



An Appreciative Inquiry into Coaches' Perspectives on the Inclusion of Young People with Autism in Sport Clubs in Ireland

By
Kate O' Brien

Supervised by Dr. Órla Slattery, Dr. Niamh Kitching and Dr. Richard Bowles

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Abstract

Background: Young people with autism spectrum difference (ASD) engage in fewer physical activities and participate less frequently in sport than their peers. To date, research has focused on the barriers to the participation of individuals with ASD in community sport and there is a noted absence of coaches' voices in available literature.

Aim: Positioned within a social constructivist paradigm, this qualitative study aims to identify facilitators for the inclusion of young people with ASD in sport clubs.

Methods: Underpinned by the socio-ecological model, this study applied appreciative inquiry to explore coaches' perspectives and experiences regarding the inclusion of young people with ASD in their clubs. Thirteen coaches representing eight different individualised sports participated in remote semi-structured interviews. A number of inter-related factors within the club environment were generated through reflexive thematic analysis.

Findings: Current strengths were linked to the sporting context, supportive relationships, and coach qualities. The ideal inclusive club required deliberate resolution with a focus on the needs rather than labels of young people with ASD. The prospective pathway to attain this inclusive setting was noted to warrant increased education, enhanced collaborative practices and improved club organisation. Trepidation was also developed as a finding whereby coaches discussed the inclusion of young people with ASD with fear and uncertainty.

Conclusions: Results indicate that guidance on the inclusion of young people with ASD in clubs is in its infancy and warrants further education on both macro and micro levels. The implications of this study may inform policy and practice across sporting and educational psychology domains and will be of interest to a wide audience, transcending from macro-level organisations including national governing bodies of sport and disability organisations to the micro-level of sport clubs and leisure centres. The employment of appreciative inquiry which focused on positive coach and club attributes was an appropriate method of inquiry.

Key Words: autism, inclusion, coaches, sport club, appreciative inquiry

Declaration

I hereby declare that this thesis is the result of my own original research and does not contain the work of any other individual, save those identified and acknowledged in the usual way.

Signature of Candidate: Kate O'Brien

Kate O' Brien

Student Number: 18174167

Date: 19/07/2022

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Dedication

*This thesis is dedicated to coaches who use their time
to inspire and encourage the next generation.*

With particular dedication to the man who showed me the value of a good coach, who knew I'd complete this journey, while knowing he wouldn't be here to see it through. Thank you for teaching me to always finish the race, no matter how distant the finish line may seem. This is for you Dad.

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List of Abbreviations

Acronyms	Definition
ADHD	Attention deficit hyperactivity disorder
AI	Appreciative inquiry
APA	American Psychiatric Association
ASD	Autism spectrum difference
BMI	Body mass index
CIGEPS	Intergovernmental Committee for Physical Education and Sport
DES	Department of Education and Skills
DSM-5	Diagnostic and Statistical Manual of Mental Disorders-5 th Edition
EP	Educational Psychologist
EU	European Union
GAA	Gaelic Athletic Association
HSE	Health Service Executive
ICCE	International Council for Coaching Excellence
ICD-11	International Statistical Classification of Diseases and Related Health Problems-11 th Revision
IT	Institute of Technology
LSP	Local Sport Partnership
MINEPS	International Conference of Ministers and Senior Officials Responsible for Physical Education and Sport
MIC	Mary Immaculate College
MMAT	Mixed-Method Appraisal Tool
NDA	National Disability Authority
NDIS	National Disability Inclusion Strategy
NGB	National Governing Body of Sport
PA	Physical activity
PE	Physical education
PSI	Psychological Society of Ireland
SFBT	Solution Focused Brief Therapy

SEM	Socio-ecological model
SIDO	Sport Inclusion Disability Officer
UN	United Nations
UNCRPD	United Nations Convention on the Rights of Persons with Disabilities
UNESCO	United Nations Economic Scientific and Cultural Organisation
WHO	World Health Organisation
WoE	Weight of Evidence

1.0 Chapter One: Introduction to the Thesis

This chapter presents an introduction to coaches' perspectives on the inclusion of young people with autism in community sport clubs (hereafter "sport clubs" or "clubs") in the Republic of Ireland. Specifically, it outlines the language of autism and provides an overview of the research area before discussing my positionality within the topic and the effects of COVID-19 on the project. The chapter concludes with an overview of the thesis.

1.1 Language of Autism Spectrum Difference

The language pertaining to autism is an area of growing discourse with no universally accepted term (Kenny et al., 2016; Vivanti, 2020). In line with the paradigmatic shift introduced into the literature by Mary Immaculate College (MIC) researchers towards an appreciation of the neurodiversity of autism (Ring et al., 2018), the term autism spectrum "difference" (ASD) is employed throughout the thesis in place of autism spectrum "disorder." It should be noted however, that "disorder" is employed when referring to clinical diagnostic manuals and as a search term in the systematic review to ensure all relevant literature was included.

Notably, adults with a diagnosis of ASD report a preference for "identity first" language (i.e., autistic person) and the term "neurodivergent" whereas professionals/volunteers supporting individuals with ASD employ the "person first" language (i.e., person with autism; Dyck & Russell, 2020; Kenny et al., 2016). This project adopted the preferred professional reference given the position of the coaches. However, the term neurotypical is used throughout the thesis when referring to individuals without a diagnosis of ASD (Dyck & Russell, 2020).

1.2 Research Area

Despite the known benefits of physical activity (PA) to young people with ASD (Dillon et al., 2017), this population are less active and less likely to participate in structured PA settings compared with their peers (McCoy & Morgan, 2020; Ratcliff et al., 2018). Moreover, little emphasis has been placed on full inclusion within extracurricular settings (Briere & Siegle, 2008) as parents describe difficulties regarding access and opportunities to PA for their children with ASD (Nichols et al., 2019) and report being unaware of inclusive structured PA programmes (Srinivasan et al., 2014).

Furthermore, it is reported that coaches feel ill-equipped to transfer their coaching skills to work with individuals with ASD (Shields et al., 2012; Rosso, 2016) and request further education and training pertaining to supporting those with ASD (Arnell et al., 2021). To this end, there is a noted absence of the voice of the community coach in the existing literature (Duquette et al., 2016; Nichols et al., 2019). The exploration of coaches' perspectives would contribute to the growing field of inclusive sport and may help to identify future facilitators to the inclusion of individuals with ASD (Arnell et al., 2021; Shields & Synnot, 2016). Furthermore, inclusion policies will neither make significant momentum nor be applied in clubs without coaches' support (Braun et al., 2011).

Through a unique integration of the socio-ecological model (McLeroy et al., 1988) and the strengths-focused approach of appreciative inquiry (Cooperrider & Whitney, 2001), the current study invited coaches to share their insights pertaining to including young people with ASD within their clubs. Braun and Clarke's approach to reflexive thematic analysis (2022) proved instrumental in guiding the subsequent analysis and write-up.

1.3 Researcher's Positionality

This project stemmed from my own sporting and academic backgrounds both in the Republic of Ireland and the United States of America. Through personal sporting experiences in both countries, I have witnessed the merits and challenges at all levels of the continuum of sporting inclusion. Given my professional studies in the quickly evolving inclusive educational landscape in the Republic of Ireland (Faas et al., 2018; Kubiak et al., 2018), I became interested in the development of inclusive sport clubs.

The interest in the inclusion of young people with ASD in sport was borne through personal links to clubs whereby coaches discussed this growing phenomenon, namely the confusion regarding best practices. This phenomenon was further uncovered during professional clinical placements as overwhelmingly both parents and their children with ASD wished to join local clubs yet expressed uncertainty regarding most appropriate settings. These experiences encouraged me to review the existing research culminating in the identification of the current research topic. The disclosure of my pre-understanding and relationship with the phenomenon highlights any assumptions that may have impacted analysis (Creswell & Poth, 2016). Moreover, it outlines my voice as a reflexive researcher which is further reflected in my choice to write in the first person throughout the thesis to avoid depicting myself as the “objective scientist” (Braun & Clarke, 2022; Clarke, 2017 cited in 2017, p. 46). This reflexive approach is most evident in Chapter Four whilst reflecting on the overall body of work.

1.4 Conducting Research in the time of COVID-19

It is necessary to consider that the current study was conducted during the COVID-19 pandemic and accompanying restrictions (Wang et al., 2020). Research

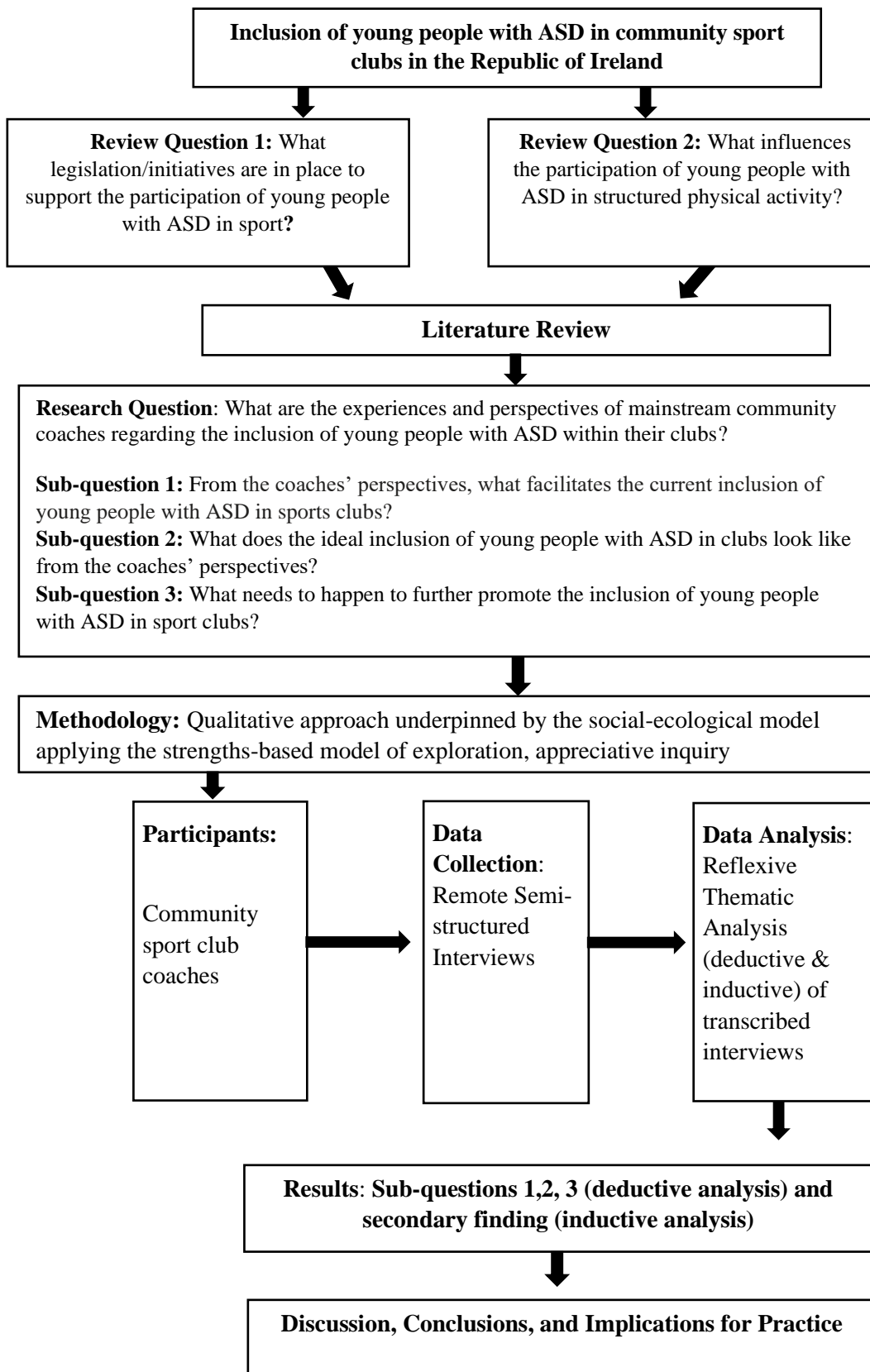
has highlighted that the pandemic has had unprecedented effects on PhD candidates (Hlongwa, 2020) and has caused a dramatic shift in the research landscape (Alam et al., 2021). Moreover, the pandemic restrictions are reported to have contributed to significant behavioural and emotional challenges for young people with ASD and their parents (Colizzi et al., 2020; Franz & Kelly, 2021; Miniarikova et al., 2021). Accordingly, in line with guidance published by the Psychological Society of Ireland (PSI), the Irish government and MIC, this research was adapted to be conducted remotely in an ethical and safe manner. The effects of COVID-19 on the current project will be further discussed in Section 4.7.

1.5 Structure of the Thesis

The thesis structure is guided by MIC recommendations and consists of three papers. The Review Paper (Chapter Two) consists of an overview of the key constructs, a review of macro sport inclusion legislation and initiatives, and a systematic review of the influences on structured PA participation in young people with ASD. The Empirical Paper (Chapter Three) consists of the methodology, results, and discussion. This applied research is then critically reflected upon in the Critical Review (Chapter Four). The thesis concludes with the impact statement which provides the significance of this research to the field of educational and child psychology. References and appendices can be found at the end of the document. Figure 1.1 overleaf provides a visual map of the research process.

Figure 1.1

Visual Map of the Research Process



2.0 Chapter Two: Review Paper

2.1 Chapter Introduction

Chapter Two considers the existing relevant literature to contextualise the current study. Key constructs are reviewed, including ASD, PA, sport clubs, coaching, and inclusion. An overview of the socio-ecological model is also provided. A two-phased review is then presented, consisting of (1) a timeline regarding macro level sport inclusion legislation and initiatives and (2) a systematic review on the influences on the participation of young people with ASD in structured PA (i.e., sport, PE and formal exercise). The chapter concludes with the current study's research questions.

2.2 Main Constructs

2.2.1 Autism Spectrum Difference

The term autism was coined in 1911 as a subset of schizophrenic symptomology (Bleuler, 1911) and became formally used in diagnosis in the 1940s (Asperger, 1944; Kanner, 1943). At that time, it was classified as consisting of unusual behaviour patterns with limited communication and was theorised to result from parental rejection (Kanner, 1949). Wing and Gould (1979) then characterised autism as subsisting of a triad of "impairments" clustering in social interaction, language, and repetitive stereotypical behaviours.

The term has changed significantly since these earlier origins and now encompasses a group of neurodevelopmental differences placed along a spectrum (American Psychiatric Association [APA], 2013; Kenny et al., 2016). The diagnostic characteristics of ASD include delayed or limited communication skills, social interaction challenges, and the presentation of restricted, repetitive behaviours (APA, 2013). In addition, individuals with ASD may also present with motor skill

difficulties (Green et al., 2009; Ozonoff et al., 2008). ASD symptomatology is heterogeneous and the severity of impact ranges from mild to very severe (APA, 2013). To date, it is regarded as a lifelong condition (Whiteley et al., 2019) with no known biological markers (Norbury & Sparks, 2013).

With regard to assessment, ASD is diagnosed by qualified clinicians based on criteria outlined within the *Diagnostic and Statistical Manual of Mental Disorders-5th Edition* (DSM-5; APA, 2013) or the *International Statistical Classification of Diseases and Related Health Problems-11th Revision* (ICD-11; World Health Organisation [WHO], 2019). Assessment is completed through an extensive developmental interview completed with caregivers (Lord et al., 1994; Wing & Gould, 1978) in conjunction with an observational evaluation that utilises semi-structured presses to elicit social and communicative behaviour. The average age of diagnosis is 55 months (Brett et al., 2016).

It is worth noting that the sex difference in ASD reports a disproportionately higher male to female prevalence (Centers for Disease Control and Prevention, 2012; Idring et al., 2015). This ratio ranges from 4.3:1 to 5.5:1 in groups within the typical IQ range (Fombonne, 2003, 2005, 2009). Strikingly, ASD symptomatology is significantly less likely to be recognised in females compared with males (Aggarwal & Angus, 2015). Relative to their male counterparts, females with ASD are described to have superior interpersonal skills (Dean et al., 2014; Hiller et al., 2014; Mandy et al., 2014), demonstrate a lower intensity of restricted and repetitive behaviours (Tillmann et al., 2018) and typically display fewer disruptive behavioural outbursts (Dworzynski et al., 2012; Honeybourne, 2015). Overall, females appear to present with compensatory behaviours to “camouflage” their autistic symptomatology

(Dean et al., 2017; Tierney et al., 2016) and therefore their diagnosis is significantly less likely to be recognised compared with males (Aggarwal & Angus, 2015).

With respect to prevalence, 1.0% to 2.64% of young people are estimated to have ASD (Abu-Akel et al., 2019; Centers for Disease Control and Prevention, 2019; Xu et al., 2018) and the most recent available national research reports that 1% of people living in the Republic of Ireland have a diagnosis of ASD (Boilson et al., 2016). Notably, the number of individuals receiving a diagnosis of ASD is increasing (Baio et, 2018; Wing & Potter, 2002) and the global prevalence of ASD is rising (Centers for Disease Control and Prevention, 2019). Many theories have been forward to explain this increase, varying from the broadening of diagnostic criteria (Fombonne, 2005) to increased awareness pertaining to ASD symptomatology amongst parents, professionals working with young people, and the wider public (Wing & Potter, 2002).

Fortunately, the discussion on ASD has moved away from the medical model towards a strengths-based focus which places an emphasis on *difference* rather than *disorder*, celebrating a child-centred approach and highlighting the dangers of over-generalisation (Dyck & Russell, 2020; Ring et al., 2018). Despite this recent shift and increased professional and societal awareness, knowledge of ASD is reported to be low and in need of improvement (Alsehem et al., 2017). Moreover, recent research from Ireland's national Autism Charity, *AsIAM*, reported that families with a child with ASD believe that the general public does not have a sufficient understanding of ASD naming this lack of understanding and judgement as one of the main barriers to inclusion (AsIAM, 2022).

2.2.2 Physical Activity

2.2.2.1 Sport, Physical Education and Formal Exercise. PA is broadly defined as any movement of the body initiated by the body which results in energy expenditure (Casperson et al., 1985, p. 126) with the Health Service Executive (HSE) further delineating this to include “sport, physical education (PE) and formal exercise” (2009, p. 10). To this end, it should be noted that the current project solely focuses on such structured PA, rather than recreational pursuits (i.e., walking, exercising at home etc.). Within such structured PA, the Sport Ireland Act (2015) further distinguishes recreational sport from competitive sport, describing recreational sport as casual PA with the aim of improving fitness, mental health and/or forming social relationships and denotes competitive sport as organised PA aiming to improve fitness and performance at competitive events.

Regular exercise increases physical fitness and can help to reduce the risk of cardiovascular and metabolic diseases (Eime et al., 2013). Moreover, an active lifestyle is credited for shaping young people’s physical, cognitive and psychosocial development (Chalkley et al., 2015; Gu et al., 2016). PA notably contributes to overall mental well-being (Department of Education and Skills [DES] & National Council for Curriculum and Assessment, 2017) and effectively mediates for anxiety and depression in young people (Blumenthal et al., 2007). To this end, sixty minutes of daily moderate to vigorous PA is recommended for young people (WHO, 2010). This importance of child participation in PA was recognised during the COVID-19 restrictions and was emphasised by government guidelines (National Educational Psychological Service, 2021). “Pods” of 15 including young people under 18 and coaches could train outdoors together during severe restrictions in November 2020 (Athletics Ireland, 2020; Government of Ireland, 2020).

2.2.2.2 PA participation in sport clubs. The benefits to PA participation in club settings have been well documented, namely for their enhancement of social belonging (Eime et al., 2013). Clubs are recognised as playing a vital role in developing social-emotional needs of young people (Department of Children and Youth Affairs, 2014) and for supporting the integration of those who may be marginalised (Doidge et al., 2020; Storr & Richards, 2022). It has further been suggested that participation in a sport club can enhance an adolescent's self-concept (Brettschneider, 2001), social competence (Howie et al., 2020) and may contribute to increased academic motivation (Gísladóttir et al., 2013). Moreover, a positive relationship with coach and peers has been linked to higher motivations to continue with sport (Riley & Smith, 2011; Rottensteiner et al., 2015). Notably, the social benefits of a club extend to typically “solitary sports” such as badminton, weightlifting etc. given the opportunities to participate with other club members and the relational and dialogic interaction with coaches (Delaney & Fahey, 2005).

Prior research has explored the social enhancement of PA in club settings for those with disabilities, noting that equal status contact and pursuit of a common sporting goal are most important towards supporting inclusion (Sullivan & Masters Glidden, 2014). Biases and discrimination towards a specific group can be decreased when contact between individuals is designed and executed in a highly structured and well-thought-out manner (i.e., as in structured club settings) and can foster feelings of acceptance and camaraderie and an acceptance of differences in individuals without a disability (Butler & Hodge, 2004; Grandisson et al., 2012). The pursuit of a common sporting goal is reported to take precedence over differences and provides a “meeting point” for individuals with disabilities and their peers who

previously had no contact with one another due to segregated education etc. (Hassan et al., 2012; Sullivan & Masters Glidden, 2014).

2.2.2.3 Physical Activity in Young People with ASD. PA offers young people with ASD additional benefits of improved motor skills and a reduction in aggressive behaviour, inattention, vocalisations and stereotypy (Bass et al., 2009; Lang et al., 2010; Pan et al., 2017; Sorensen, 2019; Vonder Hulls et al., 2006). PA additionally fosters improvements in social development and daily living skills in young people with ASD (Alaniz et al., 2017; Caputo et al., 2018). Moreover, opportunities for PA in clubs may reduce health disparities between young people with ASD and their neurotypical peers (Tyler et al., 2014). Taken together, the aforementioned studies suggest that PA participation for those with ASD may support the difficulties associated with ASD and may further enhance social belonging.

However, young people with ASD are not meeting the WHO recommended PA guidelines (Memari et al., 2015; Pan & Frey, 2006) and are less active than their neurotypical peers (McCoy & Morgan, 2020; Ratcliff et al., 2018). Young people with ASD engage in fewer physical activities (Bandini et al., 2013; McCoy & Morgan, 2020) for shorter periods of time (Anderson et al., 2004; Pan, 2008) and are less likely to participate in structured PA group settings (Hilton et al., 2008; Kasari et al., 2011). Such findings also hold true for young people with ASD in the Republic of Ireland (Healy et al., 2017). A preference for sedentary activities (Simpson et al., 2019), reduced parent-directed activities (Ratcliff et al., 2018) and social skill difficulties (Kasari et al., 2011) were associated with limited rates of PA. These lower rates of PA are concerning due to their potential to impact fitness and overall health in later years (Ratcliff et al., 2018). Understanding why young people

with ASD are less likely to participate in PA is a crucial in the context of the current research and is extensively explored in Section 2.5.

It is worth noting that both neurotypical children (aged 3-11 years) and adolescents spend more time engaged in moderate to vigorous PA compared with their peers with ASD (Bandini et al., 2013) as adolescents with ASD are actually 60% less likely to participate in PA when compared with their neurotypical counterparts (McCoy et al., 2016). Young people with ASD do follow the neurotypical trends of PA participation (Katzmarzyk et al., 2016) in that children are more active than adolescents and males are more active than females (Jones et al., 2017; Scharoun et al., 2017). However rates of PA in young people with ASD rapidly decline as they move towards adolescence which has been attributed to social demands of the nature of group and team programmes and increased interest in technology (Simpson et al., 2019).

Moreover, young people with ASD report a higher prevalence of obesity compared with their neurotypical peers (Healy et al., 2019; McCoy & Morgan, 2020) and have the highest prevalence of obesity amongst developmental disorders (Chen et al., 2010). Decreased opportunities for PA are the most cited factors contributing to these rates of obesity with authors citing difficulties with motor and social skills as limiting PA opportunities (Curtin et al., 2010; Pan & Frey, 2006). Overall, individuals with ASD are at a higher risk of earlier mortality (Bilder et al., 2013; Smith DaWalt et al., 2019).

ASD idiosyncratic symptomology and lack of parental and peer support commonly hinder the participation of young people with ASD in PA programmes (Nichols et al., 2019). Parents further describe difficulties regarding access and opportunities to PA for their children with ASD (Nichols et al., 2019) and are

unaware of inclusive structured PA programmes (Blaggrave & Colombo-Dougovito, 2019; Srinivasan et al., 2014).

2.2.3 Community Sport Clubs

A community sport club is understood as an organisation providing structured recreational or competitive PA to the community from youth to senior level (Doherty & Cuskelly, 2019; Doherty & Misener, 2008). Sport clubs are further defined as being separate entities to school and extra-curricular activities associated with school (DES, 2012) in providing affordable and accessible avenues to organised PA for young people (Cuskelly, 2004). Such clubs are recognised as promoting sport and developing competition and are referred to as the link between high performance and inclusive sport (Barnes et al., 2007). Within the Republic of Ireland, clubs are at the heart of the sporting culture with a high prevalence in the population over the life cycle (Delaney & Fahey, 2005).

As far as governance is concerned, sport clubs are part of a complex and layered system impacted by wider societal and governance structures (Sullivan et al., 2021). They have the option of affiliating with their National Governing Body of Sport (NGB) which act as umbrella organisations to manage regulations and competitions within their respective sport (Hassan et al., 2021; Mikkonen et al., 2021). Decisions made at the NGB level filter through sport clubs, impacting coach education (Sullivan et al., 2021) and opportunities for sporting participation and development (Rothwell et al., 2019) which in turn may shape club culture (Pill et al., 2021; Rasmussen et al., 2019). Within the Irish context, NGBs hold responsibility for the promotion of both recreational and elite competitive sport (Delaney & Fahey, 2005). Many NGBs exclusively support disability sport while other mainstream NGBs support the participation and inclusion of individuals with disabilities within

their clubs (Sport Ireland, 2017). For example, whilst Special Olympics Ireland is affiliated with many NGBs which are designed for individuals for disabilities (Sport Ireland, 2021c), the organisation also sets out objectives to provide tools, resources and opportunities to a wider range of mainstream NGBs which are noted within their 2021-2025 Strategic Plan (Special Olympics Ireland, 2020).

It is noteworthy that sport clubs are often non-profit or voluntary (Doherty & Misener, 2008). Within the international landscape, sport clubs consist of mostly volunteer coaches with some paid part-time/ full-time positions (Camiré et al., 2012; Duffy et al., 2011) with a high proportion of volunteers reported in clubs across the European Union (EU; Lara-Bercial et al., 2017). In the Republic of Ireland, clubs rely heavily on volunteers, with the majority of volunteers stating they are involved in community sport in order to “give back to the club” (Delaney & Fahey, 2005, p. 29). In the most recent data available, it is estimated that upwards of 15% of adults in the Republic of Ireland volunteer in sport, with reports of three volunteering coaches for every four people who regularly engage in sport (Delaney & Fahey, 2005).

2.2.4 Coaching

The role of the coach is multifaceted (Cushion, 2007). The International Council for Coaching Excellence (ICCE) define coaching as "a process of guided improvement and development in a single sport and at identifiable stages of athlete development" (2013, p. 14) which should be understood in the context of the sport, setting and participants (Lyle, 2018). Coaches are generally responsible for designing training programmes, developing participants' skills, monitoring performances and preparing for competition (Doherty & Misener, 2008). They are further instrumental in fostering social conditions for positive development in young people within sport clubs (Camiré et al., 2012; Trottier & Robitaille, 2014).

Although there are various player pathways (Dohme, 2016; Kitching & Campbell, 2019; O'Regan & Kelly, 2018), there appears to be no one comprehensive framework representing the complexity of coaching (ICCE et al., 2013; Jones & Wallace, 2005; Pill et al., 2021). Coaching philosophies vary amongst coaches and are hypothesised to develop from personal values and experiences (Super et al., 2018; Van Mullem & Brunner, 2013). Within such philosophies, coaches reflect on their coaching objectives (i.e., competitive vs recreational; Martens, 2012) and what values they hope to encourage in athletes (e.g., winning, fun etc.; Van Mullem & Brunner, 2013).

Coaches' knowledge of coaching arises from formal coaching programmes, online information, previous experiences as an athlete and from fellow coaches (Gilbert et al., 2006; Pill et al., 2021; Stoszkowski & Collins, 2014). Sport Ireland Coaching is primarily responsible for coach development in the Republic of Ireland and works closely with NGBs and the wider sector to develop coaching standards and to educate coaches (Department of Transport Tourism and Sport, 2018). There has been a recent trend towards a positive pedagogical approach in coaching, namely athlete-centred coaching (Light & Harvey, 2017, 2019; Pill, 2017) with an emphasised focus on the coach-athlete relationship (Jowett, 2017) which is evident in the Republic of Ireland (Bowles & O'Dwyer, 2020).

2.2.4.1 Role of the Coach with Young People with ASD. Coaches play a vital part in the success of athletes with additional needs through encouraging and facilitating participation (Conatser et al., 2002; Martin & Whalen, 2014). The role of the coach is even more crucial in the development of athletes with ASD given a positive coach relationship predicts young people's sport frequency and engagement with the sport (Rosso, 2016; Ryan et al., 2016) and features as a key facilitator for the sporting development of young people with ASD (Patterson & Smith, 2012).

Moreover the coach will determine the family's experience of the sport (Patterson & Smith, 2012).

The challenges of coaching athletes with "hidden disabilities" such as ASD have been well documented (Vargas et al., 2018; Vargas et al., 2015). To date it is understood that both the coach's own attitudes towards disability and the club ethos and atmosphere strongly impact the coach and their relationship with the athlete with additional needs (Hassan et al., 2012; Kraft & Leblanc, 2018). The backing of fellow coaches also supports coaches to include young people with ASD (Kraft & Leblanc, 2018). Moreover, an open and honest relationship between the coach and the parents of young people with ASD has been found to promote young people's participation (Arnell et al., 2021; Kraft & Leblanc, 2018; Vargas et al., 2018). However, there remains a need to further understand community coaches' needs and practices with regard to coaching young people with ASD (May et al., 2019; Townsend et al., 2018).

It is necessary to understand coaches' needs and practices given the danger of coaches having awareness yet little comprehension of ASD (Townsend et al., 2018). Understanding the characteristics of ASD and how they may present within a sporting environment is crucial to those in sport clubs (Patterson & Smith, 2012) to avoid the misattribution of ASD idiosyncratic behaviours such as social and emotional challenges, language difficulties and executive functioning challenges (May et al., 2019). Understanding that such characteristics stem from an individual's ASD may support coaches' inclusive practices through adapting coaching styles and/or environmental factors (May et al., 2019; Townsend et al., 2018). Furthermore, as outlined in prior sporting research, coaches' understanding of autistic strengths may also support inclusion (Kimber et al., 2021). Sport disability research has further discussed how coaches can support friendships between athletes with disabilities and

their neurotypical peers through understanding their athletes (Hassan et al., 2012) whereby it has been suggested that educating peers on ASD may further promote peer acceptance and inclusion of young people with disabilities (Shields & Synnot, 2014).

2.2.4.2 Coaching the Coaches on ASD. Ultimately, there is a lack of research pertaining to the education of sport coaches with respect to the inclusion of young people with ASD (McNamara et al., 2020; Townsend et al., 2018). The EU (2007) has previously promoted disability training in coach education programmes and it was recently recommended that coaches supporting individuals with ASD in sport clubs are educated regarding the idiosyncrasies of the condition and the effective practices to including young people with ASD in clubs (Autism Speaks, 2021; Townsend et al., 2021). However, coaches report little inclusion of disability related information in the accredited coaching courses for their respective sport (Townsend et al., 2018; Wareham et al., 2018) noting much is obtained through experiential learning (Townsend et al., 2018). Moreover, coaches highlight that it is often left to them to source the necessary information regarding the biological and physiological effects of the club participants' areas of need (Wareham et al., 2018). This may explain why coaches report feeling ill-equipped to transfer their coaching skills to work with individuals with ASD (Shields et al., 2012; Rosso, 2016). Previous research completed in an Australian "Auskick" camp for young people with varying needs including ASD found that although the majority of coaches were unpaid, it was predominantly paid coaches who had completed training on disability and/or additional needs (May et al., 2019). Those who had completed such training were found to be significantly younger than the volunteers and also all had previous disability coaching experience (May et al., 2019).

