed that most coaches (60% of surveyed coaches and 19 interviewed coaches) delivered integrated sessions – athletes with ID and non-disabled athletes. These integrated sessions were made possible by inviting athlete's family to practice, developing links with local networks (e.g., schools, clubs and colleges) and partnering athletes with and without impairment during training and some competitions (e.g., Unified Partners and Unified Sport programmes). These Unified programmes are at the core of SO strategy to ensure and enable, the social inclusion of athletes with ID into mainstream sport (McConkey et al, 2020). Furthermore, some participants highlighted that the inclusion of athletes with ID in sport played an important role in educating peers and those involved about ID, which in turn positively impacted the delivery of these inclusive sessions (Özer, Baran, Aktop, Nalbant, Ağlamiş & Hutzler, 2012). Therefore, it's unsurprising that a well-managed Unified sport programme can be used as a vehicle for combatting the stigmatisation of people with ID (Wilski, Nadolska, Dowling, McConkey & Hassan, 2012).

Exposing athletes with ID to competition that is age, ability and developmentally appropriate is at the cornerstone of SO sport. Therefore, with coaches familiarised with the cultural values of SO sport expressed the importance of athlete development rather than a focus on performance outcomes. This included valuing athletes enjoying their sport, trying their best and improving their abilities. However, one participant was keen to express that winning was important and sport was not "just about doing it" (Participant 6). This focus on winning was also alluded to in a much older study in SO (Dowling, McConkey & Hassan, 2011) and contrasts with the developmental views of coaches in Cybulski et al's, (2016) work. Given that only 21 coaches were interviewed in the current study, it may be prudent to explore the extent to which the differing views of competition have impact the practices of coaches and importantly their athletes.

The 'divisioning' of athletes according to 'ability' aims to create an effective and equitable competition structure for athletes with ID (McConkey, Slater, Dubois, Shellard & Smith, 2020). However, within the current study, there appeared to be some confusion around the process of 'divisioning'. Whilst coaches were aware that divisioning considers age, gender and competitive ability (SO, 2020), one participant suggested that there had been occasions where children were competing alongside adults. Furthermore, other coaches reported discrepancies between identified division descriptors and athletes' differing ability, which meant the competition was not equitable. Additionally, the divisioning of athletes in track and field – which is based on submitted performances – was not deemed sensitive enough to account for athletes running on different surfaces and the impact of competition motivation performance. Consequently, it would appear that more work is need not only to create a more robust system of divisioning but also provide coaches with clarity as to how the system works.

This discussion has endeavoured to provide a summary of key findings from both the survey and interview results that considers coaching within the unique content of SO sport. To do so, where possible, links to research (e.g., coaching and disability sport) and theory (e.g., models of disability) have been made to help locate this research beyond the confines of SO sport. Guided by the data, there is evidence to suggest that there is a lack of a clear coach development pathway and a dearth of formal education opportunities to support coach development. Consequently, coaches rely on learning through experience, practice and from more experienced others. However, whilst coaches appear to value informal learning opportunities, analysis of data suggests that coaches desire to learn more and can articulate their gaps in knowledge. That said, the overall focus on gaining professional knowledge meant that coaches were not aware of the cultural representations of disability that were implicit within their definitions of disability. However, some coaches were aware of the stigma and lack of support / resources that constrained their ability to offer athletes with ID quality coaching opportunities. At this point, it is worth highlighting that the qualitative approach adopted within the project means that these findings are not meant to be generalisable (as per quantitative studies), rather, the reader may have an affinity with the report and be able to transfer the findings to their unique context. Taken together, the findings of this report do offer some recommendations to facilitate reflection.

6.0 RECCOMENDATIONS

- Special Olympics coaching as a blended profession requires SO to support regions, sport governing bodies and agencies in charge of coach education to align education and learning according to coaches who are: in full time, part time and voluntary positions; holding differing levels of responsibility (e.g. head coach – assistant coach); and coach in and across the different domains of sport (e.g. schools, participation and elite).
- There appears to be a dearth of coaches with ID and therefore, this should be addressed and agencies responsible for the identification and development of coaches should develop specific strategies aimed at ensuring more athletes transition into coaching.
- The diverse range of national coaching qualifications held or in some cases having no qualifications, points to a need of a CE audit and development of a Special Olympics coaching framework. Doing so may provide consistency of knowledge at similar levels and geographically and provide a level of competency across the SO globally.
- Advocating for disability and SO sport to be infused within current mainstream coach education provision may increase the workforce by breaking down barriers / fears / stigma and create greater access to the provision of a more effective coaching practices for athletes with ID.
- Special Olympic sport and athletes should be supported by increased revenue streams to ensure that coaches in developing countries have the facilities and equipment to offer quality sporting opportunities.
- Creating and disseminating knowledge about delivering high quality coaching in this unique context is of vital importance in moving the field forward, therefore creating communities and networks of shared practices, developing SO coach mentors, and making resources feely available to all coaches along the sport pathway requires consideration.
- Greater communication between and within international and national agencies is required to unify the SO coaching context. As such, SO specific workshops and conferences should be created and made available for all coaches. Additionally, given that coaches require knowledge about divisioning, impairment and sport science, these conferences should integrate all aspects of the coaching process.
- Coaches should be made aware of the historical, cultural, and social perceptions of disability that have led to the marginalisation of athletes with ID from sport. This requires more than simply planning adaption to sporting provision but requiring coaches to check attitudinal barriers that inhibit their effectiveness.
- Finally, given the complexity of SO sport globally, more research is needed to explore coaches and athletes in regional and national contexts.

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