Coaches have expressed the need for further education and training pertaining to supporting club participants with ASD (Arnell et al., 2021), a sentiment which has been echoed by coaches with no ASD experience (Dorogi et al., 2008). Further education for coaches regarding the impact which the setting, language and coaching behaviours may have on young people with ASD is warranted (Vargas et al., 2015; Vargas et al., 2018). To date, specific ASD training for coaches has received a positive response (Kraft & Leblanc, 2018; McNamara et al., 2020). However, there is a lack of understanding regarding what is currently being done regarding disability training across coach development pathways (Duarte et al., 2020; Townsend et al., 2018). Moreover, the widespread delivery of such training may prove challenging to NGBs given the variability across coach education practices (Stoszkowski & Collins, 2014), coaching frameworks (ICCE et al., 2013; Jones & Wallace, 2005; Pill et al., 2021) and coaching practices amongst sports and countries within the EU (Lara-Bercial et al., 2017).

2.2.5 Inclusion

The construct of inclusion is multifaceted and the inclusion of young people with ASD is a complex process (Ainscow, 2013; Humphrey & Lewis, 2008). The Salamanca Statement states that inclusion is essential to “human dignity and to the enjoyment and exercise of human rights” (p.7) and highlights that it includes the establishment of strategies to promote “genuine equalisation of opportunity” (The United Nations Educational, Scientific and Cultural Organisation [UNESCO], 1994, p. 7). It is worth noting that inclusion requires more than physical integration (Eldar et al., 2010; Nutbrown & Clough, 2009) as integrated settings without appropriate implementation exacerbate risks of bullying and stigma, particularly for young people with ASD (Humphrey & Symes, 2013; Sreckovic et al., 2014). The Sports

Conflict Institute expands on this distinction between integration and inclusion noting that whilst integration provides an opportunity for people with a disability to participate as a sub-group of the larger population in typical sport environments, inclusion constitutes immersing the people with disabilities within the general population in sporting activities (Kiefer, 2022). In short, an individual could be integrated into the sporting environment without necessarily being included in it (Hassan et al., 2012). Therefore, many disability activists argue that integration is the precursor to inclusion (Hassan et al., 2012).

2.2.5.1 Inclusion in terms of Participation. Inclusion has been thought of as increasing participation and reducing exclusion (Nutbrown & Clough, 2009) whereby the construct of participation has been defined by the WHO as “involvement in a life situation” (2001, p. 10). However, this definition has been criticised for its lack of clarity (Badley, 2008; Imms et al., 2016; Whiteneck & Dijkers, 2009). Therefore, the current project will employ the Kreiger et al. (2018) specific definition of participation for individuals with ASD characterised as “being engaged in and/or performing meaningful activities in occupational or social roles,” (p.2) thereby concluding that inclusion will be understood as meaningful participation (Willis et al., 2017).

2.2.5.2 Inclusion in Sport. Though sport is recognised for its value in combating exclusion and inequalities (European Commission, 2010 as cited in Parrish et al., 2010) and the *International Society of Sport Psychology* recently issued a mission statement to promote inclusion within sporting contexts (Schinke et al., 2016), inclusion in sport remains a complex concept (Kiuppis, 2018).

Non-participation in sport is not exclusion given the element of choice (Spaaij et al., 2014). Moreover, the attendance of young people with disabilities in sport clubs

does not measure the depth of their participation (Imms et al., 2016). Inclusion in sport does not just pertain to the question of placement in ensuring that young people with ASD are enabled to take part in sport, but rather it focuses on the more process-oriented aim to empower all who take part (Kiuppis, 2018; Le Clair, 2011; UNESCO Chair at Institute of Technology [IT] Tralee, 2015). Accordingly, inclusion in sport should be thought of as meaningful participation in line with an individual's preferences and choices (Kiuppis, 2018).

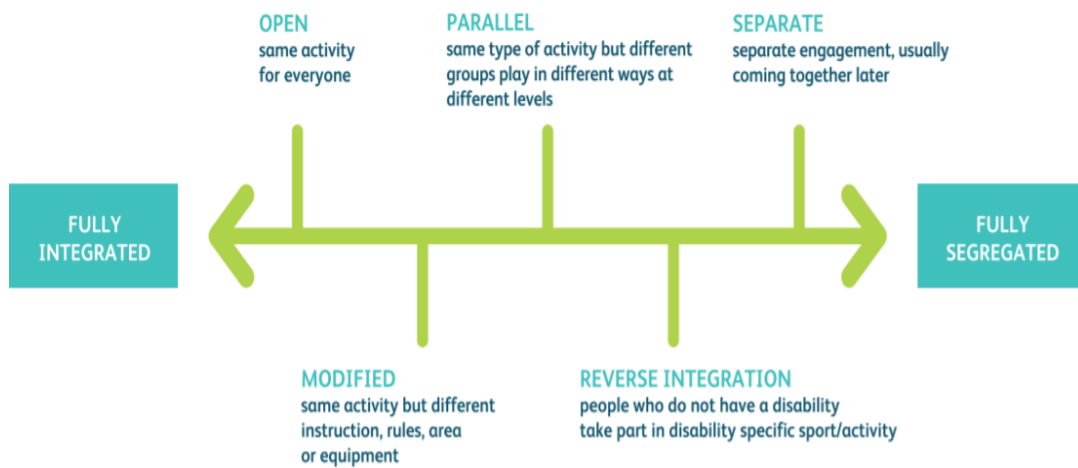
Inclusive sport settings offer multiple benefits to young people with and without ASD (Butler & Hodge, 2004; Grandisson et al., 2012; Matsunaga, 2019). Promoting inclusion through shared training and competition is a potential gateway not only for developing friendships but for contributing to feelings of acceptance and camaraderie while fostering an acceptance of differences in individuals without a disability (Butler & Hodge, 2004; Grandisson et al., 2012). Moreover, inclusion within sport can lead to greater participation of the individual with a disability in other aspects of everyday life (Kissow, 2015). It should be noted that when individuals with disabilities are excluded from activities that could otherwise be inclusive, it creates a negative impact on how they are perceived by others (Stanescu et al., 2009). To this end, socially excluded young people with ASD are more prone to anti-social behaviours, early school leaving and health problems (Howlin et al., 2004).

Cara (Sport Inclusion Ireland) promote an inclusion continuum (Cara, 2021a adapted from Winnick, 1987, pp. 157-158) as a conceptual framework for sport inclusion representing alternative sport settings for individuals with additional needs ranging from a mainstream sport with no modifications to segregated sport (see Figure 2.1). This offers a choice to individuals to participate in a preferred level of sport, with whom they want to participate alongside (Kiuppis, 2018; Misener &

Darcy, 2014) in order to foster inclusion in both mainstream and segregated settings (Kiuppis, 2018). It is crucial to note that this is not a hierarchal model and that integration with typically developing peers is not the pinnacle of inclusion, but rather meaningful participation on the continuum most appropriate to the needs of the individual (Black & Williamson, 2011; Kiuppis, 2018).

Figure 2.1

Cara Inclusion Continuum



Note. Taken from “Inclusion Resources” by Cara, 2021 (<https://caracentre.ie/fact-sheets/inclusion-resources/>).

2.2.5.3 Inclusion in Sport Clubs. There has been much encouragement towards “mainstreaming” sport and making integrated activities more accessible (Kitchin & Howe, 2014, p. 66; Sørensen & Kahrs, 2006). However, it has been found that inclusion in community clubs is generally thought of as a separate activity and is supported by few individuals who have an active interest in its provision (Jeanes et al., 2018). Previous Norwegian research has suggested that individuals with disabilities who do “not require much assistance or extra resources” can readily compete in community clubs but that those with more complex needs may experience difficulties with participation (Sørensen & Kahrs, 2006, p. 192). In

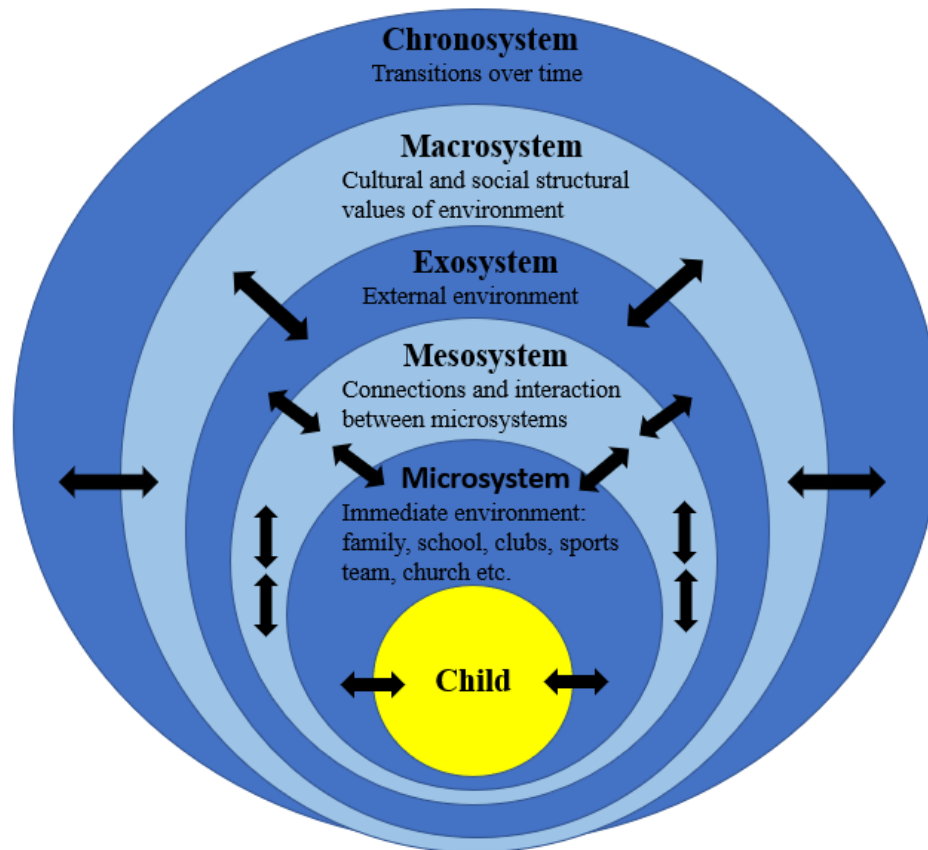
reviewing inclusion in sport clubs in Australia, Jeanes et al. (2018) concluded with the question whether inclusion and inclusive practices were compatible within highly competitive club environments. This was further highlighted by Giese and Ruin (2018) who highlighted that the individuals with disabilities who succeed in clubs “succumb to the logic of high performance and continual enhancement intrinsic to sport” (p. 162). Other authors have similarly questioned whether highly competitive sporting environments are conducive to the traits associated with ASD (Nicholson et al., 2011; McCoy & Morgan, 2020).

2.3 Socio-Ecological Model

Having defined the study’s key constructs, I will now move on to discuss its underlying framework, the socio-ecological model (SEM) which must be understood in the context of Uri Bronfenbrenner’s work. Bronfenbrenner’s bioecological model (1979; 2006) highlights that the environment and the individuals within it interact to shape one another. This model consists of five ecosystems, ranging from most intimate to most distant from the young person and emphasises the importance of the young person’s development within these ecosystems. The bioecological model (2006) expands from the original model (1979) as it further explains that both the young person and the ecosystems bidirectionally affect one another (see Figure 2.2 overleaf). The model is echoed by the HSE (2012, p. 10) to acknowledge that young people are not independent of their surrounding community.

Figure 2.2

Bronfenbrenner's Bioecological Model



Note. Adapted from “*The ecology of human development*” by U. Bronfenbrenner, 1979, Harvard University Press and from “*The bioecological model of human development*” by U. Bronfenbrenner and P.A. Morris, 2006 in R.M. Lerner and W. Damon (Eds.), *Handbook of child psychology: Theoretical models of human development* (1) pp. 793–828, Hoboken, NJ, Wiley.

McLeroy and colleagues (1988) modified Bronfenbrenner’s model to create the SEM which refers to the multiple interconnected systems as intrapersonal, interpersonal, institutional, community and public policies. For this project, physical factors will also be applied to the SEM, as has been advocated by many researchers in the field of PA (Gyurcsik et al., 2004; Gyurcsik et al., 2006; Sallis et al., 1998).

The SEM is particularly applicable when examining PA participation as it provides a theoretical framework for reviewing facilitators and barriers to PA across

multiple domains (Abdelghaffar & Siham, 2019; Sallis et al., 1998). The influences on PA participation for young people with ASD can be understood through multiple levels as outlined in Table 2.1. The SEM provides a thorough understanding of contextual factors (Fleury & Lee, 2006) and examines how such factors influence values, attitudes and behaviour (Carson et al., 2014; McLeroy et al., 1988). It is particularly useful for research including young people with disabilities (Gyurcsik et al., 2004; Gyurcsik et al., 2006; Taliaferro & Hammond, 2016).

Table 2.1

Socio-Ecological Model Multilevel Influences on Physical Activity Participation

Factors	Description
Intrapersonal Factors	Characteristics of individual (behaviour, motivation, motor skills, age, and gender).
Interpersonal Factors	Formal and informal social networks and support systems (family, peers, coaches).
Physical Factors	Physical context in which the PA takes place (e.g., availability of equipment etc.).
Institutional	Formal and informal contexts within social institutions (amount of training, homework etc.).
Community Factors	Relationship among organisations and informal networks within geographic boundaries (available programmes).
Public Policy	National and international policies that affect PA participation.

Note. Adapted from “Parents’ perspectives of physical activity in their adult children with autism spectrum disorder: A social-ecological approach.” by A. Buchanan and B. Miedema, 2017, *Adapted physical activity quarterly*, 34(4), pp. 401-420 (<https://doi.org/10.1123/apaq.2016-0099>) and “An ecologically based examination of barriers to physical activity in students from grade seven through first-year university” by N.C. Gyurcsik, K.S. Spink, S.R. Bray, K. Chad and M. Kwan, 2006, *Journal of Adolescent Health*, 38(6), pp. 704-711 (<https://doi.org/10.1016/j.jadohealth.2005.06.007>).

2.4 Phase One: Review of Sport Inclusion Legislation and Initiatives

2.4.1 Introduction

In exploring the provision of sport inclusion in the Republic of Ireland, a review of the preceding sport inclusion legislation and initiatives is necessary to contextualise the current situation (Ives et al., 2022; Jeanes et al., 2018). This next section will support the current project's understanding of how key stakeholders work to include young people with ASD (Braun et al., 2011).

Although the Irish Commission on the Status of People with Disabilities watershed report, the *Strategy for Equality* (1996) recognised the specific needs of different groups impacted by varying disabilities, there is little to no sport inclusion legislation specific to ASD. Therefore, for the purpose of this review, the term individuals with disability will be employed as is common practice in the literature. This term is cited to include “children who experience any restriction in their capacity to participate in economic, social or cultural life on account of a physical, sensory, learning, mental health or emotional impairment” (Commission on the Status of People with Disabilities, 1996, p. 16).

Timelines of both international and national legislation and initiatives to support the inclusion of young people with ASD in sport clubs are provided in Sections 2.4.2.2 and 2.4.3.3 respectively. Given the content of this review was legislative and action-focused, it warranted the inclusion of grey literature (Pappas & Williams, 2011). Therefore, information was accessed from the UNESCO and Sport Ireland databases from April 2021 to July 2021 which fostered further ancestry searches. Once completed, both timelines were reviewed by a Cara, Sport Inclusion Ireland representative in July 2021 to ensure accuracy. Upon this review, two further initiatives were added to the national timeline.

Neither timeline should be interpreted as an exhaustive list of all legislation and initiatives promoting sport inclusion as the current review sought to highlight the legislation and initiatives most pertinent to sport inclusion for young people with ASD.

2.4.2 International Inclusion in Sport

2.4.2.1 United Nations Educational, Scientific and Cultural

Organisation. UNESCO is recognised as the United Nations (UN) lead agency governing sport (UNESCO Chair at IT Tralee, 2015).

2.4.2.1.1 International Conference of Ministers and Senior Officials

Responsible for Physical Education and Sport. UNESCO oversees the International Conference of Ministers and Senior Officials Responsible for Physical Education and Sport (MINEPS), a forum which coordinates a process of international strategy on sport through engaging governments, intergovernmental organisations, specialised non-governmental organisations and academics. It has convened on seven occasions since its creation in 1976. MINEPS guides the development and implementation of sporting policies and practices around the world (UNESCO, 2021b).

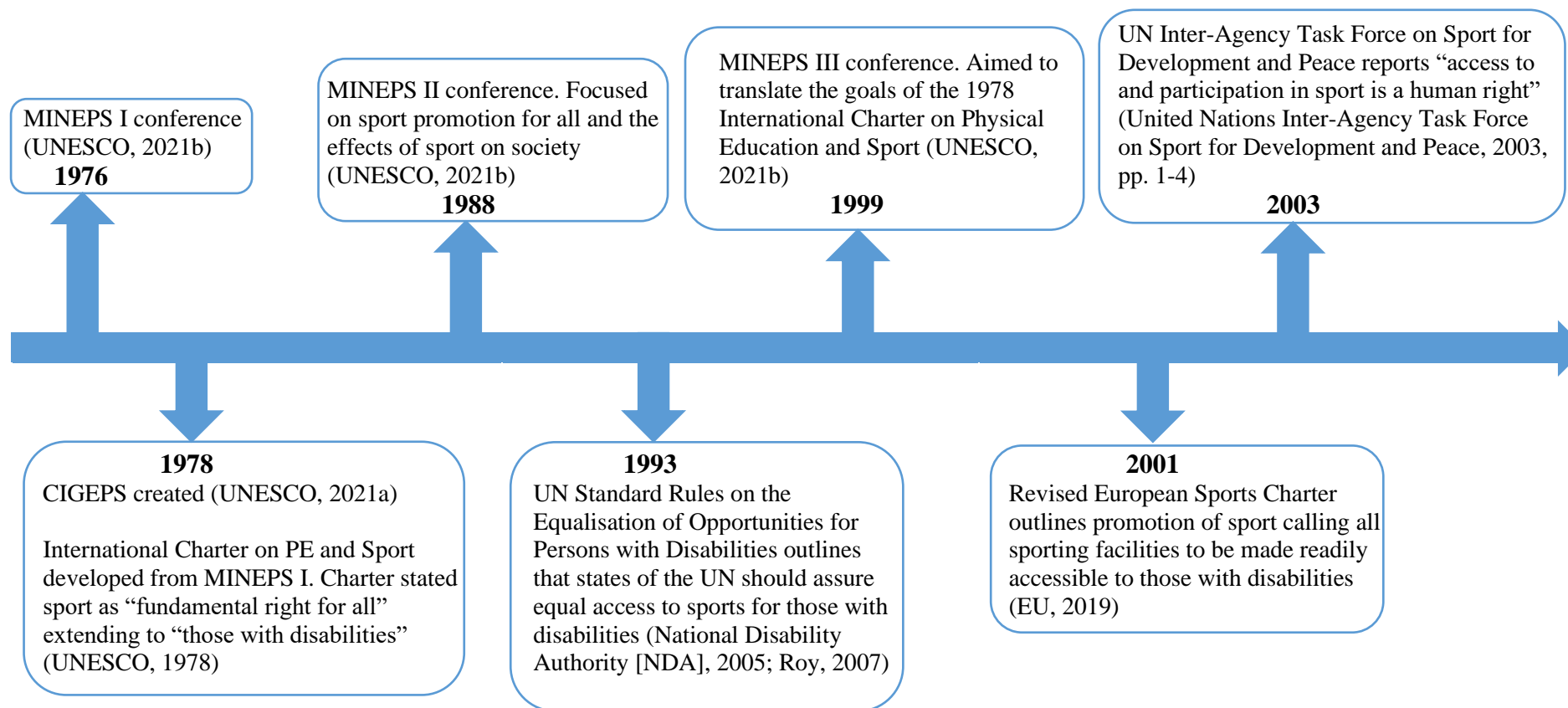
The Intergovernmental Committee for Physical Education and Sport (CIGEPS) is a by-product of MINEPS. CIGEPS advocates for access to sport as a fundamental right for all through their action-oriented work with sport federations, non-governmental organisations, and other key stakeholders in uncovering the best practices in sport in order to inform and implement policy. CIGEPS hold annual meetings and prepare for the MINEPS conferences (UNESCO, 2021c).

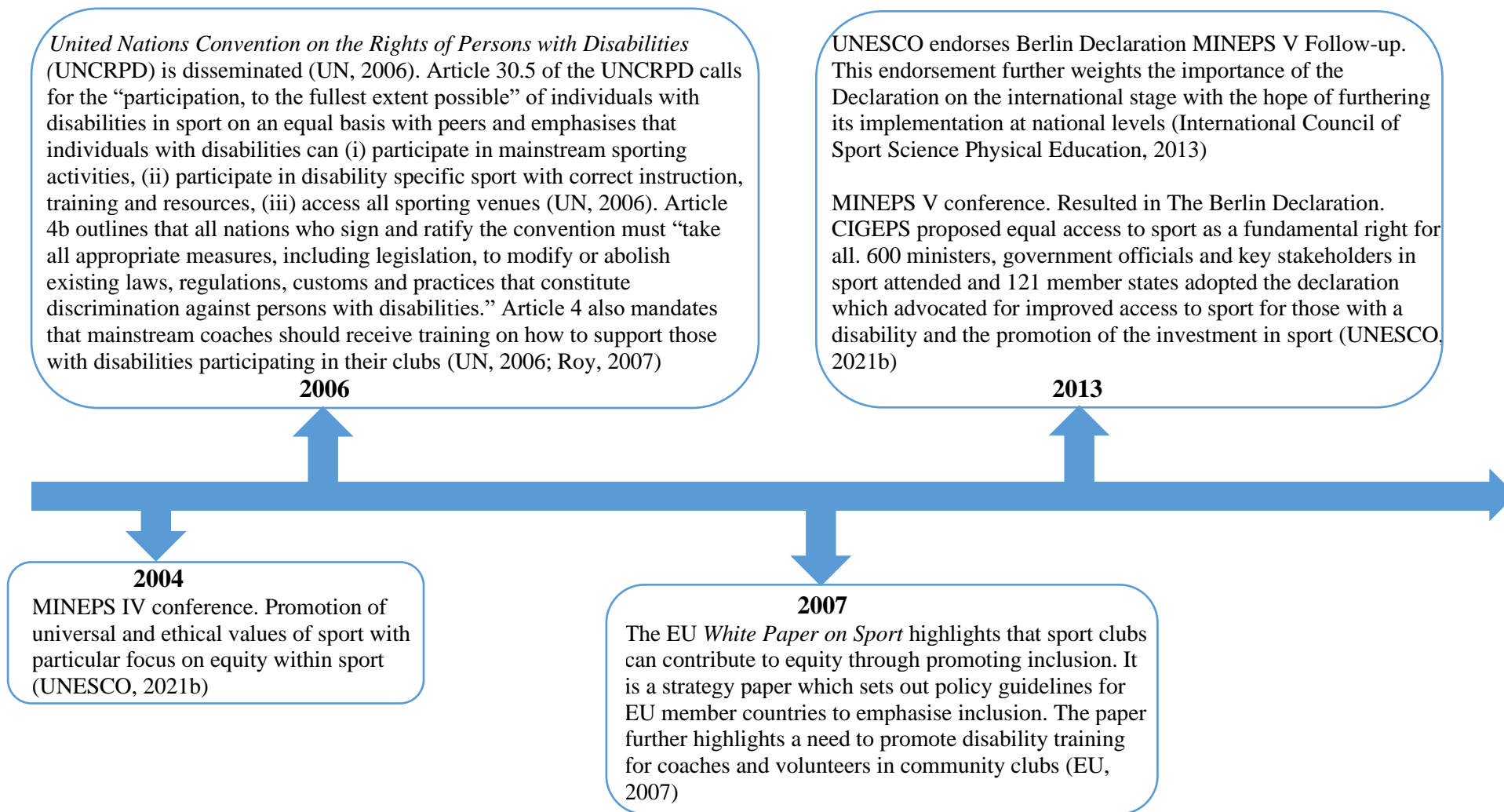
2.4.2.2 Overview of International Legislation and Initiatives. A visual overview of the timeline of international sport inclusion legislation and initiatives

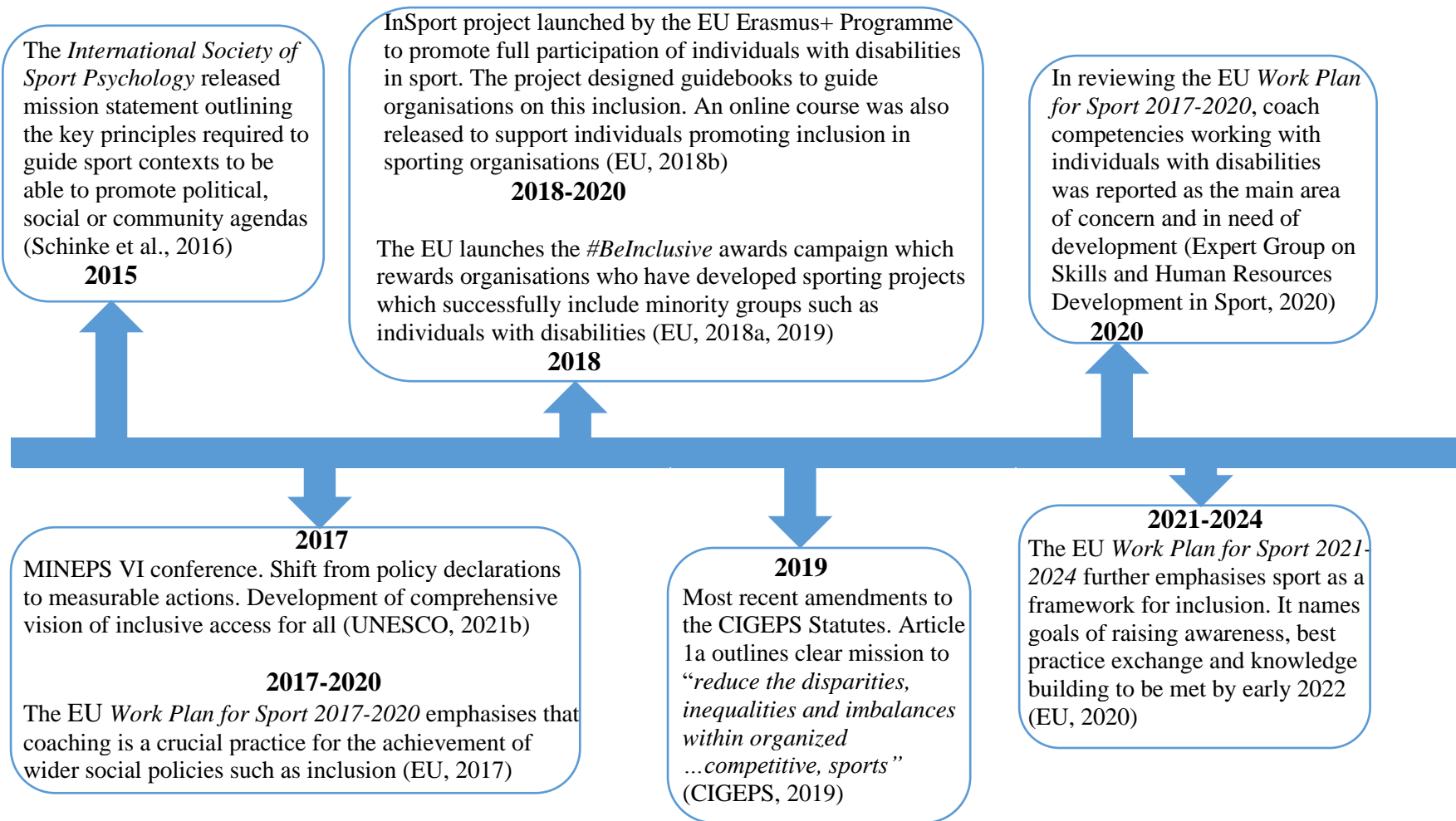
enacted by such organisations is provided overleaf in Figure 2.3. Figure 2.3 highlights how the international sporting landscape of inclusion has evolved since 1976 to the present day. It accentuates the development from broad sporting goals such as access to sport as a “fundamental right” to a more specific focus on equity within sport and a focus on the strategy papers set out to inform policy guidelines regarding inclusion. As the timeline progresses, there is also an increased focus on club and coaching development in fostering inclusion. Ultimately, the evolution over time indicates a progression from the theory and broad encouragement of sporting inclusion towards practical guidance on inclusive practices. However, despite the history of international sport inclusive initiatives outlined overleaf, it should be noted that the first and only legally binding instrument promoting the inclusion of disabilities in sporting settings is noted as the 2006 UN Convention on the Rights of Persons with Disabilities. Further discussion regarding the timeline, its impact on the inclusion of those with disabilities and its implications to the current study are provided in Section 2.4.4.

Figure 2.3

Visual Overview of International Sport Inclusion Legislation and Initiatives







2.4.3 National Inclusion in Sport

2.4.3.1 Federation of Irish Sport. The Federation of Irish Sport is recognised as the “voice of Irish Sport” (Federation of Irish Sport, 2021a).

2.4.3.1.1 National Governing Bodies and Local Sport Partnerships. The Federation of Irish Sport is the representative body for more than 60 NGBs operating within 33 Local Sport Partnerships (LSPs), representing over 12,000 sporting clubs nationally (Federation of Irish Sport, 2021a; Kildare Sports Partnership, 2021; Sport Ireland, 2022b). Clubs within a specific sport (e.g., rowing, swimming) affiliated with their respective NGB (e.g., Rowing Ireland, Swim Ireland) operate autonomously in their operation while adhering to a strict set of standards set out by the NGB (Federation of Irish Sport, 2021a).

2.4.3.1.2 Provision for Sport Inclusion in the Republic of Ireland. Sport Ireland (previously the Irish Sports Council) works with a range of organisations to provide support for those working with disabilities in sport (Sport Ireland, 2017). The *Sport Ireland Policy on Participation in Sport by People with Disabilities* (2017) outline three of the most readily known organisations regarding this support as the NGBs, the LSPs and Cara. Many NGBs exclusively support disability sport while other mainstream NGBs support the participation and inclusion of individuals with disabilities within their clubs (Sport Ireland, 2017).

The LSPs are primarily involved with supporting the sport inclusion disability programme and the sport inclusion disability officers (SIDOs; Sport Ireland, 2017). SIDOs are comparable to access co-ordinators which are often available within the community (Patterson & Smith, 2012, p. 37). As is explored in Figure 2.4, LSPs aim to increase the participation of people with disabilities including ASD in sport through the work of their SIDOs who work in partnership

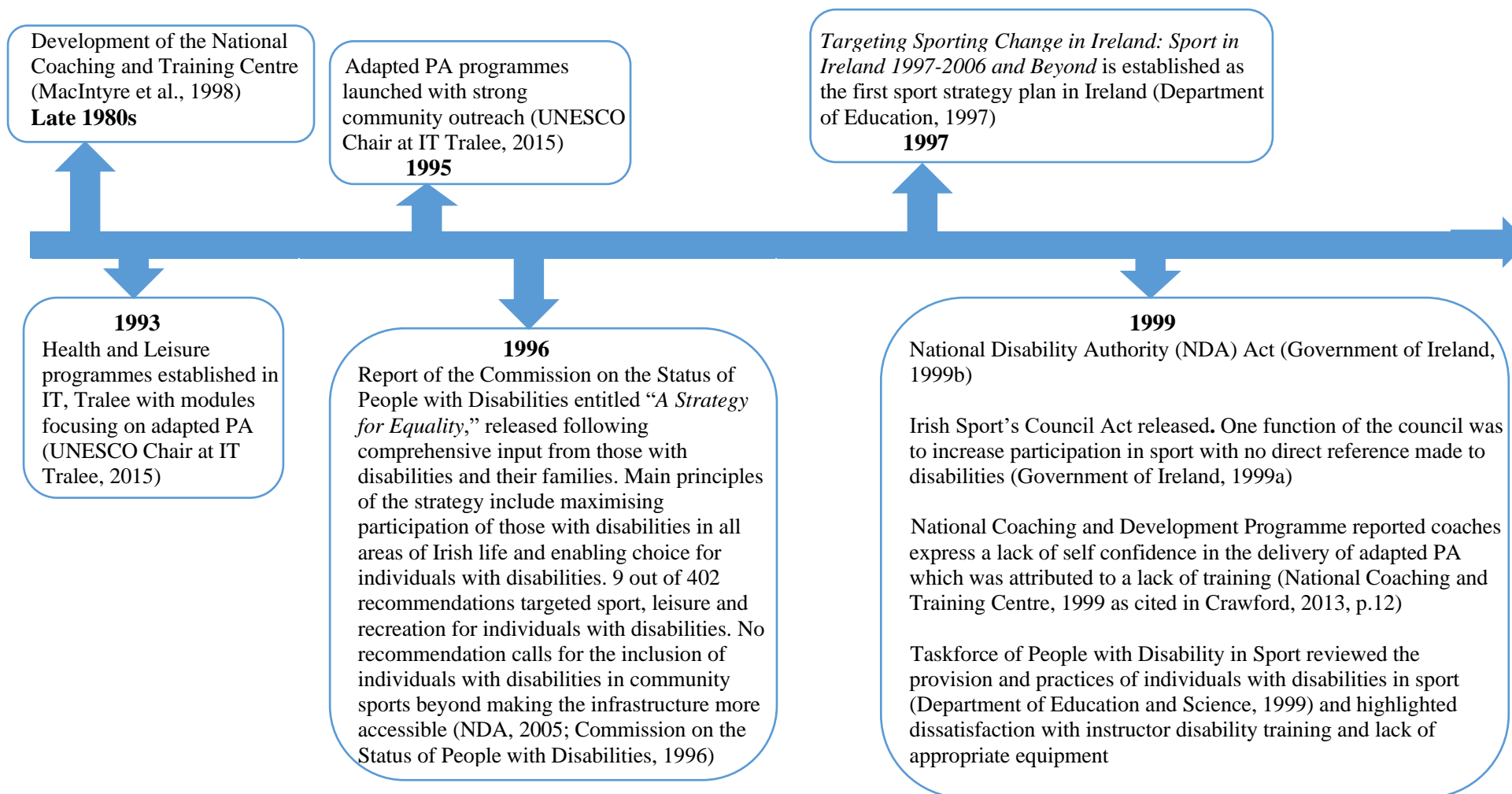
with statutory agencies, sports clubs, community groups, facility providers, schools, disability service providers and individuals with disabilities (Sport Ireland, 2021b).

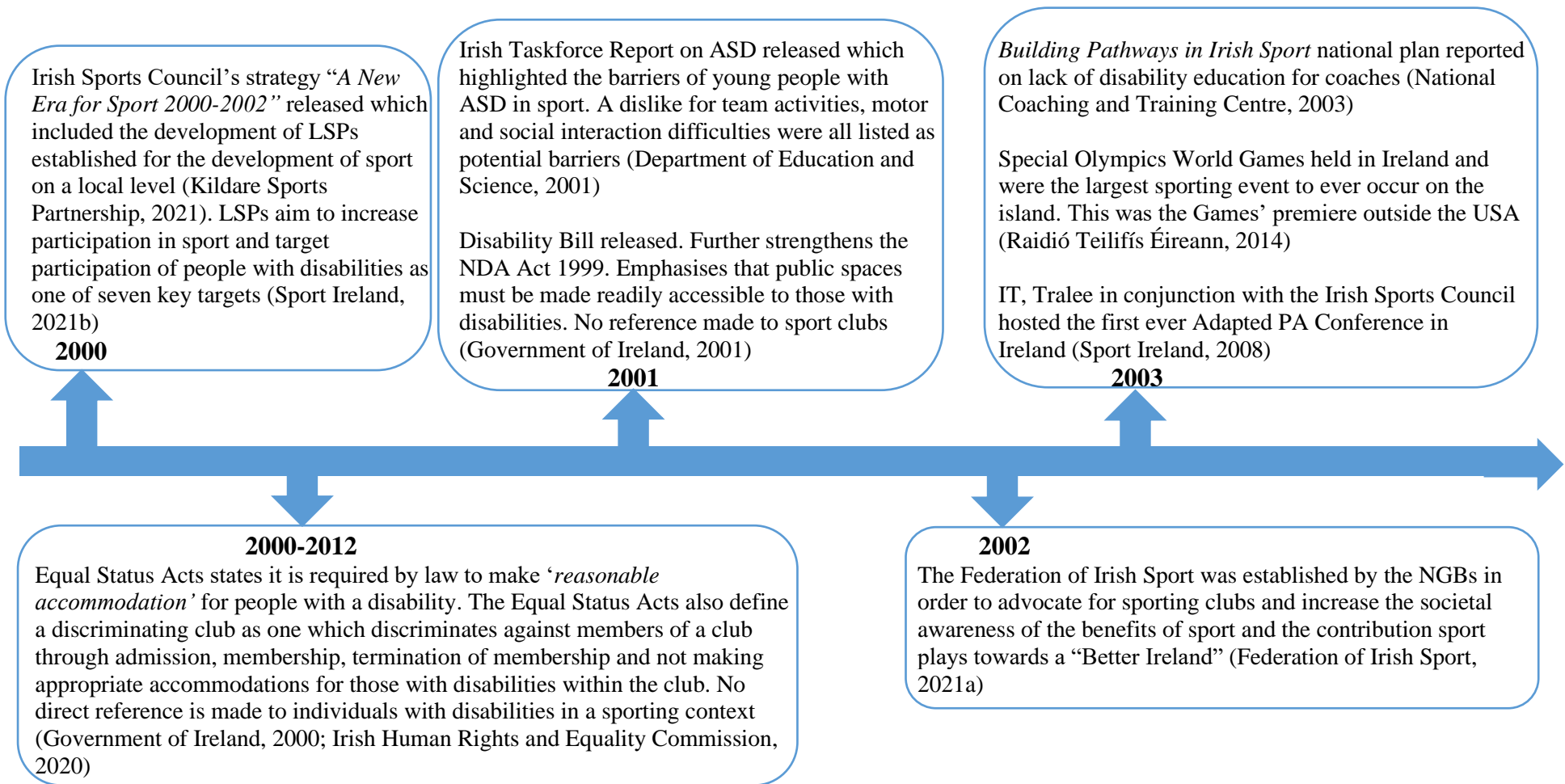
Cara, a pan-disability national organisation delivers educational and training workshops to facilitate the inclusion of those with disabilities in sport. The *Sport Ireland Policy on Participation in Sport by People with Disabilities* has named Cara as the body to support the participation and inclusion of those with disabilities in sport (Sport Ireland, 2021c) and Cara is affiliated with supporting NGBs and LSPs with inclusive practices (Sport Ireland, 2017). Initially founded through a partnership between IT Tralee and Sport Ireland in 2005, Cara has been funded by Sport Ireland since its inception (Sport Ireland, 2008, 2021c). Cara's work directly supports individuals with ASD in sport as evidenced through the positive response to Cara's Autism in Sport training (as outlined in Figure 2.4) and the release of their "Autism in Sport Passport," which is a tool for coaches and clubs to gather information about a participant with ASD (Cara, 2020a).

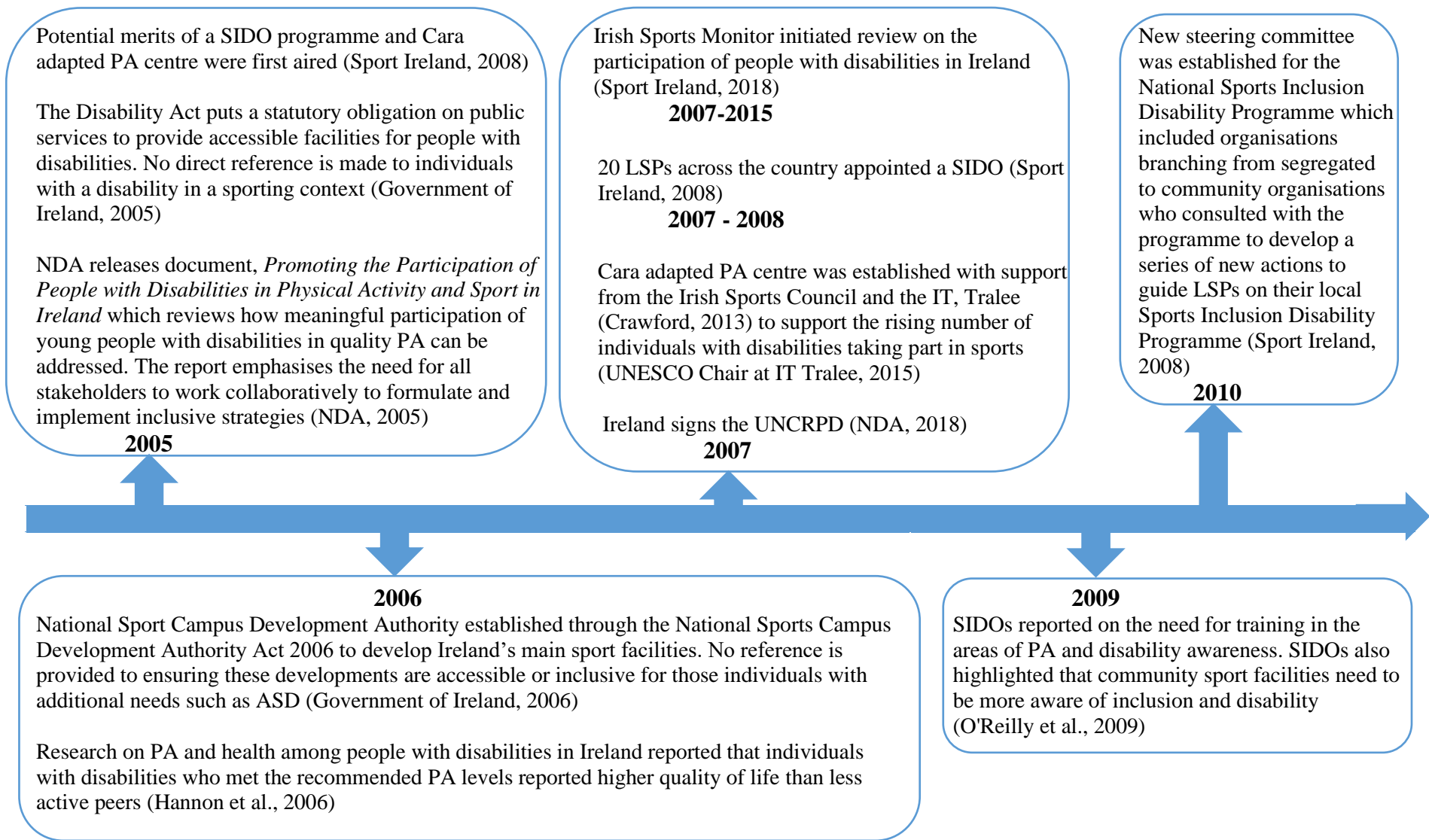
2.4.3.2 Overview of National Legislation and Initiatives. A visual overview of the timeline of national sport inclusion legislation and initiatives enacted by such organisations is provided overleaf in Figure 2.4. Figure 2.4 highlights how the national sporting landscape of inclusion has evolved since the late 1980s to the present day. The timeline outlines each of the 16 Acts and Bills pertaining to disability and sport (respectively) since the 1980s within the Republic of Ireland and provides an explanation as to how they relate to national inclusive practices. It further details the initial development and evolution of Cara and explores the positive impact Cara's SIDOs and training programmes have had on sport inclusion. However, the repeated dissatisfaction regarding coaches' disability training also strongly features throughout the timeline. Fortunately, what is most notable on this

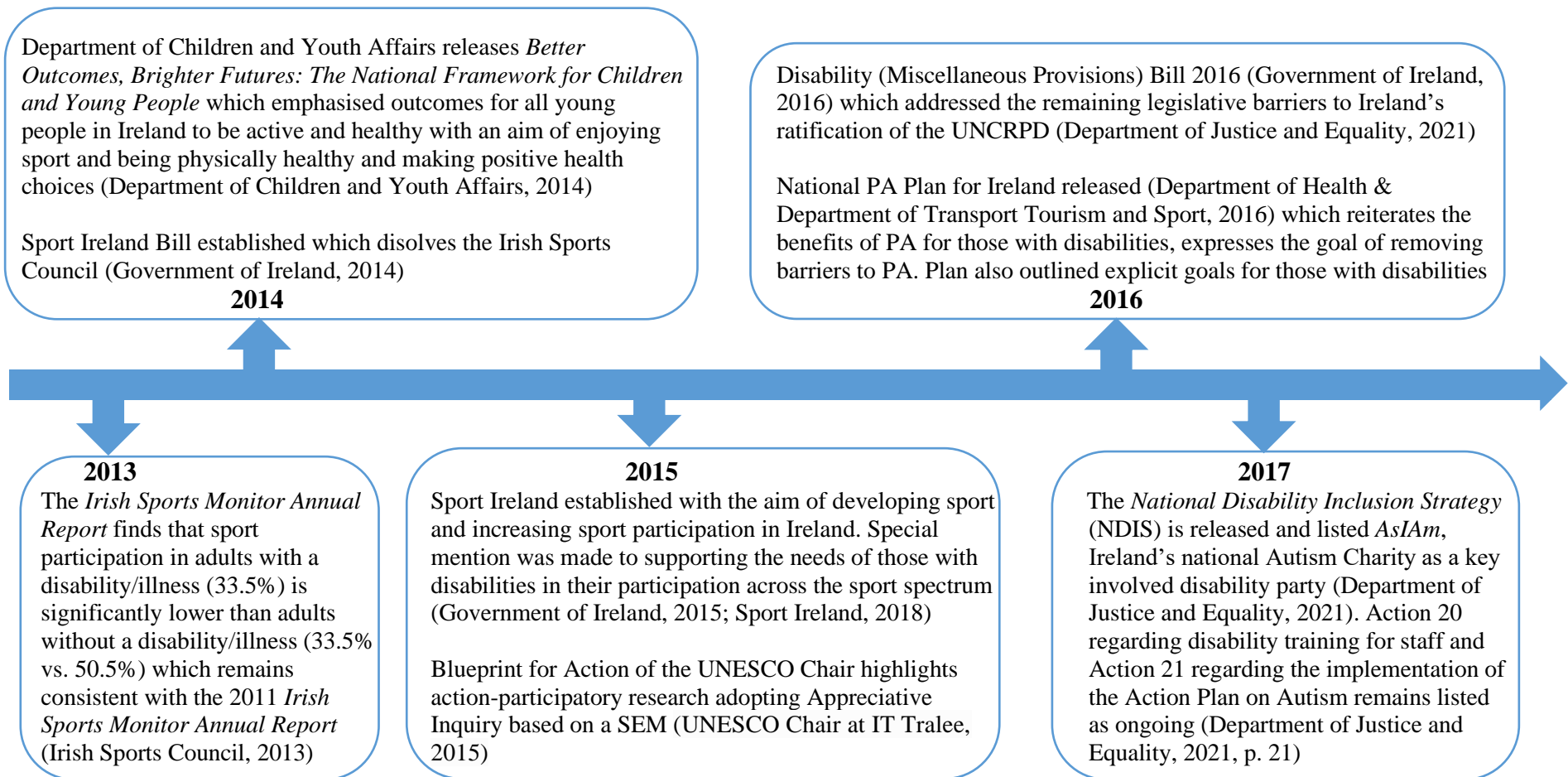
national timeline is the increased focus of encouraging sport for individuals with disabilities. This is evidenced throughout the timeline through the multiple reports and reviews from government and sporting bodies promoting disability sports in recent years alongside clearly set goals and targets regarding inclusive practices within sport and the positive advent of GAA inclusive initiatives. Further discussion regarding the timeline, its impact on the inclusion of those with disabilities and its implications to the current study are provided in Section 2.4.4.

Figure 2.4
Visual Overview of National Sport Inclusion Legislation and Initiatives









National Sports Policy 2018-2027 released. Policy highlights it will consult with Cara regarding participation of young people with disabilities in sport and emphasises key roles SIDOs and LSPs play with NGBs. Emphasises that sporting facilities developed through public funds must be accessible. Seven actions directly relate to the inclusion of individuals with disabilities in community sport. Highlights need for volunteer training across LSP and NGB networks which will cover disability awareness. Action 30 states that the provision of disability awareness education and training is warranted amongst coaches (Department of Transport Tourism and Sport, 2018)

2018-2027

Sport Ireland Policy on Participation in Sport by People with Disabilities launched. Outlines approach to supporting the participation of individuals with disabilities in sport and PA. It restates the contingencies and commitments of the UNCRPD (Sport Ireland, 2018)

Pilot of first autism specific Gaelic Athletic Association (GAA) Cúl camp (Clonakilty GAA Club, 2018; Fogarty, 2021)

Republic of Ireland becomes one of the last countries in the world to ratify the UNCRPD (NDA, 2019; Sport Ireland, 2018)

2018

2019

Cara launches *Sport Inclusion Disability Charter*. Cara engaged with 140 individuals with disabilities or parents of children with disabilities across 22 counties in Ireland, as part of the “*I’m in too*” initiative to develop this charter. The charter outlines five key areas in which people with disabilities report on how clubs could support their inclusion. Five areas are openness, people, activities, facilities and promotion (Cara, 2019)

Wexford host first GAA Cúl Camp for young people with ASD (GAA, 2019). Offaly also host a similar programme (MacMahon, 2021)

NDA reviews the progress of the NDIS which found that “number of actions require interpretation and translation at local level by all public bodies” (NDA, 2019). Such actions include Action 20 pertaining to disability training for staff and Action 21 pertaining to the implementation of the Action Plan on autism. The NDA strongly advised that progress in this area be transparently reported and outlined in clear action plans, indicating little progress had been noted in these areas to date (NDA, 2019)

Community Participation (Disability) (Miscellaneous Provisions) Bill. Emphasis is placed on the infrastructure regarding access to individuals with disabilities with no reference to enhancing community sport participation (Government of Ireland, 2019)

Mid-Term Review of the NDIS 2017-2021 (Department of Justice and Equality, 2020). New actions added which include the development of an implementation plan to coordinate implementation of the UNCRPD (Action 3A, p.16) and actions regarding autism were modified to state “we will continue to implement the Implementation Plan on policy advice on autism” highlighting the importance of keeping this action flagged as an ongoing action to be reviewed (Action 37, p.22)

Cara educational and training workshops go online in October 2020 in response to the COVID-19 pandemic. This includes the continued provision of the 2.5hours of Autism in Sport training (Federation of Irish Sport, 2020)

LSP Annual Report highlights that 2,037 people completed Cara’s Disability Awareness, Autism in Sport and Disability Inclusion Training and Education programmes with 767 people completing the Autism in Sport training specifically, which is up from 719 participants in 2019 (Sport Ireland, 2019b, 2020)

2020

2021

Budget 2021 provided a notable increase in funding for the sport sector. Moreover this funding included €9.5million for the LSPs to support their communities in continuing to build sport within their region with €945,000 invested in SIDOs (Sport Ireland, 2021c)

Clare hosts autism specific GAA Cúl camps (Fogarty, 2021; MacMahon, 2021)

Cara update on work with NGBs, highlighting that 26 NGBs have signed and implemented Cara’s *Sport Inclusion Disability Charter* and Cara have delivered 38 educational and training workshops to NGBs and have supported 6 NGBs in developing inclusion policies. Eight NGBs are engaged with Cara’s Xcessible programme which is a resourced staged approach to guiding and supporting NGBs towards facilitating the participation of individuals with disabilities within their sport (Federation of Irish Sport, 2021b)

2.4.4 Phase One Conclusions

Phase one reviewed international and national sport inclusion actions to contextualise the inclusion of young people with ASD in clubs in the Republic of Ireland. It indicated that young people's inclusion in PA has been historically woven into international initiatives as UNESCO has long emphasised participation in sport as a fundamental right (Roy, 2007; UNESCO, 1978). However, despite this history of international sport inclusive initiatives, the first and only legally binding instrument promoting the inclusion of disabilities in PA settings was not disseminated by the UN until 2006 (Roy, 2007; UN, 2006). The UNCRPD was a key step toward realising the rights of young people with ASD in the sporting world as it is viewed as an inducer which outlines a set of standards which advocates can leverage to encourage national governments to foster change (Roy, 2007). International policies have been strengthened and endorsed by the UNCRPD with the goal of being integrated into national levels, however it must be noted that the UNCRPD is only as effective as the nations which apply it (International Council of Sport Science Physical Education, 2013).

The discourse of disability training for coaches was readily emphasised throughout the international timeline. Subsequent to Article 4 of the UNCRPD which mandated that mainstream coaches should be trained in how to assist their athletes with disabilities (Roy, 2007; UN, 2006), both the EU *White Paper on Sport* (2007) and the EU *Work Plan for Sport 2017-2020* (2017) emphasised the crucial role of the coach in inclusion, highlighting the need to provide disability training in sport clubs. However, in a review of the 2017-2020 EU *Work Plan for Sport*, continued concern was raised regarding coaches' confidence supporting individuals

with disabilities (Expert Group on Skills and Human Resources Development in Sport, 2020) indicating an area warranting further investigation.

On the national platform, enacting the international policies and initiatives has taken much time. The 1996 *Strategy for Equality* marked a watershed in the inclusion of those with disabilities in the Republic of Ireland as it was the starting point of multiple Bills, Acts, reports, and initiatives. The 1996 *Strategy for Equality* report stated that it was an ambitious strategy (Commission on the Status of People with Disabilities, 1996) and 26 years on, Irish society is continuing to implement its recommendations. Similarly, the *Irish National Disability Strategy* holds objectives to promote inclusive sport settings and the progress of these objectives has been listed as “ongoing” for eight years (NDA, 2013, p. 30). More to this point, SIDOs have emphasised a need for community sport personnel and facilities to be more aware of inclusion and disability (O' Reilly et al., 2009).

It is noteworthy, that despite Ireland's ratification of the UNCRPD in 2018, there remains no formal legislation to promote the participation of individuals with disabilities in PA within the sixteen Acts and Bills pertaining to disability and sport (respectively). Moreover, although a mid-review of the *National Disability Inclusion Strategy 2017-2021* flagged policy advice on ASD as an ongoing action to be reviewed, there was no reference to progress in the field beyond this modification.

Most notably on the national overview is the repeated dissatisfaction regarding coaches' disability training (Department of Transport Tourism and Sport, 2018; National Coaching and Training Centre, 1999, 2003). Similar to the international discourse, the *National Sports Policy 2018-2027* has called for the provision of training opportunities for coaches regarding better coaching of individuals with disabilities (Action 30; Department of Transport Tourism and Sport,

2018). Fortunately, such interest in further training opportunities is positively reflected in the increased number of coaches participating in disability training programmes which are currently available (Sport Ireland, 2019b, 2020).

Another notable positive aspect of the national timeline is the growing availability of autism friendly sporting opportunities (e.g., GAA camps for young people with ASD; Fogarty, 2021; MacMahon, 2021) and the recognition of the value of the SIDO network within the 2021 Budget allocation (Sport Ireland, 2021c). Moreover, Cara have developed “Autism in Sport” workshops and ASD inclusive sport resources (Cara, 2020a, 2020b) and continue to enhance inclusive practices in a top-down approach in NGBs (Federation of Irish Sport, 2021b). The UNESCO Tralee IT Chair’s emphasis on the need for future strengths-based research into how to promote inclusion in sport clubs (UNESCO Chair at IT Tralee, 2015) may further build on these recent positive initiatives.

2.5 Phase Two: Influences on Participation of Young People with ASD in Structured Physical Activity

A better understanding of the influences on structured PA is critical to allow policy makers and service providers to improve PA participation for young people with ASD (Grandisson et al., 2012; Ryan et al., 2018). Although previous literature has explored PA promotion in young people with ASD (Alexander & Gardin, 2017; Marchand & Healy, 2019; Menear & Neumeier, 2015) influences on structured PA participation in this population have not yet been collated. Therefore, the objective of this systematic review is to examine the facilitators and barriers to participation of young people with ASD in such structured PA through adopting a specific definition of PA as outlined in Section 2.2.2 (i.e., sport, PE and formal exercise; HSE, 2009, p. 10). This definition is evident in the review’s search term (Table 2.2) and the

inclusion criteria (see Table 2.3). This second phase of Chapter Two aims to compliment the macro/policy level timelines in the overall context of the thesis through adopting a micro focus and capturing the voices of stakeholders.

Eight studies (one mixed-methods, four qualitative and three quantitative) were selected from four online databases to create this aggregative review. Studies were evaluated using the Mixed Methods Appraisal Tool (Hong et al., 2018) and Gough's (2007) Weight of Evidence Framework. Findings were then categorised using the SEM framework.

2.5.1 Review Question

What influences the participation of young people with ASD in structured physical activities (i.e., sport, PE, formal exercise)?

2.5.2 Literature Search

A comprehensive literature search was conducted on 16th June 2020 and updated on 21st June 2021 using the online databases Academic Search Complete, Education Resources Information Centre (ERIC), PsychARTICLES and PsycINFO. A multi-field search strategy was conducted using Boolean search commands developed around the four main concepts of PA, ASD and facilitators and barriers as are outlined in Table 2.2.

Table 2.2

Search Terms used to Identify Relevant Studies

Search Terms				
physical*				
OR		autis*		facil*
exercise	AND	OR	AND	OR
OR		ASD		barrier*
sport				

Note. *indicates a truncated item (e.g. autis* will search for autism spectrum disorder)

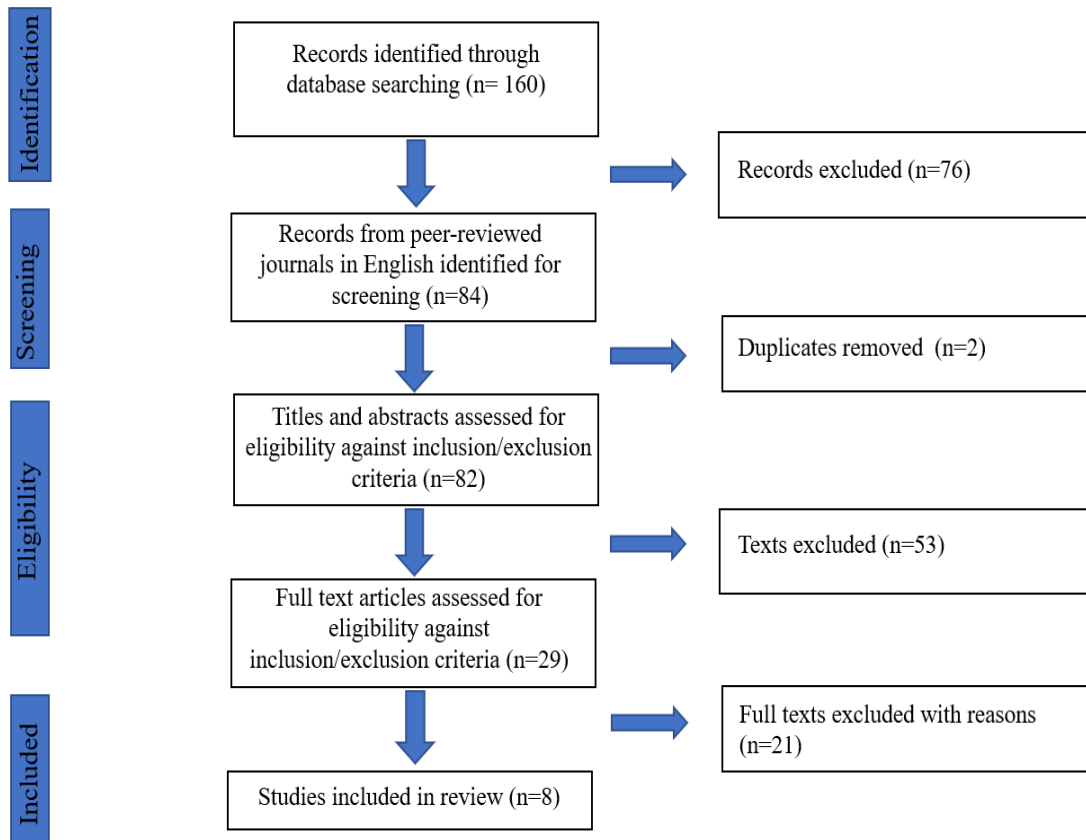
The initial search yielded 160 articles (see Figure 2.5). When all the non-peer-reviewed articles unavailable in English were removed, 84 articles remained for screening. After removing duplicates, titles, and abstracts of 82 studies were screened using the inclusion/exclusion criteria (see Table 2.3 overleaf). Twenty-nine studies remained for full-text screening against the inclusion/exclusion criteria. The list of studies excluded after full-text review with rationale can be found in Appendix A1. Eight studies were deemed appropriate for inclusion within this systematic review after the screening process was completed (see Table 2.4 for list of referenced studies). A full summary of the included studies is included in Appendix A2.

Table 2.3*Inclusion/Exclusion Criteria*

Criterion	Criteria for Inclusion	Criteria for Exclusion	Rationale
Type of publication	Peer-reviewed journal	Not a peer-reviewed journal	The study has a standard of methodological rigour from a process of external moderation
Language	Study is written in English	Study is written in a language other than English	Given translators are unavailable, studies must be available in English to be read, understood, and appraised
Participants	Young people <18 years old and have a diagnosis of ASD OR parent/guardians of young people <18 years old with a diagnosis of ASD OR support persons (coach, teacher, policy maker, administrator etc.) for young people <18 years old with ASD as outlined in the DSM-5 (APA, 2013) or the ICD-11 (WHO, 2019)	Young people >18 years old and/or does not have a diagnosis of ASD OR parent/guardians of young people >18 years old and/or does not have a diagnosis of ASD OR support persons (coach, teacher, policy maker, administrator etc.) for young people >18 years old and/or does not have ASD as outlined in the DSM-5 (APA, 2013) or the ICD-11 (WHO, 2019)	The focus of this review is on young people with ASD
Study Design	It is an empirical paper examining the perceived facilitators or barriers for young people with ASD in structured PA (e.g., sport, PE, formal exercise)	It is not an empirical paper examining the perceived facilitators or barriers for young people with ASD in structured PA (e.g., sport, PE, formal exercise)	The review question is specifically assessing the perceived facilitators and/or barriers for young people with ASD in PA by observation or experience rather than theory or logic
Intervention	Study must examine the perceived barriers and/or facilitators in structured PA (e.g., sport, PE, formal exercise) in young people with ASD	Study does not examine the perceived barriers and/or facilitators to structured PA (i.e., sport, PE, formal exercise) in young people with ASD	The focus of this review is the participation of young people with ASD in structured PA (e.g., sport, PE, formal exercise)
Outcome Variables	The outcomes must look at the perceived facilitators and/or barriers to structured PA in young people with ASD	The outcomes do not look at the perceived facilitators and/or barriers to structured PA in young people with ASD	The review question is specifically focused on the perceived facilitators and/or barriers to structured PA in young people with ASD

Figure 2.5

Process of Search Strategy PRISMA Flow Diagram



Note. Adapted from “Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement” by D. Moher, A. Liberati, J. Tetzlaff, J., and D.G. Altman, 2009, in *PLoS medicine*, 6(7), p. 877 (<https://doi.org/10.1371/journal.pmed.1000097>).

Table 2.4

References of Studies Included within the Systematic Review

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- Arnell, S., Jerlinder, K., & Lundqvist, L. (2020). Parents' perceptions and concerns about physical activity participation among adolescents with autism spectrum disorder. *Autism, 24*(8), 2243-2255.
-
- Healy, S., Msetfi, R., & Gallagher, S. (2013). 'Happy and a bit nervous': The experiences of children with autism in physical education. *British Journal of Learning Disabilities, 41*(3), 222-228.
-
- Lamb, P., Firbank, D., & Aldous, D. (2016). Capturing the world of physical education through the eyes of children with autism spectrum disorders. *Sport, Education and Society, 21*(5), 698-722.
-
- Must, A., Phillips, S., Curtin, C., & Bandini, L. G. (2015). Barriers to physical activity in children with autism spectrum disorders: relationship to physical activity and screen time. *Journal of Physical Activity and Health, 12*(4), 529-534.
-
- Obrusnikova, I., & Cavalier, A. R. (2011). Perceived barriers and facilitators of participation in after-school physical activity by children with autism spectrum disorders. *Journal of Developmental and Physical Disabilities, 23*(3), 195-211.
-
- Obrusnikova, I., & Miccinello, D. L. (2012). Parent perceptions of factors influencing after-school physical activity of children with autism spectrum disorders. *Adapted Physical Activity Quarterly, 29*(1), 63-80.
-
- Pan, C. Y., Tsai, C. L., & Hsieh, K. W. (2011). Physical activity correlates for children with autism spectrum disorders in middle school physical education. *Research quarterly for exercise and sport, 82*(3), 491-498.
-
- Stanish, H., Curtin, C., Must, A., Phillips, S., Maslin, M., & Bandini, L. (2015). Enjoyment, barriers, and beliefs about physical activity in adolescents with and without autism spectrum disorder. *Adapted Physical Activity Quarterly, 32*(4), 302-317.
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2.5.3 Synthesis of Review Findings

2.5.3.1 Weight of Evidence (WoE). Gough's WoE Framework (2007) was used to evaluate all eight studies. This framework allowed for a systematic critical review, appraising the methodological quality (WoE A), the relevance of the methodology (WoE B) and the overall relevance of the study in relation to the current review question (WoE C). The scores for each category were then averaged to provide an overall WoE score for each study (WoE D; see Table 2.5). The WoE criteria and ratings employed to assess the eight selected studies can be found in Appendix A3.

The Mixed-Method Appraisal Tool (MMAT; Hong et al., 2018) and the MMAT scoring protocol (Hong, 2020) were employed for WoE A appraisal. The MMAT was selected given its ability to concomitantly appraise qualitative, quantitative, and mixed methods studies which were each included in this mixed studies review. The MMAT scoring protocol was adapted for this review (see Appendix A4) and an example of the scored protocol can be found in Appendix A5. In order to maintain consistency, all studies were scored using this same protocol (Butler et al., 2016). WoE B and WoE C then appraised the studies using defined criteria and ratings (see Appendix A3). WOE B criteria, ratings and rationale were informed by Petticrew and Roberts (2003) who assert that certain methodologies are more appropriate for answering review questions and Guyatt and colleagues (2008) who emphasise the potential limitations a study design holds on research quality.

Table 2.5*Weight of Evidence for Each Study*

Study	WoE A Methodological quality	WoE B Relevance of methodology	WoE C Relevance to review question	WoE D Overall weighting
Arnell et al. (2020)	3 (High)	2 (Medium)	2.5 (High)	2.5 (High)
Healy et al. (2013)	3 (High)	2.5 (High)	2 (Medium)	2.5 (High)
Lamb et al. (2016)	1.8 (Medium)	1.75 (Medium)	2.75 (High)	2.1 (Medium)
Must et al. (2015)	1.2 (Low)	1.75 (Medium)	1.25 (Low)	1.4 (Low)
Obrusnikova, & Cavalier (2011)	2.8 (High)	2.5 (High)	2.75 (High)	2.7 (High)
Obrusnikova, & Miccinello (2012)	3 (High)	2.5 (High)	2.75 (High)	2.8 (High)
Pan et al. (2011)	1.8 (Medium)	2.25 (Medium)	1.75 (Medium)	1.9 (Medium)
Stanish et al. (2015)	3 (High)	2.25 (Medium)	2 (Medium)	2.4 (Medium)

2.5.3.2 Participants. Five studies recruited young people with ASD and the remaining three studies recruited parents of young people with ASD (Arnell et al., 2020; Must et al., 2015; Obrusnikova & Miccinello, 2012). Four of the eight studies stated this diagnosis was as per APA guidelines (1994). The remaining studies verified the participants' diagnosis of ASD through administration of the Social Responsiveness Scale (Obrusnikova & Cavalier, 2011), the Autism Diagnostic Interview-Reviewed (Must et al., 2015; Stanish et al., 2015), or did not make a diagnostic specification (Lamb et al., 2016). Additional inclusion criteria included

enrollment in mainstream school with no individualised PE support (Healy et al., 2013) and the ability to verbally communicate (Stanish et al., 2015). Three studies listed the presence of co-occurring conditions/comorbidities/or any illness/injury as exclusionary criteria (Arnell et al., 2020; Obrusnikova & Miccinello, 2012; Stanish et al., 2015).

Studies employed a range of purposive, convenience and comprehensive recruitment strategies. Participants were recruited from a summer camp for children with ASD (Healy et al., 2013), a Child and Youth Habilitation Centre (Arnell et al., 2020), mainstream and special schools (Lamb et al., 2016; Must et al., 2015; Pan et al., 2011) and community organisations (Must et al., 2015; Obrusnikova & Cavalier, 2011; Stanish et al., 2015). Must et al. (2015) and Stanish et al. (2015) sought additional participants from online postings, ASD support groups and previous research databases. Obrusnikova & Miccinello (2012) did not report on participant recruitment.

The eight reviewed studies included 460 participants with sample sizes ranging from $n=5$ (Lamb et al., 2016) to $n=111$ (Must et al., 2015). Eighty-five of the participants were young people with ASD and 181 of the participants were parents of young people with ASD. The age of young people with ASD ranged from three to eighteen years of age. Studies included substantially more males with ASD/parents of males with ASD ($n=232$) than females with ASD/parents of females with ASD ($n=34$). The gender imbalance found across study samples may be explained by the traditional 4:1 ratio of males to females in the ASD population as outlined in Section 2.2.1.

The studies took place across five countries: Republic of Ireland, United Kingdom, Sweden, United States of America and China. Four studies gathered

demographic information and reported the majority of participants to be Caucasian and from well-educated households (Must et al., 2015; Obrusnikova & Cavalier, 2011; Obrusnikova & Miccinello, 2012; Stanish et al., 2015). Must et al. (2015) and Obrusnikova & Cavalier (2011) also reported young people's body mass index (BMI), while Lamb et al. (2016) was the sole study to report comorbidities (e.g. attention deficit hyperactivity disorder [ADHD]).

2.5.3.3 Research Design. Three studies employed a quantitative descriptive design (Must et al., 2015; Pan et al., 2011; Stanish et al., 2015), four studies adopted a qualitative approach (Arnell et al., 2020; Healy et al., 2013; Lamb et al., 2016; Obrusnikova & Miccinello, 2012) and Obrusnikova and Cavalier (2011) applied a mixed-methods design. All studies included a group design¹. As part of WoE B, studies were appraised for their inclusion of a neurotypical comparison group to ensure reported barriers/ facilitators to PA for young people with ASD could be correlated with the diagnosis of ASD (Bandini et al., 2013). This criterion was only met by three studies (Must et al., 2015; Pan et al., 2011; Stanish et al., 2015).

Five studies received a high rating for methodological quality (WoE A). All five study designs were deemed appropriate to the research question and employed appropriate measures for the question (Arnell et al., 2020; Healy et al., 2013; Obrusnikova & Cavalier, 2011; Obrusnikova & Miccinello, 2012; Stanish et al., 2015). Stanish et al. (2015) employed widespread purposive sampling with a comprehensive screening protocol and adjusted for a high non-response rate. The other four studies provided coherence between data sources, collection, analysis, and interpretation of findings. Healy et al. (2013), Obrusnikova and Cavalier (2011) and

¹ Group design involves randomly assigning participants to two (or more) groups with at least one treatment group and one control group

Obrusnikova and Miccinello (2012) also received the highest rating for relevance of methodology to the review question (WoE B) as they provided dependability and credibility of measures and analysis (discussed below) and gathered data via multiple methods (Kratochwill & Stoiber, 2002). Additional data collection methods beyond interviews with young people with ASD is crucial for data transferability given the prevalence of social communication difficulties which are common for individuals with ASD (APA, 2013).

Two studies received medium ratings for their methodological quality (WoE A). Pan et al. (2011) recruited a limited population (exclusively males) to answer the research question and Lamb et al. (2016) provided insufficient details regarding data analysis.

2.5.3.4 Measures and Analysis. Dependability and credibility of measures was appraised in WoE B given it is crucial for studies to state how credibility of their primary measure was assessed (Kratochwill & Stoiber, 2002) and piloting of new measures ensures dependability (Marshall & Rossman, 2014). Four studies received a high rating for their measures which were piloted on a cohort similar to the target population (Arnell et al., 2020; Healy et al., 2013; Obrusnikova & Cavalier, 2011; Obrusnikova & Miccinello, 2012). Two studies received a “Medium” rating for their measures as Stanish et al. (2015) did not pilot the employed measure on young people with ASD and Pan et al. (2011) provided dependability for only one of the two employed measures. The remaining two studies received a low score for their measures as neither provided measure dependability nor evidence of piloting new measures.

Seven of the reviewed studies employed a form of interview or questionnaire. Arnell et al. (2020) and Healy et al. (2013) employed semi-structured interviews

with the latter additionally employing unfinished statements and drawings to elicit the voice of the young person. An online questionnaire was used by Obrusnikova & Miccinello (2012) which subsequently informed three semi-structured focus group interviews. Stanish et al. (2015) verbally administered close-ended questionnaires. Photo elicitation was employed by two studies (Lamb et al., 2016; Obrusnikova & Cavalier, 2011) which encouraged participants to take photos relevant to their daily structured PA to elicit further dialogue. Lamb et al. (2016) used the photos to inform semi-structured interviews and Obrusnikova and Cavalier (2011) adopted additional measures of an online questionnaire, semi-structured interviews and an accelerometer and activity log. Pan et al. (2011) used an accelerometer in conjunction with a partial interval recording system.

Six of the studies received a high rating for their analysis in WoE B. Pan et al. (2011) and Stanish et al. (2015) justified their employed statistical analyses and provided full outcome data for their quantitative studies. A comprehensive description of qualitative analysis was provided by the remaining high scoring studies (Arnell et al., 2020; Healy et al., 2013; Obrusnikova & Cavalier, 2011; Obrusnikova & Miccinello, 2012). Hong et al. (2018) require the analysis/statistical tool be defined and justified to ensure dependability. To this end, it is advocated that a transparent overview of analysis be provided if a reflexive analysis is employed (Braun & Clarke, 2022; Tracy, 2010) or in non-reflexive analyses, Kratochwill and Stoiber (2002) emphasise the need for inter-rater/test-retest reliability to be provided. Therefore, Lamb et al. (2016) received a medium rating for analysis as neither evidence of a reflexive approach nor inter-coder reliability were provided. Must et al. (2015) received a low analysis rating, as full analysis was not conducted due to a lack of statistical compensation for a high non-response rate.

2.5.3.5 Physical Activity. As noted in Table 2.3, the current review sought to examine the influences on the participation of young people with ASD in structured PA. Three studies examined the influences on the participation of young people with ASD in PE classes (Healy et al., 2013; Lamb et al., 2016; Pan et al., 2011). Two studies examined participation in after-school PA (Obrusnikova & Cavalier, 2011; Obrusnikova & Miccinello, 2012) and the remaining studies reviewed participation in broadly defined structured PA. Only four studies provided a specific overview of the reviewed PA including examples of sessions and information regarding instructors (Lamb et al., 2016; Obrusnikova & Cavalier, 2011; Obrusnikova & Miccinello, 2012; Pan et al., 2011). The provision of specific details of the reviewed PA (e.g., details of the instructor and training format) are necessary to deliver high quality research and to allow for replication of the study's findings (Kratochwill & Stoiber, 2000; Lechago & Carr, 2008).

To ensure studies were relevant to the review question, all studies were evaluated under WoE C. WoE C evaluated studies under four domains: accurate representativeness of the ASD population; clear outline of the reviewed PA, use of a theoretical framework and inclusion of coherent articulation of results.

Four studies received high WoE C rating scores (Arnell et al., 2020; Lamb et al., 2016; Obrusnikova & Cavalier, 2011; Obrusnikova & Miccinello, 2012). All four studies closely aligned to the current review question and acknowledged the 4:1 ratio of males to females which is representative of the wider ASD population (Fombonne, 2003, 2005, 2009). Three studies recruited participants in adherence to the 4:1 male to female ratio (Arnell et al., 2020; Lamb et al., 2016; Obrusnikova & Miccinello, 2012) and Healy et al. (2013) justified their predominantly male sample with reference to the higher prevalence of males with ASD.

The inclusion of a theoretical framework is crucial to justify the research question and subsequent research design (Sarter, 2006). Lamb et al. (2016) employed Bourdieu's reflexive sociology concepts as a framework for data analysis and the SEM was the selected framework for the remaining studies with high WoE C. Although the research questions and findings of Healy et al. (2013) and Stanish et al. (2015) were closely aligned with the current review, both were assigned a "Medium" rating as they did not employ a theoretical model while Stanish et al. (2015) neither employed a theoretical model nor acknowledged the 4:1 male prevalence of ASD in their sample.

2.5.3.6 Main Findings. Findings are discussed below and are consolidated in Tables 2.6 and 2.7 under the SEM as found in similar systematic reviews (Bradbury et al., 2018; Shields et al., 2012). The application of SEM formalises connections and interactions between different system levels in order to create a practical model depicting results (Henderson & Baffour, 2015).

2.5.3.6.1 Barriers to PA. The barriers reported within this systematic review are classified using the six headings of the SEM as outlined in Table 2.6. It is visibly clear from Table 2.6, that there were more responses to intrapersonal barriers than any other SEM factor. Similar to past research, findings from these reviewed intrapersonal barriers highlighted young people with ASD spend more time engaged in sedentary activities when compared to their neurotypical peers (Obrusnikova & Cavalier, 2011; Pan et al., 2011; Stanish et al., 2015). To this end, a preference for technology was commonly reported by Obrusnikova and Cavalier (2011) as hindering PA participation. However, in direct contrast, Stanish et al. (2015) identified no significant difference between youth with ASD and their neurotypical counterparts on preference for technology over PA. This inconsistency may be due

to a lack of exposure to PA as Must et al. (2015) found the number of PA barriers reported by parents (e.g., adults lack the skills needed to include their child and other children participating in PA exclude their child) to directly relate to total weekly screen-time and further reported a positive correlation between parents' difficulty making PA arrangements and higher levels of screen-time for their children with ASD.

As outlined under interpersonal factors in Table 2.6, the social sporting challenges were also highlighted as hindering participation. Compared with neurotypical peers, Stanish et al. (2015) found young people with ASD were more likely to indicate a dislike for team sports and were less likely to report PA as a way to make friends. Moreover, Lamb et al. (2016) noted the unstructured social elements of the changing room as stress-inducing for young people with ASD. In line with prior research (McMahon et al., 2020), negative social experiences for young people with ASD involved in PA were also highlighted. Healy et al. (2013) reported cases of bullying and negative social comparison and Must et al. (2015) delineated how peers in the PA group can deliberately exclude those with ASD. It is worth acknowledging that whilst such negative social experiences in PA are reported for young people with ASD, structured PA settings can enhance social development and belonging in this population (as discussed in Sections 2.2.2 and 2.2.3). This tension may be understood through the previously discussed “integrated” versus “inclusive” settings (see Section 2.2.5; Eldar et al., 2010; Nutbrown & Clough, 2009) as integrated settings without appropriate implementation exacerbate risks of bullying and stigma, particularly for young people with ASD (Humphrey & Symes, 2013; Sreckovic et al., 2014). One may also notice the frequent reference to parental

interpersonal barriers in Table 2.6 which will further explored in the subsequent section (2.5.3.6.2).

Interestingly, Healy et al. (2013) and Must et al. (2015) were the only two studies to specifically discuss exclusion. Beyond peer exclusion, both drew attention to PA instructors not having adequate skills to include those with ASD. Healy et al. (2013) further emphasised that children explicitly request to be excluded. To this end, the stimulating PA context must be emphasised (Menear & Smith, 2008) as Healy et al. (2013) noted that this self-exclusion was due to ability, sensory issues and fear of injury rather than preference for sedentary activities. Similarly, Stanish et al. (2015) found that young people with ASD expressed more fear about getting hurt from PA compared with neurotypical peers (notably all referenced as intrapersonal factors in Table 2.6). The challenges of an over-stimulating PA setting were echoed by participants in Lamb et al. (2016) study who described the corridor to the PE hall as a disorganised space which made them feel stressed and noted dirty changing rooms made them feel unhappy and unsafe (listed as physical factors in Table 2.6).

Within the current findings as shown in Table 2.6, young people with ASD did not focus on institutional and public policy barriers. This contrasts with parents outlined in Table 2.6 who emphasised a lack of public policy regarding recommended PA guidelines (Arnell et al., 2020) and expressed concern that PA instructors lack skills to support their children (i.e., institutional factor; Must et al., 2015). However, the most striking parental input was the frequency of reported barriers which was significantly more than facilitators to PA for their children (Obrusnikova & Miccinello, 2012) with parents in the Must et al. study (2015) reporting six or more barriers. Furthermore, parents of children with ASD note substantially more barriers than parents of neurotypical children (Must et al., 2015).

Table 2.6
Barriers to Physical Activity Participation

Intrapersonal	Interpersonal	Physical	Institutional	Community	Public Policy
Physical ability (1,2,4,5,7)	Peer bullying/ peer exclusion (2,4)	Weather (1,5,6,8)	Adults do not include young people with ASD (2,4)	Lack of transportation (4,5)	Recommended PA guidelines are not widely known (6)
Sensory Challenges/ PA is overstimulating (1,2,3,4)	Negative social comparisons (2)	Unsafe/ lack of equipment / resources (3,5,6)	Homework (5)	Lack of PA programmes to join (1,4,5,6)	Society is not supporting PA settings to support young people with ASD (1)
Fear of PA/ PA injury (1,2,8)	Peers breaking rules (1)	Messy facilities (3)	Insufficient developmentally appropriate PE (6)	Lack of staff training (1, 4,6)	
Social and communication difficulties (1,3,4,6,8)	Dislike for team sports (8)	Indoor PA (7)	Complex rules in team activities (1)	Community safety (4,6)	
Behavioural/ attention difficulties (4,6)	Teacher excluded young person (2)		Lack of rules in corridors/ changing rooms (2)	Financial constraint of PA programmes (4)	
Difficulty understanding rules (1)	Lack of peer exercise partner/friend (4,5,6)		Lack of structure in PA setting (1)	More PA activities for younger people (1)	
Health issues (4,6)	Parents do not have time (1,5,6)				
Request to be excluded (2)					
Easily tired (1,5)					
Lack of interest in/ bored with PA (1,5,6,8)	Parents need to drive (5)				
Preference for sedentary activities – technology, Lego, or imaginative board games (1,5,6,8)	Parental difficulty supporting young people with ASD (1)				
Lack of independence (4,6)					
Pressure to perform (1,3)					
Too busy (6,8)					
Concerned about image (8)					

Note. 1=Arnell et al. (2020); 2=Healy et al. (2013); 3=Lamb et al. (2016); 4=Must et al. (2015); 5=Obrusnikova, & Cavalier (2011); 6=Obrusnikova, & Miccinello (2012); 7=Pan et al. (2011); 8=Stanish et al. (2015).

2.5.3.6.2 Facilitators to PA. The facilitators reported within this systematic review are classified using the six headings of the SEM as outlined in Table 2.7. In Obrusnikova and Miccinello's 2012 study, parents reported intrapersonal facilitators as most crucial to their children's PA participation. Interestingly, young people with ASD cited intrapersonal factors second to physical facilitators with availability of exercise equipment appearing most predominantly (Obrusnikova & Cavalier, 2011). Accordingly, Table 2.7 also references the importance of available PA programmes (Obrusnikova & Cavalier, 2011; Obrusnikova & Miccinello, 2012). However, although Stanish et al. (2015) found no significant difference between young people with ASD and neurotypical peers' access to PA facilities, Arnell et al. (2020) explicitly highlighted that access is not sufficient, emphasising programmes must be accessible. Both the institutional and community factors listed in Table 2.7 further stress the importance of preparation and training in making such programmes accessible.

The importance of positive interpersonal factors to young people with ASD was evident throughout the review as demonstrated by the multiple responses listed under the relevant heading in Table 2.7. With respect to PA instructors, Lamb et al. (2016) described teachers structuring transitions to PA as crucial to young people with ASD (Lamb et al., 2016). Interestingly, Pan et al. (2011) findings suggest young people with ASD engage in higher levels of PA with female teachers and non-certified PE teachers. The authors did not offer any explanation for this novel finding and suggested further investigation is warranted. With regard peer interaction, Pan et al. (2011) and Lamb et al. (2016) reported PA to be positively related to peer interactions in young people with ASD. Moreover, Healy et al. (2013) found that

camaraderie and positive rapport between young people with ASD and neurotypical peers positively influenced PA.

Parents' role in PA promotion was also emphasised in this review as is evidenced from the numerous references to parents in responses listed under the interpersonal heading in Table 2.7. Arnell et al. (2020) reported on the advocacy role adopted by many parents of young people with ASD. This role included searching for/ accompanying children to accessible programmes; honest relationships with coaches and seeking support from fellow parents of children with ASD. Despite the positive effects such efforts have on PA participation, Arnell et al. (2020) emphasised the burden it places on parents. Must et al. (2015) and Obrusnikova and Miccinello (2012) echoed similar insights, noting family constraints or a lack of parental time or energy in adopting this advocacy role. Notably, such parental challenges were heavily emphasised under the interpersonal heading in Table 2.6 regarding the barriers to PA participation.

Interestingly, as outlined in Table 2.7 overleaf, no reference was made to public policies which facilitate the PA participation of young people with ASD. This absence supports the two public policy barriers noted to PA participation in Table 2.6 which both indicate a lack of widespread policy support for the PA participation of those with ASD.

Table 2.7*Facilitators to Physical Activity Participation*

Intrapersonal	Interpersonal	Physical	Institutional	Community	Public Policy
Rewards/successes (1,3,5,6)	Social interaction/camaraderie between peers (2,3,7)	Good weather (5,6)	School prepares for or offers PA programmes (5,6)	PA programmes in the community (5,6,8)	Not applicable
Feeling refreshed (5)	Initiation of friendship (2,7)	Good conditions – surface etc. (5,6)	Fitness testing/ free play lessons in PE (7)	Trained staff (3,6)	
Involves special interest (5)	Parental knowledge of/ and interest in PA (1)	Supportive exercise equipment (5)	Adapted PA setting (1)	Transportation (8)	
Uses managerial strategies (6)	Parents/siblings are supportive/ physically active (1,5,6,8)	Individual changing cubicles (3)	Individualised sport (1)		
	Friends are supportive/ physically active (5,6,8)	Quiet space provided (3)			
	Supportive adult (3,8)	Outdoor PA (7)			
	Gender of instructors (7)				
	Open & honest relationship between parents and coaches (1)				
	Help & support from other parents of young people with ASD (1)				

Note. 1=Arnell et al. (2020); 2=Healy et al. (2013); 3=Lamb et al. (2016); 4=Must et al. (2015); 5=Obrusnikova, & Cavalier (2011); 6=Obrusnikova, & Miccinello (2012); 7=Pan et al. (2011); 8=Stanish et al. (2015).

2.5.4 Phase Two Conclusions

Phase two of this review provided a comprehensive overview of the influences on the participation of young people with ASD in structured PA. Eight studies were screened for appraisal under Gough's WoE (2007). These studies were evaluated for their methodological quality, the relevance of the methodology to the review question and specific judgements pertaining to accurate representativeness of the ASD population; clear outline of the reviewed structured PA, use of a theoretical framework and the inclusion of coherent articulation of results. These judgements were averaged to create the overall weight of evidence provided by each study to answer the review question. Such judgments were crucial to inform the current study's design and methodology. Following this appraisal, four studies were awarded a high WoE rating (Arnell et al., 2020; Healy et al., 2013; Obrusnikova & Cavalier, 2011; Obrusnikova & Miccinello, 2012) and a medium rating was assigned to three studies (Lamb et al., 2016; Pan et al., 2011; Stanish et al., 2015). The study designs (as previously discussed in the above sections) of these seven studies informed the current research and as such these studies are referenced throughout the thesis. Must et al. (2015) received a low rating, therefore its findings were interpreted with extreme caution and its study design was not weighted as heavily when informing the current methodology.

With respect to PA specification, the reviewed PA differed across the studies to include PE classes, after-school PA, and a range of broadly defined structured PA. The provision of details of the PA varied across studies which compromises credibility and dependability to allow for replication of study's findings (Kratochwill & Stoiber, 2000). Therefore, it was noted that clear details of

the PA must be made explicit in the current study to allow for such replication and generalisability of study findings (Kratochwill & Stoiber, 2000; Smith, 2018).

Methodology also varied across the studies and included four qualitative studies, three quantitative studies and Obrusnikova, & Cavalier (2011) adopted a mixed methods approach. Two studies' research designs were underpinned by a theoretical framework (Obrusnikova & Cavalier, 2011; Obrusnikova & Miccinello, 2012) while Lamb et al. (2016) adopted a theoretical framework for qualitative analysis. The absence of a theoretical framework to justify the research question and subsequent research design, limited the usefulness of findings and conclusions (Sarter, 2006). Given the extensive review and discussion of each of the employed theoretical frameworks employed in the aforementioned studies (Obrusnikova & Cavalier, 2011; Obrusnikova & Miccinello, 2012), the SEM was deemed an appropriate framework for the current study as will be further explored in Section 3.3.1.3.

It was noted that dependability and credibility of employed measures were provided by only four studies (Arnell et al., 2020; Healy et al., 2013; Obrusnikova & Cavalier, 2011; Obrusnikova & Miccinello, 2012) which ensured dependability of newly developed measures through piloting on similar populations (Marshall & Rossman, 2014). This critical review serves to inform and enhance dependability and credibility within the current study design. Specifically, this review guided me as a researcher to ensure the provision of concrete methodological details (Tracy, 2010) and that all phases of the project should be documented in a transparent manner (Braun & Clarke, 2022; Tracy, 2010) within the current project. Most notably, this analysis and its subsequent conclusions informed the use of piloting of methods of inquiry within the current study (Kim, 2011; Sampson, 2004).

As far as population representativeness is concerned, females with ASD were underrepresented ($n=232$ parents of/males with ASD, $n=34$ parents of/females with ASD) which affects external dependability and transferability (Mertens, 2014, p. 310). Given the unique female “camouflage” of ASD symptomology (Dean et al., 2017; Tierney et al., 2016) the influences on PA participation in males with ASD may not be generalised to the wider ASD population. Future studies should ensure recruitment adheres to the 4:1 ASD gender ratio (Fombonne, 2009; Idring et al., 2015).

Information regarding participants’ physical histories varied across studies. Co-occurring conditions/comorbidities and/or illness/injury were listed as exclusionary criteria in two studies (Arnell et al., 2020; Obrusnikova & Miccinello, 2012; Stanish et al., 2015) and details of BMI and comorbidities in young people with ASD were reported in two studies (Lamb et al., 2016; Must et al., 2015). The remaining three studies did not report participants’ physical histories which may impact credibility (Martin, 2007; Mertens, 2014).

As described herein, the influences on the participation of young people with ASD in PA identified in this review applied to, transcended, and interacted across all levels of influence of the SEM (McLeroy et al., 1988). The reviewed studies reported substantially more barriers than facilitators and the most frequently cited barriers were intrapersonal, followed by interpersonal, community, physical, institutional, and public policy. It should be stressed that this emphasis on reviewing the barriers to PA participation for individuals with ASD is common (Blagrove & Colombo-Dougovito, 2019; Shields et al., 2012) and is therefore in need of a more balanced approach. Fortunately, the current systematic review did include facilitators, of which the most frequently cited were interpersonal, followed

by intrapersonal, physical, community, and institutional with no reported public policy facilitators. The findings of this phase also suggest that young people with ASD readily embrace opportunities to engage in PA and such participation can be facilitated in PA settings (Stanish et al., 2015). Parents further reported wanting their children to take part in structured PA (Arnell et al., 2020).

However, it must be recognised that these studies also drew attention to the perceived lack of collaboration and support from relevant public services and emphasised the difficulty parents of young people with ASD experience when trying to include their children within structured PA settings. A lack of knowledge regarding appropriate PA settings and a lack of ASD knowledge in structured PA leaders was reported to restrict access to PA for young people with ASD (Arnell et al., 2020; Obrusnikova & Miccinello, 2012). This is a crucial absence given earlier discussions (Section 2.2.4) regarding the benefit of exploring coaches' perspectives which would contribute to the growing field of inclusive sport and may help to identify future facilitators to the inclusion of individuals with ASD (Arnell et al., 2021; Shields & Synnot, 2016).

As far as future research is concerned, it is worth noting that each of the studies reviewed in phase two indicated areas for further investigation to be conducted. These suggestions are presented below in Table 2.8 to inform the current empirical study. Overall, the suggestions as outlined below encourage a focus on PA for those with ASD in extracurricular activities outside of the school and recommend gaining input from stakeholders within the community in order to evaluate current initiatives.

Table 2.8*Future Research Recommendations*

Study Authors	Recommendations
Arnell et al. (2020)	Incorporate the perspectives of stakeholders outside young people’s family regarding the participation of young people with ASD in PA settings
Healy et al. (2013)	Review the PA facilitation of young people with ASD in areas and circumstances outside of the PE setting
Lamb et al. (2016)	There is a need for inclusive planning and inclusive practices to extend beyond the classroom. More “two-way conversations” regarding those facilitating the PA and those participating in the PA was encouraged
Must et al. (2015)	An evaluation on community-based PA programmes meeting the specific needs of young people with ASD and on national policies supporting inclusion in community-based PA programmes
Obrusnikova & Cavalier (2011)	A detailed evaluation of the characteristics and environment of community PA alongside further perspectives from stakeholders involved in facilitating young people in PA (parents, physical educators)
Obrusnikova & Miccinello (2012)	Evidence on how national policies impact levels of PA in young people with ASD is warranted
Pan et al. (2011)	Further investigation into PA instructor behaviours and how these may impact PA in young people with ASD
Stanish et al. (2015)	Examine additional factors which may hinder or facilitate PA in young people with ASD with concordance from main stakeholders

2.6 Review Outcomes and Implications

The purpose of this two-phased review was to gain insights into the phenomenon of the inclusion of young people with ASD in sport which was guided by two main aims. The first aim was to contextualise sport inclusion through investigating international and national sport inclusion legislation and initiatives.

The second aim focused on gaining an understanding of the influences on the participation of young people with ASD in structured PA settings (e.g., sport, PE, formal exercise). Although phase one highlighted that the advent of sport inclusion policies is positive, there is however a need to further understand how these policies are being contextualised and enacted (Jeanes et al., 2018). The benefits of employing a strengths-based approach based on the biopsychosocial model as part of such future investigation was discussed in phase one (UNESCO Chair at IT Tralee, 2015). Phase two further outlined that the barriers for young people with ASD to participate in structured PA (sport, PE and formal exercise) have been comprehensively explored and overshadow the reviewed facilitators despite the notable benefits of PA for young people with ASD (May et al., 2018). This may be linked to the fact that the field of PA research prioritises problems and what is “broken” (Enright et al., 2014) particularly regarding the participation of individuals with ASD in sport (Blagrove & Colombo-Dougovito, 2019; Shields et al., 2012). When considering this two-phased review, it is clear that a strengths-focused inquiry would be a welcome and novel approach to the field.

As highlighted by both phases of the review and further outlined in Table 2.8, future research calls for input from all key stakeholders regarding the inclusion of young people with ASD in sport clubs. In phase one of the review, Cara engaged with individuals with disabilities or parents of children with disabilities across Ireland when developing the *Sport Inclusion Disability Charter* (Cara, 2019) and phase two included the voices of young people with ASD and their parents. To this end, there is a noted absence of coaches’ voices in this review and prior research.

Notably, both phase one and two highlighted potential concerns regarding the community coaches’ knowledge of ASD and how they include young people with

ASD. Therefore it is crucial that the voice of the community coach as a key stakeholder is captured in order to facilitate the introduction, orientation and inclusion of young people with ASD (Ohrberg, 2013; Sallis et al., 2000). Moreover, including the coach's voice responds to the need for collaboration and concordance between key stakeholders (Arnell et al., 2020; Stanish et al., 2015) and will answer a prior call to understand the needs and practices of community coaches (May 2019; Townsend et al., 2018).

It should be noted that a broad term of structured PA (i.e., sport, PE, formal exercise) was employed in the second phase of this chapter. This broader search term was warranted given the influences on structured PA participation for young people with ASD had not yet been collated. It is potentially a limitation of the review that no study focused on the facilitators and barriers to participation in a specific sport setting. However, the review of the inter-related factors of structured PA contextualised this thesis' empirical study which in line with previous work (Eime et al., 2013) will focus on sport specifically.

2.7 Rationale for the Current Study

With the rising prevalence of young people with ASD (Baio et al., 2018; Boilson et al., 2016) reflected in the number of participants with ASD in sport clubs (Ohrberg, 2013), clubs are encouraged to consider how they can support this growing population (Alexander & Leather, 2013). To date, research has focused on the challenges of coaching and integrating athletes with "hidden disabilities" such as ASD (Vargas et al., 2015) yet it is unclear what community clubs and coaches are currently doing to foster inclusion and how they could be supported with such inclusive practices (Geidne & Jerlinder, 2016; Townsend et al., 2018).

Furthermore, there is a striking lack of input from the community coach regarding the inclusion of young people with ASD in clubs (Duquette et al., 2016; Nichols et al., 2019) as recent research has captured the voice of young people (Arnell et al., 2018), their parents (Arnell et al., 2020; Nichols et al., 2019) and coaches involved in disability coaching (Kimber et al., 2021). This is a notable absence as coaches are ideal candidates to promote the inclusion of young people with ASD in sport clubs (Rimmer et al., 2004; Shields & Synnot, 2014). Moreover, inclusion policies will neither make significant momentum nor be applied in clubs without key stakeholder (i.e., coaches) support (Braun et al., 2011).

Therefore, the current project will ultimately respond to the need to conduct research on the inclusion of young people with ASD in sport clubs to review how inclusive initiatives are being enacted in order to further inform appropriate intra-club frameworks to inclusive sport participation (Arnell et al., 2021; Kimber et al., 2021; Townsend et al., 2018; UN, 2006). Crucially, the present study also acknowledges the noted absence of the voice of the coach regarding the inclusion of young people with ASD in clubs (Duquette et al., 2016; Nichols et al., 2019). Incorporating coaches' perspectives and experiences is essential to inform and enact future inclusive policy and practice (Braun et al., 2011; North et al., 2020).

As previously outlined, this research is particularly timely within an Irish context given the rising national prevalence of ASD (Boilson et al., 2016) and the call for further investigation into sport inclusion in community settings (Healy et al., 2013) particularly with respect to coaches' reported dissatisfaction with disability training (Department of Transport Tourism and Sport, 2018; National Coaching and Training Centre, 1999, 2003).

2.8 Research Questions

It is the aim of the current project to build on the limitations and strengths outlined in this chapter that provided the basis for the current exploratory study which consists of one core research question embedded with three sub-questions:

What are the experiences and perspectives of mainstream community coaches regarding the inclusion of young people with ASD within their clubs?

1. From the coaches' perspectives, what facilitates the current inclusion of young people with ASD in sports clubs?
2. What does the ideal inclusion of young people with ASD in sport clubs look like from the coaches' perspectives?
3. What needs to happen to further promote the inclusion of young people with ASD in sport clubs?

3.0 Chapter Three: Empirical Paper

3.1 Chapter Introduction

Chapter Three provides the empirical work of the current project. As aforementioned, this empirical project focuses on sport, building on the second phase of Chapter Two which reviewed the influences on the participation of young people with ASD in structured PA. Therefore, this chapter begins with the contextualisation of sport in the project before providing details of the adopted paradigm, research design, participants, measures, data collection and data analysis. The chapter closes with the project results and an in-depth discussion pertaining to the findings.

3.1.1 Research Aim

This project sought to explore the perspectives and experiences of coaches in relation to the inclusion of young people with ASD in sport clubs. The aim therein is to identify facilitators for the inclusion of young people with ASD in clubs as reported by coaches.

3.1.2 Sport within the Context of the Current Project

Phase two of Chapter Two (Section 2.5.3.6.1) emphasised the multiple intrapersonal and interpersonal barriers experienced by young people with ASD in relation to team sports noting stress, bullying, negative social comparisons (Healy et al., 2013; Lamb et al., 2016; Stanish et al., 2015) and a reported dislike for team sports (Stanish et al., 2015). Such challenges may be due to the communication and interaction difficulties hallmarked by ASD (APA, 2013). Although most organised sports occur in group contexts, both Chapter Two and prior research emphasise that young people with ASD highlight a preference for individual sports and report less stress when their performance does not impact a team (Patterson & Smith, 2012).

Therefore, the current project focused on individualised sports in line with recent recommendations (McCoy & Morgan, 2020). Defining sport type (i.e., individual vs team) was informed by research conducted by Baker et al. (2003) which adapted a more dated dependency classification system (Chelladurai & Saleh, 1978). Pluhar and colleagues' (2019) research further informed this classification within the current project.

Individual sports with repetitive movements were deemed appropriate in this study given they can be more easily adapted to personalised needs (Grandisson et al., 2012). Moreover, individuals with ASD report a preference to work on such repetitive or monotonous tasks (Baron-Cohen et al., 2009; de Schipper et al., 2016). The project also targeted structured sport as individuals with ASD experience difficulties with unstructured time (Van Bourgondien et al., 2003) and parents of children with ASD report their children perform best at organised and structured sporting activities (Arnell et al., 2020). Moreover structured activities are beneficial for both the young person with ASD and their entire family (Lock et al., 2010). Informed by prior research (Lemieux et al., 2002; Newman et al., 2016), both contact (e.g., martial arts) and non-contact sports (e.g., athletics) were welcomed in the current study.

3.2 Paradigm and Assumptions

I adopt a social constructivist lens as I prescribe to the view that all we know about the world is socially constructed (Theys, 2017). Moreover, this paradigm is appropriate in understanding the multilevel interconnected factors which influence inclusion (Mertens, 2014). The assumptions shaping social constructivism are considered below in the context of the current study.

3.2.1 Axiology

The social constructivist adopts a balanced axiology (Kivunja & Kuyini, 2017) outlining that research cannot be independent of the values of the researcher (Mertens, 2014). Therefore, my background and values were disclosed in Chapter One and my reflexivity is embedded throughout the research (Braun & Clarke, 2022).

3.2.2 Ontology

Ontologically, the social constructivist paradigm adopts a relativist position and assumes multiple socially constructed realities, whereby people's values are thought as different and not wrong (Chilisa & Kawulich, 2012) and are explored through human interaction (Kivunja & Kuyini, 2017). This aligns with my own view that the inclusion of young people with ASD in clubs is not solely determined by the intra-personal factors of the young people, but rather best understood in the SEM of multiple interactive factors (Carson et al., 2014). Furthermore, as guided by Braun and Clarke (2022), the relativist approach stands to provide a convincing account of the meanings of coaches' perspectives and explain why they matter.

3.2.3 Epistemology

The social constructivist paradigm posits a subjectivist epistemology whereby the researcher and the participant are interlocked with each influencing the other. This interactive process is evident throughout data collection and analysis (Kivunja & Kuyini, 2017) and is particularly notable given Braun and Clarke's (2022) reflexive guidance.

3.3 Methodology

3.3.1 Research Design

3.3.1.1 Qualitative Approach. In line with the social constructivist paradigm, the current research adopted a naturalist qualitative research design (Lincoln & Guba, 2000; Mertens, 2014) structured by Denzin and Lincoln's (2003) five clear phases (Table 3.1; p.32).

Table 3.1

The Qualitative Research Process

Phase 1	The Researcher as a Multicultural Subject
Phase 2	Theoretical Paradigms & Perspectives
Phase 3	Research Strategies
Phase 4	Methods of Collection & Analysis
Phase 5	The Art, Practices & Politics of Interpretation and Presentation

Note. Reprinted from *Collecting and Interpreting Qualitative Materials* (2nd ed. p 32) by N. Denzin and Y. Lincoln, 2003, Sage. Copyright 2003 by Sage Publications, Inc.

Adhering to Denzin and Lincoln's qualitative research process as outlined above emphasises my biographical situation behind each phase of the research. In Phase 1 of the process, I identified as an Irish female with an invested interest in the sporting continuum of inclusion (as denoted in Section 1.3). Phase 2 of the process is outlined in Section 3.2 whereby my paradigm and assumptions are made explicit. Phase 3 and Phase 4 will be discussed in the subsequent sections whereby I discuss the rationale behind the study design and data collection and analysis. My positionality in these two phases is further reflected upon in Chapter Four where my own voice is most pertinent as the researcher in these areas. My invested interest in the topic of inclusion and my reflexivity (Phase 5) is embedded throughout the thesis

and is regarded as a strength in this research (Denzin & Lincoln, 2003) and is made apparent given my outlined positionality evidenced through my strong alignment with Braun and Clarke.

3.3.1.2 Appreciative Inquiry. Appreciative inquiry (AI) is the adopted model of exploration. Underpinned by the social constructivist paradigm (Fitzgerald et al., 2001; Van der Haar & Hosking, 2004), AI challenges the problem-based approach common in research and employs a strengths-based model of inquiry which builds on existing strengths (Cooperrider & Whitney, 2001; Tschannen-Moran & Tschannen-Moran, 2011). Cooperative in practice, AI seeks to find the best in people and their organisations (Fitzgerald et al., 2001). The five core principles of AI outline tenants underlying the philosophy (see Table 3.2 overleaf). AI originally consisted of a “4-D process” which was transformed to a “5-D process” (see Figure 3.1; Cooperrider & Whitney, 2001).

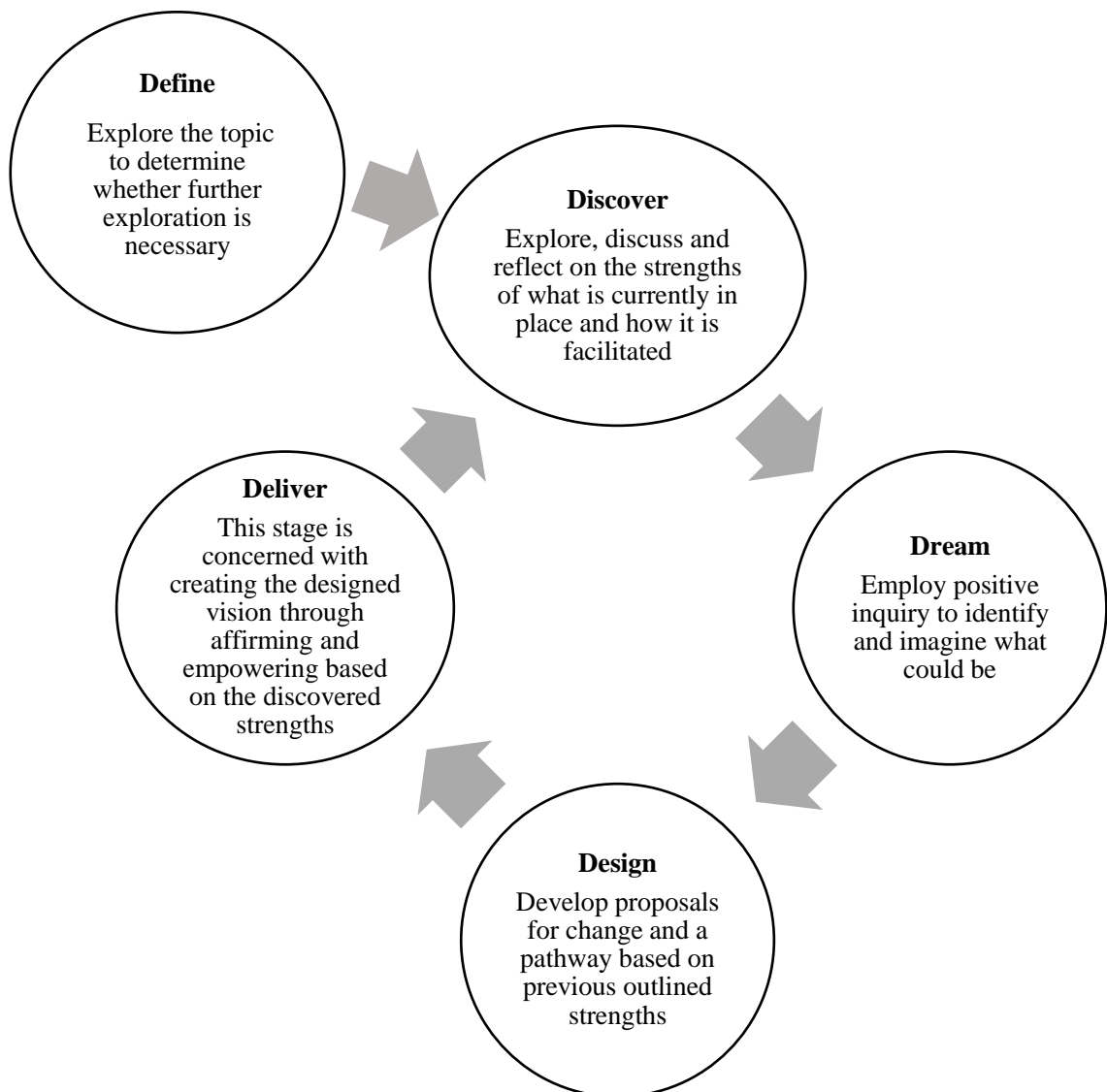
Table 3.2*Core Principles of Appreciative Inquiry*

AI Principle	Summary	Meaning
Constructionist Principle	Knowledge is not for understanding yesterday but rather for designing tomorrow	Knowledge and development are intertwined. As individuals experience and learn from their surroundings through inquiry and language, they are both gaining knowledge and informing future change
Simultaneity Principle	Inquiry fosters intervention and change	Inquiry and change cannot be separated as questions are part of the intervention and change
Poetic Principle	There is choice as to what is studied	Human organisations are forever changing given its members contribute to their own experiences, thoughts, and feelings. The choice of what to study is crucial as it defines the world as we see it
Anticipatory Principle	A future image impacts the current day's actions	Individuals move towards their created images of the future. This future image inspires the present-day actions and behaviours
Positive Principle	Positive questioning is a catalyst for positive change	Fostering change through actions requires much positive affect. Such affect is best created through the use of a positive style of questioning

Note. Adapted from “*Collaborating for change*” by D. Cooperrider and D. Whitney, 1999, San Francisco, CA: Barrett-Koehler and “*Appreciative inquiry: The new frontier*,” by S.P. Fitzgerald, K.L. Murrell and H.L. Newman, 2001, in J. Waclawski & A. H. Church (Eds.), *Organization development: Data driven methods for change*, pp. 203-221. San Francisco, CA: Jossey-Bass Publishers.

Figure 3.1

Visual Overview of the 5-D Process of Appreciative Inquiry



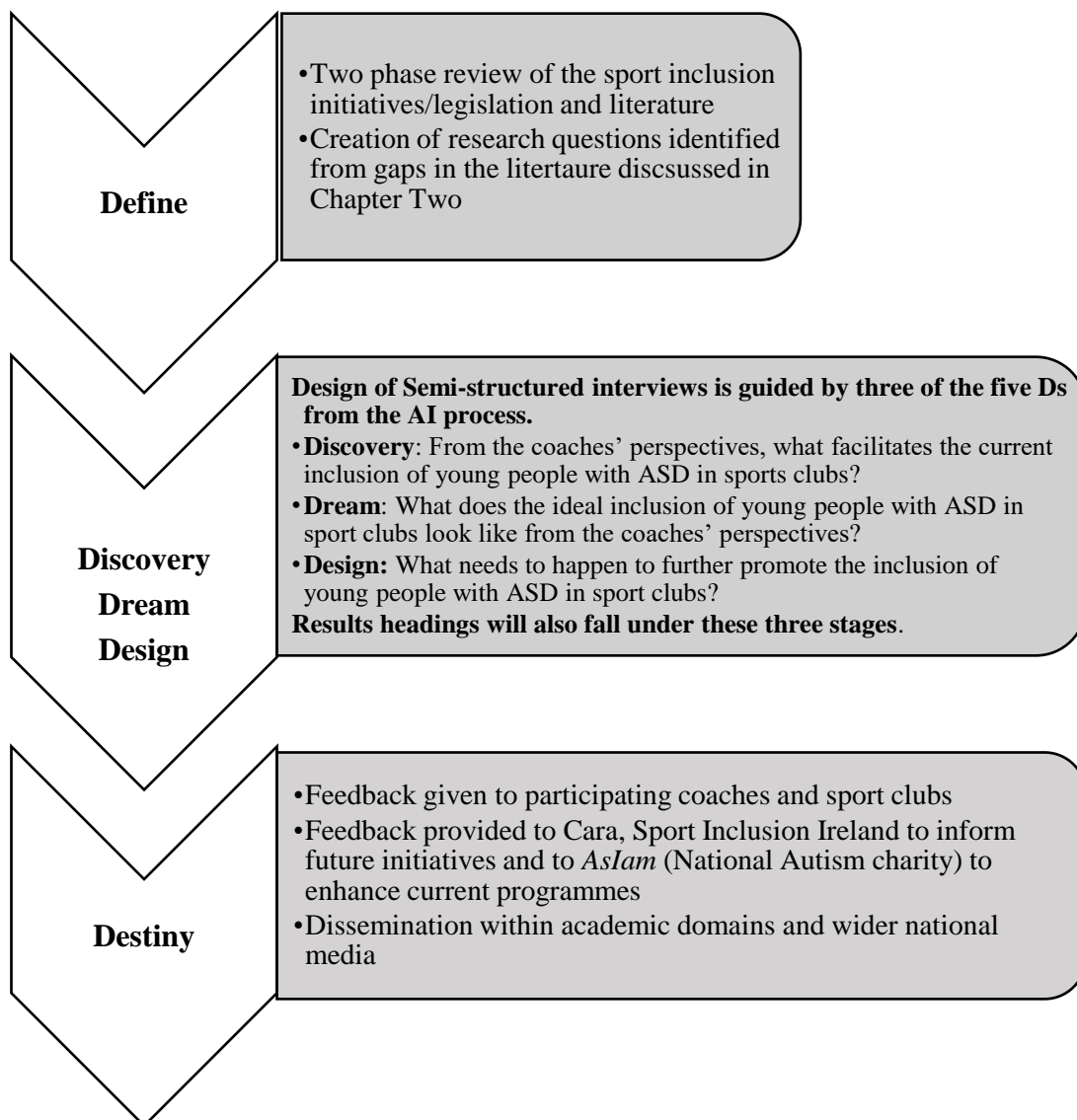
Note. Adapted from “A positive revolution in change: Appreciative inquiry,” by D.L. Cooperrider and D. Whitney, 2001, in R. T. Golembiewski (Ed.), *Handbook of Organizational Behaviour Public administration and public policy*, 87, pp. 611-630 and “Looking beyond what's broken: towards an appreciative research agenda for physical education and sport pedagogy,” by E. Enright, J. Hill, R. Sandford and M. Gard, 2014, *Sport, Education and Society*, 19(7), pp. 912-926 (<https://doi.org/10.1080/13573322.2013.854764>).

3.3.1.2.1 Appreciative Inquiry in the Current Project. AI was appropriate in this study given it provides new understandings to the facilitation of sport (MacCoy, 2014). It is also a welcome approach as sport research prioritises problems (Enright et al., 2014) particularly regarding individuals with ASD as barriers to their participation in sport have been comprehensively reviewed (Blagrove & Colombo-Dougovito, 2019) which was emphasised in Chapter Two (see Section 2.6). Furthermore, AI research has demonstrated its benefits to the field of sport pedagogy (Sargent & Casey, 2021) and its success in research with coaches (Pill, 2015).

All five stages of the AI process were adopted in the current project and a visual overview of this application is provided in Figure 3.2. The *Define* stage entailed Chapter Two of the thesis whereby the topic was explored and rationale for the current research was provided. The three research sub-questions align with the *Discovery, Dream, Design* phases of the AI process as guided by a prior successful Doctoral study (Moriarty, 2019). The mapping of the sub-questions onto the three phases of AI is clearly outlined in Figure 3.2. Appendix B further outlines the mapping of interview questions onto these three AI phases. The *Destiny* stage included the feedback to participating coaches and wider dissemination. Feedback was also shared with Cara, Sport Inclusion Ireland to inform future initiatives and to *AsIam* (National Autism charity) to enhance current programmes as part of the *Destiny* phase. These two organisations were selected as the *Sport Ireland Policy on Participation in Sport by People with Disabilities* has named Cara as the body to support the participation and inclusion of those with disabilities in sport (Sport Ireland, 2021c) and *AsIam* is accepted as Ireland's national Autism Charity (AsIAM, 2022). Moreover both organisations most prominently appeared in Figure 2.4.

Figure 3.2

Visual Overview of the Application of Appreciative Inquiry in the Current Project



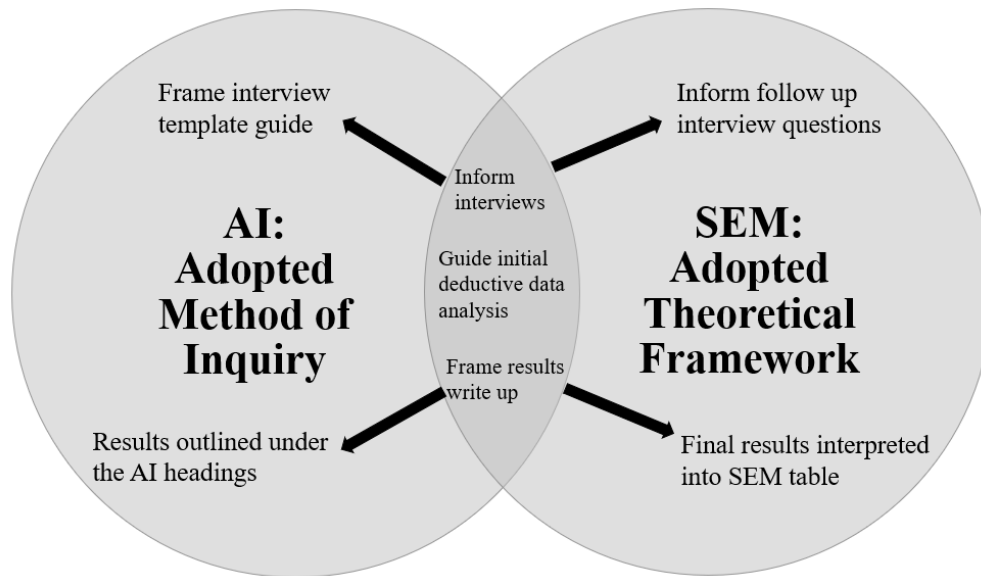
3.3.1.3 Socio-Ecological Model in the Current Project. The SEM (see Table 2.1) underpins this research, providing a theoretical framework to understand multilevel influences on sport participation (Carson et al., 2014; McLeroy et al., 1988). The SEM has previously been employed to review the participation of young people with ASD in community activities, focusing on the perceptions of young people with ASD (Arnell et al., 2018; Stanish et al., 2015) and their parents (Arnell

et al., 2020; Buchanan et al., 2017). Its use has been encouraged with additional stakeholders, such as coaches (Arnell et al., 2021) to explore facilitators for the participation of young people with ASD in sport clubs. Within the current project, the SEM provides an analytic strategy for constructing a practical model based on findings (Henderson & Baffour, 2015) and was incorporated into both interviews and the results write-up.

3.3.1.4 Appreciative Inquiry and Socio-Ecological Model. Through a unique combination of AI and SEM, the current research identifies a number of strengths-focused inter-related factors within sport clubs which were perceived to promote inclusion. AI and theoretical models have previously been woven together in both semi-structured interviews and data analysis (Yoder, 2004) and AI and the SEM specifically have also been successfully integrated together as part of a strengths-based inquiry into a multilevel issue (Herbert, 2021; Vargas-Hernández & López-Lemus, 2021). In the current project, AI framed the interview guide while SEM informed follow-up questions. Both AI and SEM guided the initial deductive data analysis as outlined in Section 3.3.5.2 and results were disseminated under the AI headings, with each heading's results then being interpreted in the SEM. Figure 3.3 provides a visual depiction of the integration of AI and SEM. As outlined in Chapter Two, the presence and discussion of this framework is crucial to justify the subsequent research design (Sarter, 2006).

Figure 3.3

Visual Integration of Appreciative Inquiry and the Socio-Ecological Model



3.3.2 Participants

3.3.2.1 Sampling Process. As noted in Chapter Two, research has called for input from the key stakeholders pertaining to the inclusion of young people with ASD in sport clubs (Arnell et al., 2020; Obrusnikova & Cavalier, 2011). Young people with ASD and their parents were considered as part of the initial sample but were not recruited due to the impact of COVID-19 as discussed in Section 4.7.1. Fortunately much of the recent research captures the voice of young people with ASD (Arnell et al., 2018; Stanish et al., 2015) and their parents (Arnell et al., 2020; Nichols et al., 2019) further highlighting the need to capture the voice of the coach.

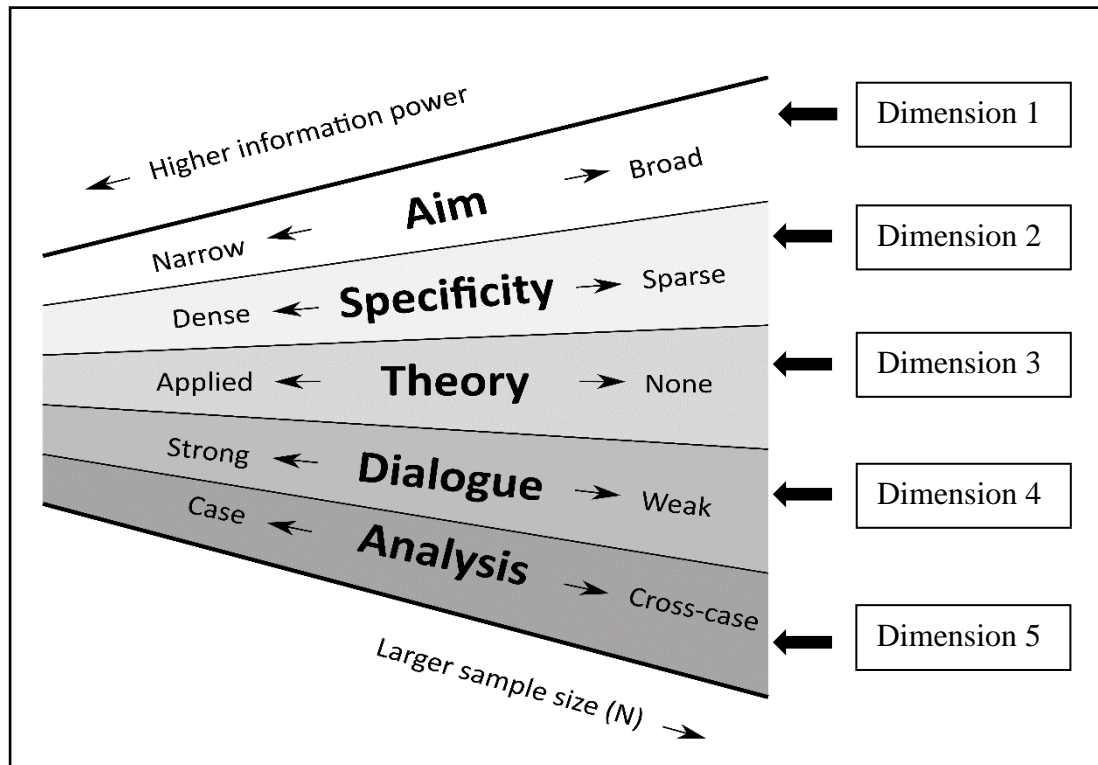
3.3.2.2 Inclusion Criteria. Coaches were required to have experience coaching young people under the age of 18. This included paid/volunteer coaches, helpers, parents, or any individuals who facilitate the participation of young people within sport clubs. Coaches did not require certification from a Sport Ireland recognised coaching course to participate. Furthermore, experience coaching a young person with disabilities and/or ASD was not an inclusion criterion as this

study sought to understand why some coaches are reluctant to transition to coaching individuals with disabilities (Martin & Whalen, 2014) and what could facilitate this transition. Moreover, previous research has suggested targeting coaches and sport clubs with limited experience with young people with ASD (McConkey et al., 2012). Therefore coaches affiliated with disability sport organisations (e.g., Cara and/or Special Olympics Ireland) were not directly recruited.

3.3.2.3 Recruitment Process. Determining sample size is widely debated in qualitative research, particularly with reference to Guest and colleagues' (2006) "gold standard" of saturation (Braun & Clarke, 2019b; Malterud et al., 2016; Varpio et al., 2017). Therefore, Malterud and colleagues' concept of information power (2016) was adopted to guide sample size. This model is dependent on five dimensions (see Figure 3.4) which emphasise the quality of the dialogue with participants rather than the quantity of the participants (Varpio et al., 2017). The application of this model in the current study indicated that more than a handful of coaches would be required given the broad study aims (dimension 1) and employment of a cross-case analysis (dimension 5). Therefore, an initial approximation of 10-15 coaches was put forward in the planning stages based on similar projects within the field (Kimber et al., 2021; Super et al., 2018) and in accordance with the time constraints of the project. However, the specificity of the required sample (dimension 2) and the presence of the SEM as a theoretical framework (dimension 3) reduced the number of coaches required. Moreover, the depth and quality of the interview dialogue (dimension 4) as data collection progressed also increased the information power. The adequacy of the final sample size was evaluated throughout the data collection in line with higher information power.

Figure 3.4

Items and Dimensions of Information Power



Note. This model was produced by Malterud et al. in 2016 summarising the items and dimensions required to establish information power. From “Sample Size in Qualitative Interview Studies: Guided by Information Power” by K. Malterud, V.D. Siersma, A.D. Guassora, 2016, *Qualitative Health Research*, 26(13), p. 1756 (<https://doi.org/10.1177/1049732315617444>). Copyright 2015 by the authors.

Criterion-based purposive sampling identified coaches who met inclusion criteria (Bernard, 2017; Patton, 2002). A heterogeneous approach ensured maximum variation whereby coaches were recruited from different counties, across rural and urban settings, and from different sporting backgrounds (Mertens, 2014, p. 321; Robinson, 2014). All coaches/clubs were situated in the Republic of Ireland and to maintain a consistent approach all were affiliated with their relevant NGB

(Federation of Irish Sport, 2021c). Recruitment was conducted in a two-phased approach and was simultaneous with data collection.

Phase one: The National Sport Inclusion Coordinator for Cara circulated the participant information letters amongst SIDOs. The regional SIDOs then served as gatekeepers to club coaches as they disseminated information letters to potential participants.

During this first phase of recruitment, I also directly contacted clubs. Sports which met the inclusion criteria (i.e., individual sport with junior membership available) were identified through the NGBs of Sport (Federation of Irish Sport, 2021c). Although there are many NGBs exclusively for individuals with a disability (Sport Ireland, 2021c), this research engaged with mainstream NGBs who supported the facilitation of individuals with disabilities. On the home webpage of the NGBs (Federation of Irish Sport, 2021c), the number of clubs associated with each selected NGB was counted and through the employment of a random number allocator, a number of clubs per NGB were identified. The presidents /captains/ secretaries of the targeted clubs served as the gatekeeper to their club coaches as they were contacted via email (see Appendix C) to inform them of the research project and were asked to disseminate information to coaches. Interested parties then initiated contact with me as the lead researcher.

I maintained a consistent approach of targeting clubs under a NGB during the second phase of recruitment. Clubs were recruited in the same manner and those more directly involved with the NGB (i.e., regional director/child officer etc.) were also contacted. These parties now served as a gatekeeper to clubs coaches as they were asked to disseminate information to coaches and once again, interested parties contacted me directly.

Recruitment began in January 2021 and ran until June 2021 with phase two of the recruitment beginning in April of 2021. During this six-month period, I contacted 114 clubs and/or regional directors/child officers. It should be noted that all coaches who participated in this research were identified through my contact with their sport club.

3.3.3 Measures

3.3.3.1 Semi-Structured Interviews. Semi-structured interviews (SSI) were employed as an appropriate measure to gather data regarding coaches' perspectives on this complex issue (DeJonckheere & Vaughn, 2019; Henriksen et al., 2021). Moreover, the flexibility of SSIs (Robson & McCartan, 2016) allowed for rapport building and follow-up questions to be asked regarding coaches' experiences, knowledge, and opinions (Mertens, 2014, pp. 242-243). SSIs are also notably the most common measure employed within this project's field of research (Arnell et al., 2020; Blagrove & Colombo-Dougovito, 2019; Nichols et al., 2019). Follow-up focus groups were not completed within this project due to ethical concerns. The confidentiality afforded by the one-to-one setting of the SSI was crucial given the sensitive nature of discussing certain young people with ASD in clubs (Thomas, 2013).

3.3.3.2 The Interview Protocol Refinement Framework. The interview protocol refinement (IPR) framework (Castillo-Montoya, 2016) was employed to systematically develop and refine the operationalisation of the measure. The IPR framework ensured questions aligned with the research questions and guided both supervisor feedback and piloting of the measure prior to utilisation. Descriptive questions were adopted in adherence to the social-constructivist paradigm (Creswell & Creswell, 2017) and the interview schedule further aligned with the AI model

which is effective when completing individual SSIs (see Appendix B; Michael, 2005; Sargent & Casey, 2021). Follow-up questions were informed by the SEM to review facilitators on multiple socioecological levels which is successful in exploring perspectives on sport participation (Abdelghaffar & Siham, 2019) particularly regarding individuals with ASD (Buchanan et al., 2017). A sample SSI template can be found in Appendix D.

3.3.3.3 Pilot Study. In line with the IPR, the SSIs were initially reviewed by my supervisors. Pilot interviews were then held with two coaches who met the inclusion criteria. As denoted in the second phase of Chapter Two, piloting on cohorts similar to the respective target population ensured participant understanding of questions and reviewed any instrumentation issues (Marshall & Rossman, 2014, p. 105). Feedback from the pilot phase informed SSI review and the addition of two supplementary questions regarding the coaches' backgrounds before data collection began. Data obtained during the pilot phase was not included in the study.

3.3.4 Data Collection

Interviews were completed simultaneously with the two phases of recruitment. Each interview was conducted at one single point in time to gain insight into coaches' perspectives on the phenomenon (Bryman, 2016).

3.3.4.1 Zoom. Given this research was conducted during the COVID-19 pandemic lockdown restrictions, the majority of SSIs were facilitated via the online platform, Zoom, in accordance with telepsychology guidelines (American Psychological Association, 2020). Online qualitative data collection is a valid alternative to face-to-face SSIs (Lo Iacono et al., 2016) and was found to be an effective method of inquiry during the COVID-19 pandemic (Teti et al., 2020). The use of a camera allows for social and nonverbal cues to be noticed (Stewart &

Williams, 2005; Sullivan, 2012). Moreover, online interaction is also reported to enhance participants' personal agency as they are in their own safe space (Pugh et al., 2020) encouraging enhanced sincerity amongst participants (Deakin & Wakefield, 2014; Mabragaña et al., 2013). Zoom was specifically selected given it is a valid tool for gathering qualitative data (Daniels et al., 2019; Matthews et al., 2018) as it is more user friendly than other online platforms and has enhanced security features (Archibald et al., 2019; Lobe et al., 2020).

Within the current study, the use of online SSIs allowed for recruitment of coaches who may not have participated within in-person interviews (Upadhyay & Lipkovich, 2020). In advance of the online meeting, coaches were provided with a meeting identification and password. A Zoom information sheet was also shared prior to the interview (see Appendix E) in order to support coaches unfamiliar with the platform (Lobe et al., 2020). I had also completed training on conducting online counselling prior to data collection (see Appendix F for statement of participation).

Three interviews were completed via phone as requested by these three coaches. The benefits of phone interviews have previously been demonstrated (Drabble et al., 2016; Ward et al., 2015) as they are reported to enhance privacy (Sturges & Hanrahan, 2004) and reduce self-consciousness (Lechuga, 2012) in interviewees. To minimise a cost barrier for participation, I directly phoned the coaches (Drabble et al., 2016).

3.3.4.2 Ethical Considerations. The ethical principles of beneficence, respect and justice underpin this research (Mertens, 2014, p. 12). The study adhered to the PSI Code of Professional Ethics (2019) and ethical approval was granted by the MIC Research Ethics Committee in December 2020 (see Appendix G). Prior to data collection, coaches first reviewed the information sheet (see Appendix H)

before signing and returning the consent form (see Appendix I) regarding their participation and use of data. Prior to interviews, coaches selected their own pseudonym (Super et al., 2018) and were briefed and reminded that they were free to withdraw at any time and after interviews, coaches were thanked for participation and reminded that their information would remain anonymous.

The recorded interview was transferred to an encrypted flash drive to which only I had access to immediately after the Zoom meeting/telephone call. The subsequent transcribed interviews and other related information were stored securely and analysed on my password protected computer and I remained cognisant of the Data Protection Act (Government of Ireland, 2018). All data remained confidential and no information identifying any coach/club appears on any findings linked to this research. In accordance with MIC Record Retention Schedule guidelines (2018), all data collected as part of this doctoral study is required to be stored for specific periods of time.

3.3.4.3 Researcher Reflexivity. As stated from the outset, my pre-understanding and relationship with the phenomenon underlines my work in this research (Clarke, 2017 cited in Jankowski, 2017) and this subjectivity is deemed a benefit in SSIs and analysis (Gough & Madill, 2012). However to enhance “sincerity” it is necessary to be transparent in the manner in which I was challenged regarding my subjective values and inclinations and which methods were employed to combat such challenges (Tracy, 2010). Throughout the research project, observational memos and theoretical notes were logged in a reflexive research journal (Barrett et al., 2020; Trainor & Bundon, 2020), with particular importance being attributed to surfacing a-priori assumptions (McGrath, 2021; Rolls & Relf, 2006). Memos also served to highlight how certain decisions were made and applied

in the research project (Loo & Thorpe, 2002). These entries encouraged me to constantly reflect on my role in the overall research and fostered a process of “continual internal dialogue and critical self-evaluation” of my own positionality (Berger, 2015, p. 220). Such reflection shaped subsequent work in the project (e.g., further probing during interviews). An excerpt from the journal is provided in Appendix J. Consultation with my supervisors also assisted with this process of sincerity whereby I was encouraged to fully embrace my role as an active agent in the data construction (Trainor & Bundon, 2020).

3.3.5 Data Analysis

Interviews were recorded (via Zoom or Dictaphone) and were transcribed verbatim shortly after the interview took place. Transcription was considered part of the analysis and I completed this independently in order to engage with the data (Hesse-Biber & Leavy, 2006, p. 347). I paid close attention to silences and non-verbal cues (e.g., crying/laughing) during transcription given their importance beyond what is explicitly stated (Trainor & Bundon, 2020).

3.3.5.1 Interview Transcript Review. Coaches were provided with a redacted version of their interview transcript to complete an interview transcript review (ITR). ITR allowed coaches to omit, clarify or add information in order to ensure accuracy (Hagens et al., 2009). While ITR has been criticised for the potential to lose crucial data, the ethical responsibility to coaches with regard to their own data cannot be ignored (Hagens et al., 2009; Mero-Jaffe, 2011). Four coaches completed an ITR. No significant insights were omitted nor added which is a potential concern regarding ITR given the value of candid comments and the risk of systematic bias whereby certain transcripts are afforded more thoughtful consideration (Hagens et

al., 2009). One coach noted a minor change, requesting that a club detail irrelevant to the research question be redacted.

3.3.5.2 Reflexive Thematic Analysis. Reflexive thematic analysis (TA) was employed whereby data was analysed in a recursive approach (Braun & Clarke, 2006, 2012, 2020; Clarke & Braun, 2013) guided by six phases outlined overleaf in Table 3.3. This approach encompasses a later development of themes which arise from developed codes whereby themes represent patterns of shared meaning across the phenomenon (Braun et al., 2014). The themes developed in the current study were predominantly latent in nature (Braun & Clarke, 2006).

It should be noted that a deductive-inductive approach (Abdelghaffar & Siham, 2019; Clarke & Braun, 2009) was employed. Analysis initially adopted a deductive approach based on the research questions, SEM and AI framework which is comparable to prior research (Herbert, 2021; Martin, 2015). An inductive approach was then adopted to search for additional themes due to the limited research in this area (Kimber et al., 2021).

Table 3.3*Six Phases of Thematic Analysis*

TA actions	Research action
Phase 1: Familiarisation with the data	I independently transcribed all interviews and read and re-read the interview transcripts. Familiarisation with entire data set is crucial in TA.
Phase 2: Generation of initial codes	Certain quotes and ideas which were of significance to the research questions/AI/SEM, and which frequently re-appeared were coded.
Phase 3: Generation of initial themes	These initial codes were organised and collated into initial overarching themes.
Phase 4: Review and development of themes	The main themes were reviewed against the initial codes. Codes which did not fit under any reviewed theme were excluded. A second coder assisted in this phase of analysis.
Phase 5: Refinement, defining and naming of themes	The preliminary themes were modified as all data pertaining to the theme was reviewed to ensure it is relevant to the theme. Meanings and significance of each theme were also reviewed to ensure they were distinctly different from one and another. Themes were all named, and any relevant subthemes were both identified and named.
Phase 6: Writing up	The most appropriate extract examples were selected. The clearly defined and named themes were written up in the results and discussion section of the thesis with supporting literature.

Note. Adapted from “Using thematic analysis in psychology ,” by V. Braun and V. Clarke, 2006, *Qualitative research in psychology*, 3(2), 77-101 and “One size fits all? What counts as quality practice in (reflexive) thematic analysis?” by V. Braun and V. Clarke, 2020, *Qualitative research in psychology*, 1-25 and “Doing a thematic analysis: A practical, step-by-step guide for learning and teaching scholars,” by M. Maguire and B. Delahunt, 2017, *All Ireland Journal of Higher Education*, 9(3).

3.3.5.2.1 Coding. The NVivo 12 software programme (released in March 2020) was employed for analysis. At phase one, interviews were listened to and transcripts were read to further familiarise myself with the content (Clarke & Braun,

2013; Hesse-Biber & Leavy, 2006, p. 347). Close attention was also paid to non-verbal cues (silences, realisations etc.) which are just as important as the spoken word in producing quality TA (Trainor & Bundon, 2020). I frequently referred to notes in my research journal to improve rigour throughout this stage (Vaismoradi et al., 2013).

A two-phased coding approach (deductive-inductive) was adopted in phase two. All initial codes were simple and precise (Mertens, 2014, p. 428) and evoked the data (Clarke & Braun, 2013). An extract of coded transcript is provided in Appendix K. Codes were then reviewed to identify similarities across the data (Clarke & Braun, 2013) in phase three. Singular codes not aligning with any theme were categorised under a miscellaneous label.

Main themes were reviewed against the initial codes in phase four. Codes categorised under the miscellaneous label were further refined and added to the study if deemed relevant or excluded from the study if they were noted as irrelevant to the research aim (Braun & Clarke, 2014).

A second independent coder reviewed data in phase four (Campbell et al., 2013; Mertens, 2014). Rather than a consensus on coding, the use of a second-coder developed a richer and more nuanced understanding of the data (Braun & Clarke, 2019a). Given the deductive analysis, the second coder was briefed on the research questions and the established coding practice (Braun & Clarke, 2006; Nowell et al., 2017). As guided by previous research, inconsistencies regarding code meanings and categorisations between the second coder and my role as the independent coder were identified and discussed until a consensus was reached (Henderson & Baffour, 2015; May et al., 2018). I created a visual map at this point to clarify “the relationship between codes, between themes, and between different levels of themes” (Braun &

Clarke, 2006, p. 89). This map was shared with my supervisors, encouraging further discussion and enhancing the iterative nature of the reflexive TA process (Trainor & Bundon, 2020).

The final refinement in phase five aimed to “identify the ‘essence’ of what each theme is about” (Braun & Clarke, 2006, p. 92) and ensured that each theme and subtheme were relevant to the research questions (Braun & Clarke, 2014; Nowell et al., 2017). Final themes, subthemes and codes are provided in Appendix L.

In phase six, the final themes and subthemes were presented in the results section. The AI model was incorporated into the results write up and the SEM understanding of the results was portrayed in table format. A more detailed description of the TA process is outlined in Appendix K which further conveys the iterative and “messy” nature of the reflexive process (Braun & Clarke, 2019b).

3.4 Results

3.4.1 Participating Coaches

Thirteen coaches were interviewed using the SSI format. In total, 549 minutes of interview data was gathered. Interviews ranged from 25 minutes to an hour with the average interview lasting 42 minutes. Coaches were from ten different sport clubs from rural and urban settings across eight counties spanning all four provinces. They had an average of 16 years coaching junior athletes. One female coach stated they had a diagnosis of ASD and provided consent for this diagnosis to be reported within the research. As previously mentioned, coaches selected their own pseudonym (Super et al., 2018) and coach information details are outlined in Table 3.4.

Table 3.4*Coach Information Details*

Coach Pseudonym	Sport	Years Coaching Experience	Coaching Level	Experience Coaching Young People with ASD
Robert	Archery	6	Local	No (not to coach's knowledge)
Ichobod	Archery	5	Local	No (not to coach's knowledge)
Shanny	Athletics (javelin)	43	Local/ National	Suspected but not confirmed to coach
Niall	Athletics (running)	5	Local	Yes (alongside prior experience in ASD specific cycling programme)
Rachel	Kickboxing	15	Local	Yes
Edmond	Rowing	22	Local	Yes
James	Rowing	7	Local	Yes
Elizabeth	Rowing	2	Local	Yes
Michael	Squash	40	Local/ National	Suspected but not confirmed to coach
Sadie	Surfing	1	Local	Yes (alongside prior experience in ASD specific surfing programme)
Sophie	Surfing	1	Local	Yes (alongside prior experience in ASD specific cycling programme)
John	Swimming	30	Local/ National	Yes
Hannah	Tennis	31	Local/ National	Yes

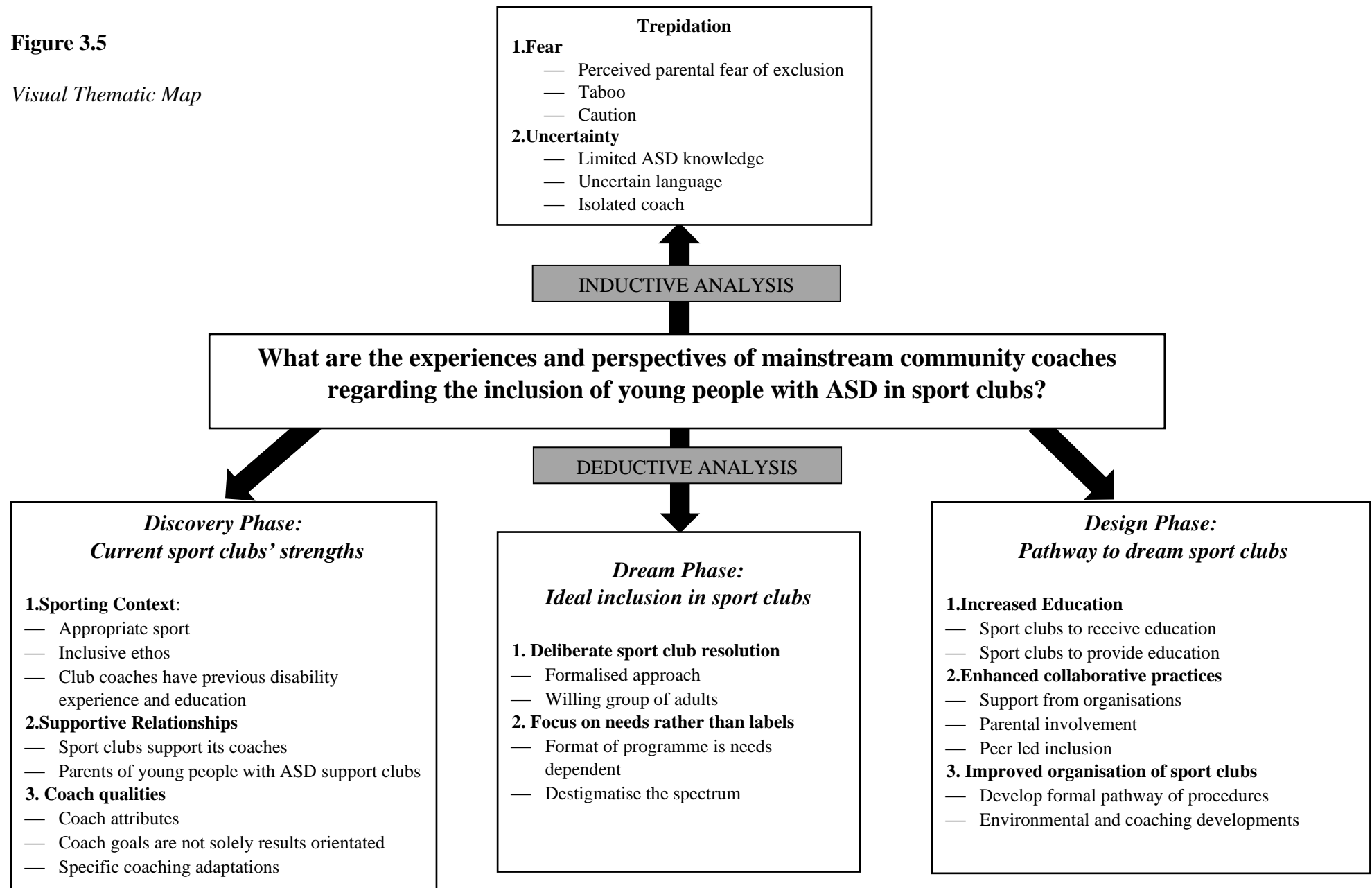
3.4.2 Research Question: What are the experiences and perspectives of mainstream community coaches regarding the inclusion of young people with ASD in sport clubs?

The overall project findings are outlined overleaf in a visual thematic map in Figure 3.5. As outlined on the bottom half of Figure 3.5, the deductive analysis of the research found that current strengths were linked to the sporting context, supportive relationships, and coach qualities. This analysis further reported that the ideal inclusive club requires deliberate resolution with a focus on the needs rather than labels of young people with ASD and the prospective pathway to attain this inclusive setting warrants increased education, enhanced collaborative practices and improved club organisation. As outlined on the top half of Figure 3.5, the inductive analysis developed the theme of trepidation, which permeated all interviews as coaches discussed the inclusion of young people with ASD with fear and uncertainty.

The following section presents the project findings as outlined in Figure 3.5. Initially, the results from the deductive analysis which generated coaches' reflections on the *Discovery*, *Dream* and *Design* phases of AI regarding the inclusion of young people with ASD in clubs will be explored. Within such exploration, the findings for each sub-question are assigned to different levels of the SEM. As aforementioned, this is useful in linking interactions between different system levels in order to create a practical model depicting results (Henderson & Baffour, 2015). The theme of trepidation which permeated all interviews and was developed through inductive analysis will then subsequently be discussed.

Figure 3.5

Visual Thematic Map



3.4.2.1 Discovery: From the coaches' perspectives, what facilitates the current inclusion of young people with ASD in sports clubs? A range of sport club strengths promoting the inclusion of young people with ASD were listed throughout the interviews. Strengths were linked to the sporting context, supportive relationships, and coach qualities.

3.4.2.1.1 Sporting Context. All coaches noted that their club was an appropriate context for young people with ASD highlighting the appropriate context, inclusive ethos and previous disability education and experience within the club.

Certain coaches further commented that their respective sports were appropriate for young people with ASD noting that this population had a preference for individual sports. Hannah described this well:

He doesn't like team sports where there is a lot going on and he wasn't good with noise whereas tennis allowed him to be the individual on the court and take full responsibility.

This sentiment was echoed by Niall, "From speaking with parents of children with autism, they seem to prefer the individual sports rather than the team sports." It was further suggested that young people with ASD had experienced previous exclusion in other sporting settings:

Most of the sports kids would have tried up to that point - would have required am...physical challenges like tackling or whatever like that, like all the ball sports ...the kids who come to us then, wouldn't have done well there or would have been excluded there. (James)

An inclusive ethos consisting of a welcoming environment was referenced by many coaches to support the inclusion of young people with ASD:

It's also been a very open sort of atmosphere like everybody's welcome so whether that's somebody from a different nationality or somebody with special needs, anybody has the opportunity to come in and be treated the same. (Rachel)

A key to developing an inclusive ethos appeared to be that membership was not ability tested, "They'll also accept you and give you a go at the sport which I think is really important and we won't turn anyone away for whatever reason" (Elizabeth). Coaches also described how having mixed abilities train together furthered an inclusive ethos:

We just mix everybody in...you're trying to develop those people with all that potential but you're never giving them special treatment, at the age of 12-16 they still row with whoever is there like we mix them up so you're constantly trying to keep that inclusivity going. (James)

Coaches also credited prior disability education and experience within the club towards supporting the inclusion of young people with ASD. Coaches with professional jobs with disability experiences outside of the club were discussed, for example Ichobod said, "We have a kind of combination of a few special needs teachers and things like that, like the club isn't ignorant to this."

Previous club experience with young people with additional needs was noted to improve capacity to support individuals with ASD, as Robert put it, "We've done a bit of work at the club with disabled people, they can shoot as well-but nobody with autism you know, but yeah look I don't see why not." Coaches with experience at a *Cara Inclusion in Sport* workshop also noted it provided them with additional beneficial resources to support young people with ASD. Speaking about this issue, Ichobod stated:

Sporting Ireland had a sport inclusion...thing in UL and I went down to that with another one of our coaches... I didn't know that passport² existed until I went to one of the sessions... I was able to give them [young person with additional needs] the passport and then I was able to better suit things around him.

3.4.2.1.2 Supportive Relationships. Coaches emphasised the value of supportive relationships. The role of the sport club in backing coaches was expressed as committee assistance, “the greatest strength that we have is this backing of the committee” (John) and support between coaches such as shared knowledge:

I don't see a need for 10, 11 or 12 from every club to be at it [inclusion workshop] - but you know word of mouth does spread, so two coaches from my club did get something from it and that encouraged more coaches to take part in it [disability coaching]. (Niall)

A supportive relationship between the club and the parents of young people with ASD was also discussed which included the benefits of parents providing information on their children, “I've had long chats – thankfully once again it's down to his parents who have given me the information” (Hannah) and parents staying at the initial few sessions to support their children with ASD:

They'd be more likely to hang around especially for those first couple of weeks and that sort of transition period where if a child is kind of getting upset or they're overwhelmed the parent is there to sort of step in and...calm them down. (Rachel)

It was highlighted that such parental support often developed into coaching roles.

² Cara's *Autism in Sport Passport* which is a tool for coaches and clubs to gather information about a participant with ASD.

3.4.2.1.3 Coach Qualities. Coaching qualities which promoted the inclusion of young people with ASD included coaching attributes, coach goals and specific coaching practices. Certain coaches regarded this reflection on their own strengths as emotional, for example Hannah commented, “I actually get a bit teary now – look what you’re doing to me [laughs].” The attributes of compassion, respect and patience were frequently mentioned. Elizabeth stated that “I was very patient with her [child with ASD]. I know am...that patience is very important” and James commented “Like I’d be empathetic and at the end of the day, I come from a teaching background so I always feel that like I always treat people the way I would like to be treated.”

A common quality reported amongst all interviewees was that their goals for young people were not limited by results and allowed for a focus on the process. Coaches expressed the goal of building confidence as Hannah described well in her experience with one young person with ASD:

I’ve had more enjoyment from seeing and watching the growth and development of a player like Adam across the years...from where he was at six years of age where his communication skills obviously got better just as he got older but even watching his ability to communicate with his peers and his understanding of his own limitations...you’re not just developing tennis players- you’re developing tennis people; you’re developing rounded people.

Coaches also expressed the importance of fostering life lessons, “No matter what sport you’re doing, the greatest benefit is it helps you as to how to lead your life in a way where you know you can challenge yourself and that you can overcome very difficult things” (Shanny). The goal of developing the sport in young people was equally highlighted, “I want to keep this to the point of you’re happy and you feel

like you're constantly growing in your development with the goal of archery and things like that" (Ichobod). Coaches also emphasised the need for fun: "I hope anyway that at the end of the day they all go out feeling, ok I've done a good job and I've had fun" (Rachel).

The employment of specific coaching practices to support the inclusion of young people with ASD was also discussed. Such practices included adapted instruction, as explained by Sophie, " 'Hop up on your board' doesn't really make much sense or like showing them rather than telling them so sometimes you can say and show at the same time," emphasising the importance of offering multimodal communication.

Certain coaches also referred to assigning set roles to those with ASD as inclusive as outlined below by Shanny:

If I notice one of my kids with autism getting overwhelmed with an activity...I often give them a special job to go set up the long jump or something. So, they are happy out with their job, while the rest of the group move onto the more intensive task.

Interestingly, although such practices aim to provide a meaningful role for the child with ASD, the examples discussed often appeared more logistical than participatory and were solely aimed at young people with ASD.

3.4.2.1.4 Sport Club Strengths in terms of SEM. These results of the "Discovery" stage may be better understood through the SEM. The application of SEM formalises connections and interactions between different system levels in order to create a practical model depicting results (Henderson & Baffour, 2015). Table 3.5 outlines how the factors which coaches perceive to have facilitated the

inclusion of young people with ASD in clubs transcends all levels of the SEM excluding public policy.

Table 3.5

Sport Club Strengths in terms of the Socio-Ecological Model

Intrapersonal	Interpersonal	Physical	Institutional	Community
Coach attributes support inclusion of young people with ASD	Sport clubs support coaches	Appropriate sport	Inclusive ethos	Coaches have disability education and experience
Coach goals are process oriented rather than results focused	Parents support sport clubs		Specific coaching practices to support inclusion of young people with ASD	

3.4.2.2 Dream: What does the ideal inclusion of young people with ASD

in sport clubs look like from the coaches’ perspectives? Insights into coach perspectives on what the ideal inclusion of young people with ASD in clubs might look like were explored, with coaches indicating that the ideal scenario would require deliberate club resolution. Coaches reflected the merits of a variety of programme settings but ultimately concluded that any such programme should focus on the needs rather than the labels of its young people.

3.4.2.2.1 Deliberate Club Resolution. The theme of deliberate club resolution consisted of the subthemes of a formalised approach and a willing group of adults. A formalised approach was highlighted to promote an inclusive ethos:

I think it’s important that your club has that policy in place to - you know be inclusive – that every kid is treated really equally and given the same chances and coached the same, which is really important, you know that there’s no singling out. (Niall)

It was noted that such an approach would be developed in a top-down manner:

I think that's a top-down approach for everybody...the club culture falls in on the kids so if you're the coach then you have to maintain those values of inclusivity and balance of competition. (James)

With regard to promoting club inclusion, some coaches expressed that there should be no direct advertising:

I don't think the club would necessarily or should even advertise the fact that am - well people with autism are welcome. I think that would be sort of saying, there's something different about these kids. (Michael)

However, other coaches considered that direct recruitment may be beneficial:

"We could approach...part of society where there are autism schools. Like maybe contact them directly, like you know to say, 'look this is a sport, would any of your organisation be interested in - we would most definitely welcome you.'" (Robert)

It was also emphasised that a formalised approach would require a willing group of adults who were both large in numbers and interested in inclusion.

Speaking on this issue, Edmond said:

People need to be comfortable with and willing to do it and then...you do need to make sure that you've got enough volunteers or adults or whatever working with these people to make sure that there's adequate coverage to adequately supervise and to help them improve.

3.4.2.2 Focus on needs rather than labels. When asked about the ideal inclusion of young people with ASD, the coaches were unanimous that this would feature a club where the spectrum would be destigmatised and whereby the programme provision would be needs dependent. In destigmatising the spectrum, a

recurrent issue in the interviews was that a young person's diagnosis of ASD would need to be shared with the club. Many coaches discussed the challenge of learning of the diagnosis, as aptly shared by Hannah:

There doesn't seem to be an identification by parents an awful lot of the time whether it's the fault of the club or the fault of somebody – there's a glitch in the system somewhere where there's no identification given...parents are just making the best choices for their children but maybe they're not seeing that by giving the information – it's not a label, it's actually a tool that could help them down the road.

Beyond learning of the diagnosis, coaches also indicated the club would need a general comprehension of ASD noting "there would have to be an understanding and an awareness brought to coaches and the people who are kind of administrating and running the club to be able to appreciate it and provide for it." (Edmond)

Coaches reported that if sport clubs had this understanding, they could foster an environment "where the strengths are recognised" (Rachel) which was further built on by Sadie who highlighted that:

Children with autism can get obsessive about things sometimes or they find this focus and that kind of like draws them - so I think there is an advantage for kids with autism in sport in that way - other kids would have more distractions around like and yeah, like if you can harness that obsession with kids with autism...

Referencing the talents of previous athletes with additional needs, John noted, "A lot of these kids are very talented anyway. I mean wasn't Michael Phelps slightly autistic himself you know, so he had ADHD or something like that."

There were varied opinions whether the ideal programme would feature a segregated setting or an integrated setting. Commenting on the benefits of integration, Edmond noted:

You know there's a benefit to the kids– I know they're all 13 - 14 and they don't even know the benefit of interacting with someone like that, but even to try and encourage them to get more socially involved and get involved in everything...Ah it just benefits everyone to be honest.

Whereas James alluded to the “challenge of mixing kids” and Robert discussed the fact that “if there was a big demand, then it might be better to teach everybody together with autism.”

Niall, a coach with experience in ASD specific programmes commented on the dilemma:

Do we need to have an inclusive athletics programme or are we happy to stay as we are ...I always ask that question – I'm on an autism friendly committee as well and I keep asking that question “do you want something separate for your children with autism or do you want them to be part of it?” and I still never get a majority answer, it's always split down the middle. It needs to be a decision.

However, all coaches agreed that this format would ultimately be needs dependent. Hannah emphasised that additional/ tailored support would only be warranted based on the child's need rather than assumptions regarding a diagnosis:

We should never take a child who is on the spectrum or has any form of learning disability or any form of physical disability for that matter and segregate them away from the others unless it was to do with their ability. So really meeting their needs rather than meeting their label I suppose.

Sadie also commented on the spectrum of ASD in designing an appropriate programme: “Children with autism present so differently depending on the severity of it...so I think it’s just really down to the individual child as to whether it would be possible to easily integrate” and this sentiment was echoed by Sophie “it depends on the child themselves and how much it [autism] would affect them.”

3.4.2.2.3 Ideal Sport Club Inclusion in terms of SEM. These results of the “*Dream*” stage may be better understood through the SEM. The application of SEM formalises connections and interactions between different system levels in order to create a practical model depicting results (Henderson & Baffour, 2015). As outlined in Table 3.6, the ideal inclusion of young people with ASD in clubs as described herein by coaches was primarily limited to institutional factors followed by one intrapersonal factor. Notably, interpersonal, physical, community and public policy factors (as described in Table 2.1) were not predominantly discussed during the interviews and are therefore not included in Table 3.6.

Table 3.6

Ideal Sport Club Inclusion in terms of the Socio-Ecological Model

Intrapersonal	Institutional
Willing group of adults needed	Formalised approach to ASD inclusion is adopted
	Format of programme is needs dependent and person centred
	Spectrum would be destigmatised

3.4.2.3 Design: What needs to happen to further promote the inclusion of young people with ASD in sport clubs? The prospective pathway to attain the aforementioned ideal inclusive setting was discussed. Increased education, enhanced

collaborative practices and improved club organisation were noted as key to this pathway.

3.4.2.3.1 Increased Education. Two discrete subthemes emerged from this theme which included sport clubs receiving education and clubs providing education. Overwhelmingly, coaches indicated there is presently a lack of knowledge regarding sport inclusion training:

We were kind of not sure how to go about it and we didn't know where to go to get information and advice. So, there was definitely the interest, just didn't know where to get support. I haven't heard of any programmes or training or anything. (Elizabeth)

Therefore, the need for training was emphasised, "I would like to be coached a little bit in it ok?...that's the thing about it - the club needs to have a way like what's going on here - show us the way" (James).

Commenting on sport clubs providing education, coaches indicated the need to educate parents on the running of the club. This was described well by John, "I think the parents of kids with autism would also need to be educated also in how they approach sporting clubs"

and further echoed by James who stated:

I would also say that if parents of kids with autism...want their children to be included in sport, then they need to be responsible and think that this child needs to be fit and active – you know that the lifestyle is crucial, and parents need to be educated on this.

It was also noted that the clubs could educate peers to increase ASD awareness:

When the other kids understand the reasoning behind it or the way these kids interact in the lane, like some of these kids aren't very socially interactive or

good with other kids in the lane and they don't understand this and when you actually explain the situation, they just say, "oh ok, it's fine" and they try then to include and make that person feel wanted. (John)

3.4.2.3.2 Enhanced Collaborative Practices. This theme captured coaches' reports of a need for enhanced organisational support, parental involvement, and peer led inclusion. Coaches expressed a desire for NGB backing noting, "the governing bodies need to support the club and say, 'look this is something that we're going to approach nationally'" (James) and it was noted that each NGB could cover sport specific topics:

It would have to go through each NGB, to create individual tailored programmes. It's just that sports are so varied, you know what I mean? Like you can't really talk about a kid with autism going through swimming, in the same way that you would talk about another autistic kid who's going through rugby. (John)

A minority of coaches also made reference to national ASD organisations, for example Edmond noted, "It can only come from those that know how to do it to be honest. Like whoever their support groups are."

Parent involvement was discussed as a requirement across all interviews. While some coaches stated parental involvement should not be expected as they "might just want a little bit of a break from it all" (Sophie), the majority of coaches emphasised an urgency for open communication with parents, noting "they could share what is kind of effective in communicating with their particular child and whether we could kind of customise things a little bit for, to suit their child. I mean it's really an open discussion." (Robert)

The importance of having "the parents of children with autism to be down in

the club as volunteers” (Niall) was discussed by many coaches and it was further noted that having parents’ physical presence in the sport club would be beneficial, “cause at least we’d know is this normal– you know if they are having a bit of an episode” (Ichobod).

Peer led inclusion was discussed through the use of assigned roles. John described the beneficial role which could be promoted in club captains who “are generally the older kids in the club and they’re there in case there’s anything sort of going on in the dressing rooms or if they notice anything or see anything and they just help out and look after kids” further suggesting that “maybe if you sort of took those captains aside and identified individuals and said, ‘Look this person has this.’”

Michael further noted the valuable role that “those who have obtained success” in the club could play:

Well they could give them the advice, whereas where I’d be concerned is that they’d look at me like an older person – like a parent or somebody in authority whereas the children themselves, if they look at an equal, or maybe at somebody who had achieved something and maybe give them something to aim for.

3.4.2.3.3 Improved Organisation of Sport Clubs. The development of a formal pathway of procedures was discussed as a necessary component to the pathway of future inclusion, as James outlined, “what isn’t in rowing is a club development framework so you want that...you have all the different aspects of a club, organisational, financial, coaches, training, resources, one aspect of that could be inclusivity.” Many coaches alluded to the notion that such procedures should be complimented with documentation derived from a code of conduct or child protection procedures, which Niall described well:

Every year as the parents are asked to sign up their children again, that policy needs to be signed again so, just like your code of conduct. So, every parent signs that and obviously like your code of conduct they talk their children through it and they're made aware that we're an inclusive club.

The majority of coaches also discussed the need for environmental and coaching developments. Environmental changes mainly referred to equipment, noise, and lighting. Examples were "much larger boards...so they have more stability" (Sadie) and "lessen noise and a few other bits and pieces...like if they don't like the feel of the string on their finger, there are these things...ah they're basically like rubber to cover the string" (Ichobod).

Coaches also discussed the incorporation of visual techniques as outlined by Sophie: "you could give them a visual thing of what might happen" and Shanny: "There are other ways to think of coaching I suppose. For example, recording on video, to demonstrate techniques."

A fear of safety concerns was also addressed in the coaches primarily involved in water sports and featuring a weapon. James emphasised the need for safety protocols stating, "from a safety point of view, you're on the water and you know you can see kids and if it's their first time out, they're getting a little frightened...especially in smaller boats." Similarly, Robert described the bow and arrow as "a lethal weapon" adding "safety is very important, but I think with the bit of planning and organisation then I don't see why not, you know?"

3.4.2.3.4 Pathway to Ideal Sport Club Inclusion in terms of SEM. These results of the "*Design*" stage may be better understood through the SEM. The application of SEM formalises connections and interactions between different system levels in order to create a practical model depicting results (Henderson &

Baffour, 2015). Table 3.7 depicts the pathway outlined by coaches towards the inclusion of young people with ASD in clubs transcends all levels of the SEM excluding intrapersonal factors.

Table 3.7

Pathway to Ideal Sport Club Inclusion in terms of the Socio-Ecological Model

Interpersonal	Physical	Institutional	Community	Public Policy
Peer led inclusion	Environmental adaptations in sport clubs	Coaching developments	Organisational support	Sport clubs to be
Parental involvement		Develop formal pathway of procedures	Sport clubs to provide education	educated

3.4.3 Secondary Finding

3.4.3.1 Trepidation.As aforementioned, the theme of trepidation was developed through inductive analysis. This theme permeated all interviews from which two subthemes of fear and uncertainty were developed.

3.4.3.1.1 Fear. Coaches described the topic of young people with ASD in their clubs as a “whispered conversation” and “a taboo subject...it seems to be a very hush hush area” (Hannah). Hesitation was expressed regarding the introduction of young people with ASD to sport clubs, noting coaches would have to be “cautious...[and]...careful at the start” (Robert). Hannah expanded upon this adding that coaches feared that they may be “pigeon-holed” through promoting inclusion, “I just think that there’s a fear of any coach saying, “‘Oh I work with autistic children’ and then all of a sudden that’s all you can do, you just work with them.” Coaches perceived there to be a parental fear of exclusion of their child with ASD which coaches attributed to the rationale underpinning parents’ decision not to disclose the

diagnosis to clubs. Coaches expressed frustration regarding this lack of knowledge, noting that this experience is most common with young people with high-functioning ASD:

Parents might be of the ‘less is more’ you know-let the kid in and let’s say nothing too much, cause if it’s not fairly obvious...they don’t want to give you the full info cause they don’t want their child to be excluded you know?

(James)

3.4.3.1.2 Uncertainty. Uncertainty developed across interviews as coaches highlighted their limited ASD knowledge, as Edmond’s sentiments, “I’m a little bit ah-unaware of the ah-the full-blown symptoms” were frequently echoed. Confusion regarding the language of ASD was also discussed. For example, while describing one young person with ASD, James stated “maybe a mild form [of ASD] if I have that right?” whilst Hannah repeatedly questioned her phrasing saying, “Is that how you phrase it? I’m sorry if I’m saying the wrong phrasing of things—sorry I’m so bad.”

Furthermore, a few coaches alluded to the fact that they were rather isolated in their positions which lead to further uncertainty, a point which John spoke about, “Really as a coach, I’m sort of left to my own devices, and I’m not really an expert on the area to be honest with you, you know it’s not really something that we’re given guidelines on.” Such feelings of uncertainty and isolation echo coaches’ prior emphasis on the need for education, enhanced organisation and collaboration.

In summary, the above findings provide an account of the inclusion of young people with ASD in sport clubs from the perspective of coaches. Current club strengths were linked to context, relationships, and coach attributes. The ideal club was depicted as having a deliberate focus on needs rather than labels which would

warrant further education, collaboration and club organisation. The pervasive theme of trepidation was also presented.

3.5 Discussion of Findings

To support the following discussion, this study's findings will be addressed in light of previous research. Initially the coaches' reflections on the *Discovery*, *Dream*, and *Design* phases of AI will be explored. The theme of trepidation which permeated all interviews will then subsequently be discussed.

3.5.1 Discovery

Findings regarding current club strengths facilitating the participation of young people with ASD featured key themes of *sporting context*, *supportive relationships*, and *coach qualities*.

Sporting Context. The appropriateness of the sporting context was heavily emphasised by coaches. Such perceptions have previously been highlighted, as parents of children with disabilities describe certain activities as “inherently unsuitable” to their children's unique needs (Shields & Synnot, 2016, p. 6) with coaches further reporting on the exclusive nature of certain sports towards young people with ASD (Kimber et al., 2021). However, these reports cannot be concluded to indicate that individual sports are always the most appropriate for each young person with ASD. It should be noted that the presence of a group is essential for social skill development in young people with ASD (Alaniz et al., 2017; Ohrberg, 2013) and such groups are not always present in the sports addressed within the current research.

The importance of an inclusive ethos noted in the current findings has also been previously applauded for promoting supportive environments and inclusive attitudes in sport clubs (May et al., 2019; Shields & Synnot, 2014). Moreover, the

value of prior disability experience outlined in current results has been found to shape coaches' initial willingness to commit to disability coaching (Jeanes et al., 2018). Notably professional teaching experience has previously been found to strengthen coaches' transition to coaching individuals with additional needs (Duarte & Culver, 2014). Whilst this prior experience is valuable to disability coaching, clubs may have to be cautious to ensure that this one coach is not then assumed to be the advocate for disability coaching (Jeanes et al., 2018) as the negative effects of such sole advocacy roles and their longevity within clubs is further discussed in Section 3.5.4.

Supportive Relationships. Prior research corroborates current findings that supportive relationships are crucial to meaningful inclusion. Parental involvement in supporting their children in sport is frequently detailed in the literature (Arnell et al., 2020; Gregor et al., 2018). Moreover, coaches have previously emphasised the value of peer coach support (Pill et al., 2021; Stoszowski & Collins, 2014). With respect to supporting individuals with ASD, coaches rely on fellow coaches and further emphasise the need for a relationship with parents when supporting their children with ASD (Kraft & Leblanc, 2018).

Coach Qualities. Whilst the coaching qualities listed in the current study are positive coaching practices for all young people (Forlenza et al., 2018; Stewart & Owens, 2011), the findings do further emphasise the value of fun, humour and empathy when coaching individuals with ASD (Kimber et al., 2021; Super et al., 2018). Moreover, these qualities along with the coaches' depiction of process-oriented goals foster positive peer relationships, academic success and encourage more enjoyment than those who solely focus on winning (Pill et al., 2021; Prichard & Deutsch, 2015). Such process-oriented goals are crucial given individuals with

ASD often report discomfort with coaches who are overly competition focused (Duquette et al., 2016). Interestingly no coach mentioned promoting social integration with peers in the club as a focus for young people with ASD, which is in contrast to previous research (Hassan et al., 2012). This inconsistency may be due to the current focus on individualised sports or the strengths-based approach of questioning combined with the fact that communication and interaction difficulties are inherent to ASD (APA, 2013).

Both current and previous work (Kimber et al., 2021) recognise child-centred coaching as key to the participation of young people with ASD whereby coaches are led by the young person's individual developmental stage and motivation in the sport rather than the coach/club or NGB's motivation (David, 2020). Such practices have long been advocated in psychological and educational settings (Hart, 1992; Ingram, 2013) and are becoming increasingly popular in coaching pedagogy (Light & Harvey, 2019; Prophet et al., 2017). Key authors have provided guidance on the process-oriented development of athlete-centred practice on the basis of empowerment and intrinsic motivation (Jowett, 2017; Pill, 2017) with further input on the integration of disability studies into such coaching practices (Townsend & Cushion, 2018). Moreover, the largest NGBs in the Republic of Ireland advocate for athlete-centred approaches (GAA, 2017; Irish Rugby Football Union, 2018). The current study uniquely connects such coaching pedagogies with disability studies which is cited as the "fundamental starting point for the development of true athlete centred approaches" (Townsend & Cushion, 2018, p. 54).

Interestingly the child-centred role assignment specified by coaches in this study was logistical rather than participatory (e.g., task assignment separate from group) which may counter Laura Lundy's Model of Child Participation (2007) as

promoted within the Irish context (see Figure 3.6; Department of Children and Youth Affairs, 2015). Although coaches' logistical focus may be an attempt to reduce distress in young people with ASD, based on Lundy's model, it should be questioned as to whether the young person's own view was sought and if not whether the decision to assign distinctive tasks was explained to them.

Ultimately, Lundy's Model may be a worthwhile model to guide the inclusion of individuals with ASD in sport clubs given it reflects the shift from the medical model of disability towards an appreciation of the neurodiversity (Marshall & Goodall, 2015). Furthermore, previous work has denoted how the model can be incorporated to include the young person with ASD into a setting where there are competing rights where the young person is just part of the "few" amongst "many" others (Gillett-Swan & Lundy, 2022). Lundy articulates that the voice of the young person must be listened to and acted upon appropriately showing respect and dignity further emphasising that the practice of actively involving the young person in decision making "should not be portrayed as an option which is in the gift of adults but a legal imperative which is the right of the child" (Lundy, 2007, p. 931).

Therefore, based on Lundy's Model, coaches' aforementioned logistical focus should seek and consider the young person's voice on any specific role assignment (i.e., "Would you like to set up the next task while the others finish up here?") and if they young person does not want to accept this role the coach should seek to make adaptations in the current environment to reflect the young person's influence on decision-making.

Figure 3.6

Lundy's Model of Child Participation



Note. From Ireland's National Strategy on Children and Young People's Participation in Decision-Making 2015-2020

(<https://assets.gov.ie/24462/48a6f98a921446ad85829585389e57de.pdf>)

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3.5.2 *Dream Phase*

As interpreted through the SEM in Table 3.6, the “*Dream*” phase focuses on intrapersonal and institutional factors of the SEM. It is worth noting that the SEM is often critiqued for its skewed focus on social factors at the expense of contextual factors (Golden & Earp, 2012). However, these current *Dream* phase findings stress a focus on contextual institutional factors noting the willingness of a group of adults to support inclusive initiatives as the sole intrapersonal factor which is perhaps a strength of the current research. Within this “*Dream*” phase, coaches’ ideal inclusion of young people with ASD in sport clubs is presented through *deliberate club resolution* alongside a *focus on needs rather than labels*.

Deliberate Club Resolution. Consistent with previous literature (Shields & Synnot, 2016), coaches indicated meaningful club inclusion warrants a formalised approach, such as an inclusive policy. However, the indecision amongst coaches regarding advertising clubs as “inclusive” is not representative of Cara’s advocacy. One telling quote from Cara’s *Sport Inclusion Disability Charter* reads, “They should be stating everyone is welcome. I think they need to be more vocal about it so that people know straight away” (Cara, 2019, p. 3).

In further contrast to the *Sport Inclusion Charter*, the current study and previous findings report an increased number of willing coaches as required to support inclusive practices (Kimber et al., 2021). Interestingly, Cara (2019) challenges this, noting “the biggest obstacle is not people unwilling to change but just don’t know how to change and how to adapt” (p.3). This discrepancy between coaches’ *Dream* phase of increased quantity of coaches versus Cara’s view on enhanced quality of coaches (better training) may be understood through Robertson

and colleagues' (2019) commentary on the tension that sport clubs are predominantly led by volunteers, not trained health professionals.

Focus on needs rather than labels. In outlining how they could destigmatise the spectrum, coaches emphasised the need to be aware of the diagnosis. While it is strongly advocated that coaches are informed of children's personal information alongside how needs for participation could be met (Arnell et al., 2020; Ohrberg, 2013), parents do not consider it essential to share their child's ASD diagnosis with coaches (Hays & Butauski, 2018). In responding to this tension, it is worth considering whether there is an opportunity for future disability sports to adopt an approach similar to that of Circular 0013/2017 Special Education Teaching Allocation Model within schools (Department of Education and Skills, 2017). This Circular gave autonomy to schools to focus on the needs of students rather than formal diagnoses and could therefore offer families additional support rather than seek a label of a diagnosis.

Furthermore, coaches hinted at the danger of having awareness yet little comprehension of ASD (Townsend et al., 2018). Understanding the basic tenets of ASD and how this may present in a sporting context is crucial to those in sport clubs (Patterson & Smith, 2012) to avoid the misattribution of ASD idiosyncratic behaviours such as social and emotional challenges, language difficulties and executive functioning challenges (May et al., 2019).

As highlighted by current and prior research, understanding autistic strengths is crucial in supporting individuals with ASD (Kimber et al., 2021). Although previous work has noted that involving favourite interests (e.g., *Star Wars*) facilitates sport participation (May et al., 2019) and autistic strengths can be reflected through increased determination and focus (Kimber et al., 2021), further investigation is

warranted to examine how such advantages could enhance inclusion. This may be a worthwhile investigation given the harnessing of special interests of children with ASD has fostered school engagement (Davey, 2020).

The noted divisiveness between coaches' views on full integration echoes prior coaching debates (Kimber et al., 2021) and explains why sport for individuals with additional needs often operates as a separate function in many clubs (Jeanes et al., 2018). This tension reflects the bisection between the philosophical rhetoric and the practice of full inclusion (Tiernan, 2021). This tension has been widely discussed within the Irish educational landscape in recent years given the National Council for Special Education's proposal for a model of full inclusion in schools based on the New Brunswick Model of full inclusion in Canada (National Council for Special Education, 2020). Whilst this research offers no conclusions to the debate, it does emphasise that coaches acknowledge "one size does not fit all" (Shields & Synnot, 2016, p. 6) and that individualised/tailored practices are warranted when supporting individuals with ASD (Jachyra et al., 2020) which may contribute to the ongoing education debates.

3.5.3 Design Phase

As interpreted through the SEM in Table 3.7, the focus of the "*Design*" phase transcends all levels of the SEM excluding intrapersonal factors. It should be noted that no elements from the aforementioned ideal inclusive club settings warrant an intrapersonal change from young people with ASD as findings extended to reviewing interpersonal factors (e.g., peer led inclusion), physical factors (i.e., environmental adaptations), institutional factors (e.g., development of a formal pathway of procedures), community factors (e.g., sport clubs to provide education) and public policy (i.e., education in clubs). This is a strength in the current research

as it highlights that barriers to inclusion are not solely within child factors (Bradbury et al., 2018). Within this “*Design*” phase, the positive changes needed to promote inclusion within sport clubs are reflected through the themes of *increased education, enhanced collaborative practices* and *improved organisation of sport clubs*.

Increased education. Current findings echo previous calls for input regarding ASD and inclusion for coaches (Arnell et al., 2021). Neglecting disability education in coaching courses has been referred to as an “indirect form of disablism” (Townsend et al., 2021, p. 10) counterbalancing Articles 4 and 30 of the UNCRPD (UN, 2006) and may explain why coaches are hesitant to coach individuals with ASD (Rosso, 2016). Although coach-specific disability programmes do exist in the Republic of Ireland, they are separate from traditional coaching courses (Cara, 2021b). Previous research indicates sport specific disability training is warranted (McMaster et al., 2012) which is echoed by coaches in the current study who placed this onus on NGBs. Fortunately, there has been significant recent academic discourse as to how such training can be infused into these courses with a notable focus on the need for disability studies to be embedded throughout coach education curricula to reduce a focus on “impairments” or “dealing with strategies” (Townsend et al., 2018; Townsend et al., 2021; Townsend et al., 2015). Such infusion would further acknowledge the coach confusion noted in the current study as to where disability training could be accessed.

Coaches additionally highlighted the need for clubs to provide education. Such support benefits parents of children with ASD who have requested education regarding the most appropriate sport for their children (Arnell et al., 2020) and input regarding a club’s experience supporting individuals with ASD (Patterson & Smith, 2012). Furthermore, educating peers on ASD may promote peer acceptance which

fosters the participation and inclusion of young people with disabilities (Shields & Synnot, 2014). Educating peers on ASD may reflect Gordon's Allport's Contact Theory which hypothesised that biases and discrimination towards a specific group can be decreased when contact between individuals is designed and executed in a highly structured and well-thought-out manner (Bridges & Tomkowiak, 2010).

Enhanced Collaborative Practices. Coaches expressed a desire for the backing of their NGBs when designing inclusive practices. This is warranted given NGB decisions/policies shape coaching practices which will ultimately impact young people's participation and development alongside overall club culture (Rothwell et al., 2019; Sullivan et al., 2021; Pill et al., 2021). To this end, it should be noted that Cara has thus far successfully supported six NGBs in developing inclusion policies (Federation of Irish Sport, 2021b).

As outlined in current findings, collaboration with families is also key to inclusion (Arnell et al., 2021). Specifically, both coaches and parents advocate for a family-centred collaborative approach (Arnell et al., 2020; Kimber et al., 2021; Potvin et al., 2008). However, as noted by two coaches in this study, there may be a need to relieve parental burden and alleviate the "hidden labour" of parents' advocacy in sport promotion for their children with ASD (Gregor et al., 2018, p. 57) as was previously mentioned in Section 2.5.3.6.2.

Improved organisation of sports clubs. Coaches discussed the development of a formal pathway of procedures as imperative to future inclusion. However, a formalised template guide to the development and progression of young people with ASD in clubs is complex given the spectrum of ability and the club context (Sullivan et al., 2021). Therefore, familiarity with various participant development pathways which recognise social and cultural aspects and provide further guidance on

coaching adaptations may respond to coaches' needs whilst acknowledging unique complexities (Sullivan et al., 2021). For example, the *Lifelong Involvement in Sport & Physical Activity* framework (Sport Ireland, 2022a) outlines three distinctive development pathways (i.e., active recreation, organised sport and high performance) which may support the professional development required for learning the adaptations to meet the varied needs of individuals with ASD (Arnell et al., 2021).

3.5.4 Trepidation

As aforementioned, the theme of trepidation with the subthemes of fear and uncertainty was developed. The pervasiveness of trepidation throughout the interviews promotes the notion that coaches are “working at the edge of chaos” (Bowes & Jones, 2006, p. 235) in a role characterised by obscurity and ambiguity. Coaches' trepidation does not appear to be as dominant in prior research and it is therefore potentially a limitation of the current project that it was not further explored. It is plausible that richer data on this sensitive yet complex topic would have been obtained through serial interviewing (Read, 2018).

Fear. Coaches in the current study attributed parental fear as a plausible explanation for not disclosing a diagnosis, echoing conflict as to whether ASD diagnosis disclosure enhances inclusion or exacerbates the risk of bullying (Hays & Butauski, 2018; Thompson-Hodgetts et al., 2020). Interestingly, those without lived experiences of ASD perceive diagnosis disclosure as informing actions and adopt the assumption that it should be shared, which is in contrast to those personally affiliated with the individual with ASD (Thompson-Hodgetts et al., 2020). Nonetheless, there appears a clear dichotomy between disclosure for exclusionary purposes and disclosure for understanding idiosyncrasies and abilities (Hays & Colaner, 2016) and results of this study depict the negative impacts caused by this tension.

Uncertainty. The discomfort expressed by coaches regarding the appropriate language pertaining to children's additional needs is not novel (Davey, 2014) and may fuel further ASD "myths" (Townsend et al., 2018, p. 353). Moreover, coach uncertainty negatively impacts inclusive practices (Townsend et al., 2021) as due to a lack of understanding of disabilities, coaches attribute a young person's inability to perform a task to their listening or general ability rather than to their own coaching practice (Vargas et al., 2015).

Coaches also identified a concern regarding feeling isolated in their role supporting young people with ASD. This is reminiscent of evidence suggesting that the enactment of inclusive practices in clubs is usually driven by one advocate (Jeanes et al., 2018). This experience leads to feelings of isolation (Wareham et al., 2018) whereby coaches may be forced to rely on their own experiences rather than evidence-based practices (Pill et al., 2021). The current research further noted that coaches do not wish to be "pigeon-holed" into disability coaching. Whilst, previous educational research has reported that special educational teachers perceive themselves as segregated from the mainstream community (Finlay et al., 2019; Kilgore et al., 2003), this is a novel finding with sporting literature and disability coaching and may contribute to why coaches are hesitant to transition to disability coaching (Martin & Whalen, 2014; Rosso, 2016).

3.6 Conclusions and Implications for Policy, Practice and Future Research

Underpinned by the SEM and through the adoption of a strengths-based approach, the current study contributes to the empirical literature on the inclusion of young people with ASD in community sports, from the coaches' perspective where research is limited. While the strengths and limitations of the methods adopted will be addressed in Chapter Four, the above sections (3.4 and 3.5) have presented

important insights into the inter-related factors within the club environment perceived to promote inclusion. These findings suggest a number of implications and recommendations for policy, practice and future research as outlined in Table 3.8. Such implications are translated from Table 3.5 (Sport Club Strengths in terms of the SEM), Table 3.6 (Ideal Sport Club Inclusion in terms of the SEM) and Table 3.7 (Pathway to Ideal Sport Club Inclusion in terms of the SEM). These past findings interpreted through the SEM are mapped onto *Implications for International (Macro-Level) and National (Macro-Level) Sporting Policy and Practice, Implications for Club (Micro-Level) Policy and Practice, Implications for Coaching Practice, Implications for Educational Policy and Practice* in Table 3.8 overleaf. This clear hedging style of prose was informed by Smith (2018) and Chenail (2010) in order to make it explicitly clear what the research might offer and how the findings have the potential to be generalisable in many ways. However, in adopting such a strategy, Smith (2018) notes there is the danger of “claiming potential without providing the evidence” (p.143). Therefore the implications of the study with reference to Table 3.8 will be discussed in greater detail in the text in Section 4.9.

Table 3.8

Implications for Policy, Practice and Future Research

Implications for Policy, Practice and Future Research
<i>Implications for International (Macro-Level) Sporting Policy and Practice</i>
<ol style="list-style-type: none">1. These findings are meaningful in potentially furthering the enactment of the UNCRPD, with particular significance to Article 4 which outlines measures that nations should take to reduce discrimination towards individuals with disabilities and which further emphasises the necessity for mainstream coaches to be trained to support those with disabilities. The findings reported here also shed new light on how to potentially endorse Article 30.5 regarding the participation of individuals with disabilities in sport on an equal basis with their peers.2. This study contributes to the international growing discourse on inclusive sport. This project appears to be the first investigation capturing input from the mainstream community coach regarding the inclusion of young people with ASD in clubs which is notably absent in research to date. The current findings may provide initial insight into why coaches may be hesitant to transition to coaching individuals with additional needs.
<i>Implications for National (Macro-Level) Sporting Policy and Practice</i>
<ol style="list-style-type: none">1. This study is timely within the Republic of Ireland given the rising number of young people diagnosed with ASD which is reflected in the growing expectation for inclusive practices across the country (Faas et al., 2018; National Council for Special Education, 2019). Moreover, the current findings may support the Irish government (2012) and Sport Ireland's (2021a) shared goals of encouraging all young people to participate in community sport.2. Sport Ireland may be particularly interested in this project as the current findings have significant implications for the understanding of how to support the needs of those with disabilities in their participation across the sport spectrum (Sport Ireland, 2018) alongside the further enactment of the <i>Sport Ireland Policy on Participation in Sport by People with Disabilities</i> (Sport Ireland, 2018).3. These results highlight a definite need for inclusion policies to be developed at the NGB level with support and input from Cara, as has been done by six NGBs to date. Moreover, the current findings may further enhance such policies alongside informing future development. Present findings may also support Cara's pre-existing programmes and workshops (Cara, 2021b).4. NGBs should consider reviewing how disability awareness training could be infused into coach education programmes. Provision of this infused education will target coaches' requests for sport specific guidelines and input regarding general language pertaining to disability.

5. The insights gained from this study may be of assistance to LSPs who aim to increase participation in sport with specific focus on the inclusion of individuals with disabilities (Sport Ireland, 2008, 2021b). Findings will also be of particular interest to SIDOs within their LSPs whom had previously called for further input regarding inclusive practices in community clubs (O'Reilly et al., 2009) and whom continue to support coach disability trainings (Sport Ireland, 2019b, 2020).

Implications for Club (Micro-Level) Policy and Practice

1. It is recommended that NGB inclusion policies are tailored to the specific sport club's needs with NGB support through coach education and coaching plans at the club level. Moreover this study and relevant literature suggest that the club should promote such full inclusion policies to the community though direct reference to "Autism Friendly" clubs may not be warranted.
2. Led by their NGBs, a key policy priority for clubs would be to review their model of participant development to identify and signpost key aspects to inclusion (e.g., a revised membership application to include a section pertaining to disability). Reviewing and potentially enhancing current models could direct both parent and young person's anticipated involvement in the sport club and provide coach guidance pertaining to any potential coaching adaptations. Clubs may consider the *Lifelong Involvement in Sport & Physical Activity* framework and the implementation of Cara's resources (e.g., Cara's *Autism in Sport Passport*) helpful when considering this review.
3. A reasonable approach to foster more collaborative and open relationships between sport clubs and the parents of children with ASD would be the enactment of the previous two implications and more open opportunities for parent volunteering.
4. It is advisable that all personnel working with a young person with ASD in the sport club setting are made aware of the diagnosis.
5. A key priority should be to plan for the longevity of inclusion in sport clubs, as based on current findings it is advisable that coaching athletes with ASD should not be left to one isolated coach. The promotion of such longevity is in line with Sport Ireland's evolving definition of lifelong physical literacy which has been adopted by many NGBs (Sport Ireland, 2022c).
6. Management to enhance peer-led inclusion might involve assigning peer specific roles to monitor inclusive practices in the sport club which extend past the coaches' environment (e.g., changing rooms).
7. A practical "toolkit" could be developed from the current findings. This resource will be developed subsequent to the current project and is envisioned to take the form of a self-check list to enhance inclusive practices within the club context.

Implications for Coaching Practice

1. Continued efforts are needed to adhere to child-centred coaching practices. Coaches may consider the more frequent use of visuals alongside the reduction of verbal instructions.
2. If coaches felt they were not best supporting a young person's needs, they could refer to the club's inclusion policy or adapt the *Cara Autism in Sport Passport* to seek parental input in supporting the young person in the club in a non-threatening manner.
3. Coaches are strongly encouraged to familiarise themselves with the strengths of young people with ASD, most notably those which are autistic in nature. These strengths are often reflected through increased determination and focus and capitalising on such admirable strengths alongside the special interests of young people with ASD has previously been found to yield positive results.

Implications for Educational Psychology Policy and Practice

1. A key takeaway for the field of Educational Psychology are the multiple benefits offered by community sports and its surrounding coaching network to the individual with ASD. This knowledge is particularly timely to the field given the extreme pressure psychological services are under to provide clinical services which serve to deliver similar benefits to that of sport.
2. The successful use of AI and the SEM may inform future Educational Psychology research pertaining to the inclusion of marginalised groups.

Implications for future research on the inclusion of young people with ASD in sport clubs

1. It is recommended that further research at a NGB level is conducted to review best practices supporting young people with ASD at a macro level.
 2. The findings of the current research may be presented at club committee meetings to stimulate dialogue amongst coaches and board members. The AI framework may be then employed locally to encourage a strengths-based change.
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4.0 Chapter Four: Critical Review

4.1 Chapter Introduction

Adopting a reflexive approach, the current chapter provides a critical reflection of the research journey with an emphasis on the empirical study. A critical review of the research process, framework and methodology is presented in conjunction with reflections on qualitative quality criteria, ethical considerations, and the impact of COVID-19 on the overall process. The penultimate section focuses on the dissemination of this research and its implications to both policy and practice. Directions for future research are also considered.

4.2 Reflections on the Research Process

Throughout my doctoral training, my investment regarding the inclusion of young people with ASD has grown. My interest in coaches' perspectives on the phenomenon of inclusion was central from the conception of the research and increased in prominence as I noted their lack of voice in the current field of research. Prior to my empirical study, I questioned whether coaches' hesitation to coach young people with ASD resulted from a lack of education or interest (Jeanes et al., 2018; Rosso, 2016). However, the current project overwhelmingly suggests such hesitation is grounded in fear and uncertainty. The AI format of this research allowed for coaches to speak freely without trepidation leading to creative yet practical inclusive practices which challenged my preconceptions. By virtue of engaging with this project, I am more cognisant of the multi-factorial components of facilitating inclusion with a restored value for collaboration in my professional practice. On a personal note, this project encouraged deep reflections regarding my own high-performance experiences and ignited a new interest in participant development in sport.

Another significant reflection from this project was my development as a qualitative researcher. As the project progressed, I strongly aligned with the work on reflexive TA developed by Virginia Braun and Victoria Clarke (2019a, 2019b; 2020; 2022) and became cognisant of what Varpio and colleagues (2017) coined the “cobra effect.” This effect addresses the continued use of concepts once required to enhance the legitimacy of qualitative research to positivist academia. In abandoning such terms and my undergraduate experience of defending the use and efficacy of qualitative research, my doctorate sought to develop high quality, nuanced and meaningful research, fostering my development as a “researching professional,” both as a consumer and producer of research (Fenge, 2009). The narrative in this thesis developed alongside my role as a researcher, highlighting the advances and boundaries of qualitative research (Honan & Bright, 2016) culminating in Chapter Four which allows for greater creative and critical contributions (Weatherall, 2019).

Over the course of this project, I attempted to remain cautious of the potential ambiguity of language (Charmaz, 2014). However, a certain fear surrounding language permeated the research. This was embodied through my professional discomfort regarding certain language employed by coaches for those with additional needs and coaches’ fear of saying the wrong thing. Such tension regarding the social dynamics of research is not unique to this project (Townsend & Cushion, 2021). Further reflection on language and my experience of the research will be explored in a separate commentary given the remits of the current project. Such exploration will document my own positionality through the lens of my social constructivist and reflexive stance as seen in the existing literature (Hayfield & Huxley, 2015; Mutepa, 2016; Trainor & Bundon, 2020).

4.3 Reflections on Reflexivity

Reflexivity is often stylistically confronting for individuals disciplined in “scientific” writing practices (Braun & Clarke, 2022; Jankowski, 2017) and initially I shied away from having my own voice pervade the research. However, as the thesis write-up progressed, I chose to use language as a tool to explore my reflexivity (Braun & Clarke, 2022). Moreover, given factual data only holds relevance when interpreted and communicated through personal and cultural lenses (Willig, 2013), my positionality was made clear from the outset and my reflexivity was embedded throughout the research. Continuous reflection on my positionality was a crucial aspect of this project given its influence on data construction (Braun & Clarke, 2019a; 2022) however my own voice as the researcher is perhaps most present within the reflective style in Chapter Four as outlined in Section 4.2.

As previously mentioned, I consider my subjectivity as a strength in this research (Gough & Madill, 2012). My sporting positionality (former international rower with experience at an Ivy League University) assisted the recruitment of coaches and enabled me to quickly establish trust and rapport during interviews (as discussed in Section 4.5.3). Moreover, my lived experience with coaches and professional understanding of ASD helped me to empathise with coaches’ experiences. I believe my subjectivity to have been most evident in the analysis given I actively created themes, striving to interpret coaches’ perspectives rather than solely report them (DeSantis & Ugarriza, 2000). Although time-consuming, there was value in reflecting upon my interactions with the data in enhancing overall rigour (Trainor & Bundon, 2020). To this end, a detailed overview of its translation in the current project is provided in Appendix K (Braun & Clarke, 2022).

It must be acknowledged that my positionality may have equally placed boundaries on my vision (Imenda, 2014) though I remained cognisant to not conflate coaches' experiences with my own anecdotal accounts. My reflexive journal helped this process through encouraging me to acknowledge my impact on the research while also providing transparency on the “messy” nature of the research process (Braun & Clarke, 2019b; Tracy, 2010; Trainor & Bundon, 2020). Consultations with my supervisors fostered critical reflection and encouraged me to look beyond my own horizons (Braun & Clarke, 2022; Trainor & Bundon, 2020).

4.4 Reflections on the research framework

4.4.1 Reflections on the SEM

The SEM was adopted as the underlying framework within the current research. Its use classified results in the second phase of Chapter Two (Section 2.5; Obrusnikova & Miccinello, 2012) and informed follow-up questions in the SSIs (Abdelghaffar & Siham, 2019). Furthermore, the empirical project findings were interpreted in the context of the SEM (Bradbury et al., 2018).

The SEM posits that inclusion is shaped by multi-level factors (see Table 2.1) which was a strength in the current project as it highlighted that barriers to inclusion are not solely within child factors (Bradbury et al., 2018). For example, no elements from the aforementioned ideal inclusive club settings warranted a change from young people with ASD. Coaches regarded many current challenges as interpersonal (e.g., parental involvement) and institutional (e.g., destigmatise the spectrum).

An additional strength of the SEM is that it reflects the social constructivist paradigm, and encourages working with rather than on people (Prilleltensky & Nelson, 2005) which is evident in the accessible presentation of results. The SEM

table of results constructed a practical model (Henderson & Baffour, 2015) which streamlines findings to inform future initiatives (Obrusnikova & Miccinello, 2012).

The SEM is critiqued for its skewed focus on social factors at the expense of contextual factors (Golden & Earp, 2012). However, current research findings extended beyond intrapersonal factors, reviewing physical factors (e.g., environmental adaptations), institutional factors (e.g., format of programme), community factors (e.g., sport clubs to provide education) and public policy (e.g., education in clubs). The limited number of policy related factors discussed may be due to the micro focus of the research (Eyler & Dreisinger, 2011). Had a macro focus been adopted (i.e., NGB focus), it is anticipated issues of public policy would have featured more predominantly.

4.4.2 Reflections on AI

AI has previously successfully been used to inform coaching practices (Pill, 2015; Scholes, 2016) though with an emphasis on high-performance coaching (Bertram et al., 2016; Trudel et al., 2016) and re-engaging students in PE (Gray et al., 2019). The present study appears to be novel, where previous work has critiqued coaches in their attempts to include young people with ASD (Arnell et al., 2020; Obrusnikova & Miccinello, 2012) the current application of AI emphasised that every coach and sport club have strengths to be amplified (Cooperrider et al., 2008).

A notable strength of AI in the current research was the positive change it encouraged in coaches and their clubs throughout the process, reflecting the core principles of AI (see Table 3.2; Fitzgerald et al., 2001). For example, coaches noted they had looked up resources and chatted to fellow coaches prior to interview and had begun analysing inclusion within their own clubs. These efforts reflect that change had begun from the moment of the first question regarding participation,

demonstrating the simultaneity principle. The power of positive questioning to encourage positive change (i.e., the positive principle) was reflected in many interviews whereby coaches became emotional discussing their coaching strengths, noting that they had never thought about them. While discussing the “*Dream*” club, coaches also discussed potential present-day actions (e.g., discussing inclusion policy at club meeting) reflecting the anticipatory principle, whereby the image of the future molds the present.

However, the strengths-based approach of AI has been criticised and likened to a to a distorted plant growing towards light (Rogers & Fraser, 2003). Rogers and Fraser (2003) posit that just as plants grow skewedly towards light, there is a risk that AI evaluations may be distorted in their overly positive focus. However, although AI is based on a heliotropic principle, it does not reject less positive discussions (Enright et al., 2014). While reflecting on unrealised potentials or organisational barriers during the “*Dream*” phase (Bushe, 2011; Patton, 2003), coaches did discuss the stigma of ASD and challenges of accessing the diagnosis (Van der Haar & Hosking, 2004). However, in line with Cooperrider (2012), the traditional societal 80/20 deficit bias was reversed to an 80/20 positivity ratio to fully acknowledge coaches’ challenges yet to encourage a focus on what they wanted more of, rather than on the problems (Bushe, 2001).

4.5 Reflections on the Methodology

4.5.1 Reflections on the Study Design

A strength of qualitative research is that it situates the researcher in the world of the participants (Denzin & Lincoln, 2003) and adhering to Denzin and Lincoln’s qualitative research process (see Table 3.1) emphasised my biographical situation behind each phase of the research. This allowed me to build an understanding of

coaches' construction of reality (Mertens, 2014) and to focus on the inclusion of young people with ASD as perceived by coaches and to further address how coaches would approach inclusive practices (Patton, 2002). My invested interest in the topic of inclusion is a strength in this research (Denzin & Lincoln, 2003) and was apparent given my outlined positionality evidenced through my strong alignment with Braun and Clarke and my reflexive journal (Barrett et al., 2020) as outlined in Section 4.3. This approach contrasts greatly with quantitative methods whereby the researcher is not an active participant in the research (Bryman, 2012).

4.5.2 Reflections on Defining Sport

Defining the inclusion criteria for sports within the current project was initially challenging and it was noted that prior reports had not defined their classification between individual and team sports when discussing same (Delaney & Fahey, 2005; Lunn et al., 2013). Baker et al. (2003) informed the defining of sport types through a classification system based on the independence/interdependency of athletes in their sport. Individual sports were depicted as “primarily” independent in nature (e.g., gymnastics and badminton) allowing for specific interdependence warranted by many sports. Pluhar and colleagues (2019) supported this classification as they defined individual sport as one which does not require another person to compete with you (excluding an opponent). Such flexibility allowed for sports such as rowing and squash to be included in the sample.

The decision to target individualised sport is timely in the Republic of Ireland given adolescents are moving from team sports towards individual activities (Lunn et al., 2013). The Tokyo Olympic Games showcased this rising popularity of individual sports (Olympian Database, 2021) and as a result it is now plausible that such sports

will experience a further rise in popularity within the national context (Reis et al., 2017).

The selection of individual sports is not without its potential limitations. The presence of a group is essential for social skill development in young people with ASD (Alaniz et al., 2017; Ohrberg, 2013) and such groups are not always present in the sports addressed within the current research. Moreover, research indicates that parents of children with ASD would prefer their child to participate in team sports (Alexander & Leather, 2013). However, parents have strongly emphasised challenges experienced by their children in such team sports, particularly when the child reaches adolescence (Arnell et al., 2020).

4.5.3 Reflections on Research Sample

Criterion-based purposive sampling was used to recruit 13 coaches from eight sports across ten clubs within the Republic of Ireland (Bernard, 2017). The constructivist paradigm tends to adopt a purposive approach through identifying settings (e.g., sport clubs) which feature individuals with the best understanding of the phenomenon (e.g., coaches; Mertens, 2014). This approach ensured that coaches could share their expertise of coaching and their club context to provide rich accounts of current factors supporting inclusion alongside dreams for how future inclusive settings would look (Bryman, 2012; Mertens, 2014). A strength of the recruitment was the adoption of information power and the rejection of data saturation (Malterud et al., 2016). The concept of data saturation suggests that meaning lies within data waiting to be found and is unchanging, which is inherently incoherent with the reflexive and interpretive nature of the current social constructivist project (Braun & Clarke, 2019b; Malterud et al., 2016; Sim et al., 2018).

A prominent strength of the current sample is its heterogeneity. Although randomised sampling was not adopted, coaches represented a variety of sports with varying levels of coaching experiences (Robson & McCartan, 2016). As previously mentioned, coaches represented eight sports and their coaching experience ranged from one year to 43 years with four coaches having extensive international coaching experience. Three coaches in the sample also discussed previous experience in ASD specific sporting programmes. The strength of this variation is that findings may inform future facilitators to the inclusion of young people with ASD with guidelines to suit a variety of coaches and settings (Arnell et al., 2021; Shields & Synnot, 2016) as it did not solely focus on coaches with ASD experience (Kimber et al., 2021).

An additional strength of this sample is the representation of females. The ratio of male to female coaches in the current sample reflects the national coaching population which is one-third female (Sport Ireland, 2019a). The inclusion of a female coach with ASD was valuable given the disproportionately higher male to female prevalence of ASD (Idring et al., 2015). Although, her diagnosis was not linked to her pseudonym to ensure anonymity, her unique insights as both an athlete and a coach informed all AI phases. Additionally, seven coaches reported coaching experience with females with ASD. As noted in Chapter Two, this is a higher representation than is usual of females with ASD in the sporting literature and is in contrast with prior research whereby professionals do not recognise autistic traits in females (Whitlock et al., 2020).

A sole focus on the coaches' perspectives may be considered a limitation in the current exploratory study. Coaches are passionate people working at the interface (Bowes & Jones, 2006; Lafrenière et al., 2011) and when interviewed in previous research have expressed frustration at the administration and organisation of sport

(Kitching & Campbell, 2019). Further to this point, the coaches were self-selected participants indicating potential for findings to neither represent the general coaching population nor current inclusive practices (McConkey et al., 2012; Townsend et al., 2021). However, the sample included varying levels of experience with young people with ASD and reported extensively on both the strengths and the challenges with results reflecting preceding literature. The secondary finding of trepidation further highlights that an overly positive account of the phenomenon was not reported. Moreover, while the voices of administrators, development officers and other club personnel would offer significant insight to the inclusion of young people with ASD in clubs (Arnell et al., 2021; Arnell et al., 2020), the current study sought to understand coaches' perspectives given its absence in the literature to date (Duquette et al., 2016; Nichols et al., 2019). As aforementioned, coaches' insights are crucial given inclusion policies will neither make significant momentum nor be applied without the support of such key stakeholders (Braun et al., 2011).

It should be noted that the recruitment process was also not without its limitations. Recruitment was completed in two phases due to a slow uptake and took much time from my limited doctoral timeframe. Dependence on gatekeepers to coaches (e.g., club captains) meant that the gatekeepers ultimately influenced the results (Chaudhuri, 2017). Certain gatekeepers expressed interest in the project and appeared to encourage coaches' participation. As a result, three pairs of coaches came from different clubs, however the perspectives between the pairs were very different, offering contrasting perspectives at times.

Moreover, my own sporting experience may have interacted with the recruitment. Although coaches were sought using purposive sampling, three coaches in the overall sample were known to me, two from rowing and one from athletics.

Although being an “insider researcher” enhances the participants’ openness and rapport with the researcher (Saidin, 2016), a limitation of this insider role is that participants potentially make assumptions about the researcher’s knowledge. This was demonstrated in this project, as coaches said things like “I’m sure you are aware....you know yourself” requiring further prompts and probes (Saidin, 2016). “Writing ourselves in” (Chaudhuri, 2017, p. 134) and providing my own location in the research further adheres to reflexive TA through demonstrating my subjectivity (Braun & Clarke, 2022).

4.5.4 Reflection on Data Collection Methods

SSIs were systematically developed in line with the IPR framework (Castillo-Montoya, 2016) and were subsequently piloted on two coaches. The flexibility of the SSI allowed for a rich exploration of coaches’ experiences, knowledge, and opinions (Mertens, 2014). Conducting rich SSIs was dependent on my ability to develop rapport, probe appropriately and allow for responses (Brinkmann & Kvale, 2015) which are skills developed as part of my professional doctoral training. The nature of the one-to-one manner of SSIs allowed for authenticity in coaches that would not have been afforded in a focus group setting (Robson & McCartan, 2016). The confidentiality afforded by the one-to-one setting was also crucial given the sensitive nature of discussing certain young people with ASD in clubs (Thomas, 2013).

Data collection posed challenges over this project as SSIs require significantly more time than other methods of data collection (Mertens, 2014) and much time had to be allocated to the organisation and running of interviews alongside transcription (Robson & McCartan, 2016). Furthermore, SSIs are at risk of social desirability, whereby participants may feel obliged to over-report socially desirable perspectives and under-report what are perceived as less socially

acceptable beliefs (Bryman, 2016). My role as a trainee psychologist may have impacted coaches' shared perspectives on inclusion (Lüke & Grosche, 2018). Although efforts were made to reduce this bias through my familiarity with cues for detecting social desirability, deliberate rapport building through disclosures and humour and through clearly outlining the purpose of the study (Bergen & Labonté, 2020), I cannot be certain of effects due to social desirability.

A potential limitation of the current study was that only one SSI was conducted per coach. Given the exploratory nature of this research, it is plausible that richer data would have been obtained through serial interviewing (Read, 2018) which was not possible due to the time constraints of my doctoral programme. However, measures were taken to ensure coaches' perspectives and experiences were meaningfully collated to reach sufficient information power through the use of uninterrupted interview periods, follow-up questions and incorporating ITR (Malterud et al., 2016; Varpio et al., 2017).

4.5.5 Reflections on Data Analysis

Braun and Clarke's guidance was integral to the analysis. Sixteen years since their seminal 2006 paper, they have continued to produce much guidance on the principles and process of reflexive TA, likening their work to a compass and a map rather than a set of rigid rules (Braun et al., 2019). They uniquely advocate that the researcher is "a situated, insight-bringing, integral component of analysis" (Braun & Clarke, 2022, p. 10). To this end, I held an active role in the iterative process of the analysis from my own perspectives of ASD and sport (Arnell et al., 2020; Braun & Clarke, 2022).

A detailed overview of the translation of the two-phased (deductive-inductive) reflexive TA in this research is provided in Appendix K. In line with

reflexive TA, a second coder reviewed data to develop a richer and more nuanced understanding of the data as the positivist assumptions underpinning coding reliability do not align with reflexive TA (Braun & Clarke, 2019a). To further ensure the quality of the approach, the analysis was recursively reviewed using a checklist for producing good TA (see Table 4.1; Braun & Clarke, 2006, p. 96; Braun & Clarke, 2022, p. 269).

Table 4.1

15-point Checklist for Producing Good TA

Criteria to good TA	Action completed
The data have been transcribed to an appropriate level of detail; all transcripts have been checked against the original recordings for “accuracy”.	I independently transcribed all 13 SSIs including all filler words and laughter. Following transcription, I listened to each SSI and compared it to the transcription.
Each data item has been given thorough and repeated attention in the coding process.	This criterion was met through the recursive use of the six phases of TA with particular focus on the codes in phases three and four.
The coding process has been thorough, inclusive and comprehensive; themes have not been developed from a few vivid examples (an anecdotal approach).	Throughout analysis, I re-read areas of sparse coding to ensure they had not been neglected in the process. Moreover, I developed a table where all extracts, codes and themes were collated. Through the use of this visual overview, it was ensured that there were sufficient codes to warrant a theme.
All relevant extracts for each theme have been collated.	This criterion was met through the use of a table as outlined above.
Candidate themes have been checked against coded data and back to the original dataset.	The table was used to check themes against coded data and each code was then checked against the original transcript to ensure the coded data was not taken out of context and was a credible reflection of what the coach had said.
Themes are internally coherent, consistent, and distinctive; each theme contains a distinct central organising concept; any subthemes share the central organising concept of the theme.	This criterion was met through both the second coder and my supervisors’ review of the findings.

Data have been analysed – interpreted, made sense of – rather than just summarised, described or paraphrased.	This was met through comprehensive stages of analysis followed by the interpretation of findings into the tables of SEM.
Analysis and data match each other – the extracts evidence the analytic claims.	The results and discussion sections were reviewed by my supervisors to ensure this consistency.
Analysis tells a convincing and well-organised story about the data and topic; analysis addresses the research question.	This criterion was met through the use of three research questions, the structured AI phases and the SEM.
An appropriate balance between analytic narrative and data extracts is provided.	This was ensured through the separate sections of results and discussion.
Enough time has been allocated to complete all phases of the analysis adequately, without rushing a phase, or giving it a once-over-lightly.	The data analysis was completed over a three-month period in Summer 2021, with frequent adjustments made to the data until the final thesis was submitted in April 2022.
The specific approach to thematic analysis, and the particulars of the approach, including theoretical positions and assumptions, are clearly explicated.	It was made explicitly clear that a reflexive TA approach was adopted which was noted to adhere to the qualitative paradigm. Further assumptions regarding the paradigm were outlined in Section 3.2 within Chapter Three.
There is a good fit between what was claimed, and what was done – i.e., the described method and reported analysis are consistent.	I engaged with much of Braun and Clarke’s literature throughout the course of this research to ensure that I appropriately adhered to reflexive TA in a recursive manner. This consistency and transparency were enhanced through the adherence to the six steps as outlined in Table 3.3 and Appendix K.
The language and concepts used in the report are consistent with the ontological and epistemological positions of the analysis.	This consistency is outlined in Section 3.2 denoting the research paradigm
The researcher is positioned as active in the research process; themes do not just “emerge”.	My own position in the overall research project was made clear from the outset and reflexivity was frequently revisited throughout the write-up.

Note. Adapted from “*Thematic analysis: A practical guide,*” by V. Braun, V. Clarke, 2022 Sage.

The ITR featured as an additional strength of the current research as is common in qualitative sport research (Bowes & Kitching, 2021). Although only four coaches completed an ITR, it was crucial to offer this opportunity from an ethical standpoint to respect their contributions (Hagens et al., 2009; Mero-Jaffe, 2011) and to foster anonymity (Thomas, 2017). Moreover, ITR has been recommended over triangulation in ensuring accuracy of data (Mertens, 2014), which is pertinent given the concept of triangulation does not align with the constructivist paradigm (Varpio et al., 2017).

It has been claimed that a deductive approach may reduce the depth of analysis (Braun & Clarke, 2006). However, a deductive-inductive approach has previously been adopted in literature (Abdelghaffar & Siham, 2019; Clarke & Braun, 2009) and further defended for its efficacy (Fereday & Muir-Cochrane, 2006). This balanced approach in the current project was warranted given the research questions, methods of inquiry (AI) and theoretical framework (SEM). Moreover, inductive analysis ensured findings strongly aligned with the raw data (Braun & Clarke, 2006) as a sole deductive analysis would not have generated rich findings such as the theme of trepidation.

4.6 Qualitative Quality Criteria

Within the social constructivist paradigm, trustworthiness and authenticity are manifested through credibility, dependability, confirmability and transferability (Guba, 1981; Lincoln & Guba, 1986). Though criteria for rigour has been problematised (Smith & McGannon, 2018), it should be noted that in the current context such terms adhere to the academic discourse of qualitative research and provide a more nuanced understanding of the undertakings of the current project (Braun & Clarke, 2022) rather than serving to negotiate the legitimacy of such

research (Varpio et al., 2017). Furthermore, quality criteria are “not cast in stone” (Braun & Clarke, 2022, p. 278) and are adapted to highlight the nuances of the current work.

4.6.1 Credibility

The credibility of the study refers to the extent which data collection, analysis and results are authentic and believable (Guba, 1981) and relates to how I investigated the research question (Kivunja & Kuyini, 2017). To enhance the credibility of the project, concrete methodological details were outlined, details of all developed codes were shared (see Appendix L) and thick descriptions of coaches’ own accounts were provided (Tracy, 2010). Multiple direct quotations from the coaches were also shared to enhance the credibility of the findings (Braun & Clarke, 2006; Graneheim & Lundman, 2004). Although qualitative reports often replace filler words with ellipsis, I solely employed ellipsis to connect phrases in order to fully attend to the coaches’ own words (Arnell et al., 2020).

4.6.2 Dependability

Given this project interacted with multiple participants in various contexts subject to multiple realities, it may not be possible to replicate the results (Kivunja & Kuyini, 2017). However, to ensure the dependability of the current study design, all phases of the project were documented in a transparent manner (Braun & Clarke, 2022; Tracy, 2010). Moreover, field notes regarding recruitment and memos pertaining to any change in design were maintained in my reflexive journal and overseen by my supervisors. Such documentation was critical given the frequently changing research context as a result of COVID-19 (Mutepa, 2016).

4.6.3 Confirmability

In line with the subjectivist epistemology of the social constructivist paradigm, it was necessary to outline the confirmability of the current findings throughout the project (Lincoln & Guba, 2000). Within this study, the process of how the data was interpreted was clearly outlined and multiple examples of coaches' quotes were provided to support the inferences drawn from the data (Mertens, 2014; Patton, 2002). Moreover, my personal values and interaction with the research process were explicitly discussed (Braun & Clarke, 2006, 2022).

4.6.4 Transferability

Transferability denotes that I should ensure the data is “richly contextualised” so that readers can relate findings to their own contexts (Braun & Clarke, 2022, p. 143). Despite the subjective nature of social constructivism (Gomm et al., 2000), transferability has been argued to exist in naturalistic generalisation whereby readers intuitively transfer the research to their own context and actions (Braun & Clarke, 2022; Tracy, 2000, 2010). The responsibility of transferability therefore wholly lies with the reader (Lincoln & Guba, 2000; Stake, 2000). Displaying results under the SEM aided this transferability as it provided an analytic strategy for the facilitation of young people with ASD in sport clubs (Henderson & Baffour, 2015). The positive reception to the findings across academic and sporting contexts (see Section 4.10) is evidence of transferability.

4.7 Reflections on the COVID-19 Impact on the Research Process

Given COVID-19 caused a dramatic shift in the research landscape (Alam et al., 2021), the effects of the pandemic permeated this study. However, I remained true to the positive psychology principles of AI in my approach to research planning and I consistently adapted the project to overcome challenges posed by COVID-19.

4.7.1 Impact on Sample

Young people with ASD and their parents were considered part of the initial sample, however during the period of data collection, the Republic of Ireland was experiencing strict lockdown restrictions due to the pandemic (Government of Ireland, 2020). During such lockdowns, young people with ASD were reported to experience higher levels of stress compared with neurotypical peers (Alhuzimi, 2021; Colizzi et al., 2020) whilst their parents demonstrated heightened levels of anxiety and depression (Miniarikova et al., 2021). Research conducted in the Republic of Ireland further highlighted negative behavioural outcomes in young people with ASD and stress in their parents as a result of the lockdown (Franz & Kelly, 2021). Therefore, due to ethical considerations, sampling from these populations did not seem appropriate during recruitment (Jowett, 2020). The absence of the young person's voice is a notable limitation of this study (Williams & Gilbert, 2019), though it is hoped that perspectives from the coach with ASD and coaches with experience working with young people with ASD may have reflected these absent voices (Kimber et al., 2021).

4.7.2 Impact on Recruitment

Two contacted sport clubs indicated they would not disseminate information to coaches given the stresses of lockdown. To this end, it is worth acknowledging the dramatic decline of volunteers in sport during the pandemic (Sport Ireland, 2021a). However, overall the pandemic largely had a positive impact on coach recruitment. Online SSIs allowed for the recruitment of more coaches across a wider geographic region (Upadhyay & Lipkovich, 2020). Moreover, coaches also emphasised they were readily available to participate in the study due to their extra time without coaching commitments during lockdown.

4.7.3 Impact on Data Collection Methods

Due to the lockdown restrictions, SSIs were conducted via Zoom. While the benefits of online interviews were extensively outlined in Section 3.3.4, it must be acknowledged that online data collection was dependent on coaches' digital literacy (Archibald et al., 2019). To reduce this dependency, Zoom information sheets were shared with coaches prior to interviews and three phone SSIs were conducted as per coaches' requests.

4.7.4 Impact on Content of Findings

The word frequency of items pertaining to COVID-19 was reviewed using the NVivo software. The terms pandemic, closure and shutdown were not referenced. COVID/(-19) was referenced five times and lockdown/(s) was referenced nine times throughout all SSIs. When these terms were mentioned, they were referencing coaches' free time due to lack of coaching and how clubs had supported young people with ASD during the pandemic. It is plausible that the application of AI encouraged coaches to focus on previous strengths rather than solely on the lockdown challenges. However, it should be noted that coaches' challenges and negative experiences were otherwise discussed (see Section 4.4.2), therefore suggesting the effects of COVID-19 did not dominate the findings.

4.8 Reflections on Ethical Considerations

The pilot interviews informed an additional query regarding previous experience with young people with ASD which guided appropriate follow-up questions during SSIs (Bryman, 2012). This was crucial in ensuring that coaches would feel neither judged nor criticised and could appreciate the value of their perspectives and experiences (Robson & McCartan, 2016).

A further strength of the research was the diligence in ensuring all information was anonymised in adherence with the PSI Code of Ethics (2019). Beyond redacting SSIs during transcription through removing all coach/club names, great attention was afforded to ensuring no quotes could be traced to any young person, coach or club (PSI, 2019). In particular, no quotes pertaining to idiosyncratic behaviours of young people with ASD were shared. The ITR additionally provided coaches the opportunity to further anonymise the redacted script (Hagens et al., 2009; Mero-Jaffe, 2011).

Despite having received ethical approval, ethical dilemmas developed and were overcome over the course of this research journey (Bryman, 2012). For example, as aforementioned, certain participating coaches were personally known to me. Therefore, their voluntary participation and right to withdraw at any time without providing a reason was heavily emphasised throughout (British Psychological Society, 2021). Furthermore, my adherence to the ethical considerations regarding the online nature of SSIs was evident in my completion of online counselling training and my alignment with the American Psychological Association telepsychology guidelines (2020). Some examples of the employed measures include wearing headphones during SSIs and a comprehensive review of Zoom security features.

4.9 Implications of Research Findings

This study aimed to explore the perspectives of coaches regarding the inclusion of young people with ASD in sport clubs. Project findings reveal implications both for understanding this complex topic within the context of the existing literature and for the extension of policy and practice across sporting and educational psychology domains. Findings will be of interest to a wide audience,

transcending from international and national macro-level societies to the micro-level of community sport clubs, gyms and leisure centres.

4.9.1 Implications for Understanding of the Topic

This study's findings contribute to the research base on work to support young people with ASD in sport and may prove particularly insightful to educators and researchers in the fields of education, sport, PE and the health sciences. Specifically, the research adopted a novel strengths-based approach to review inclusion in clubs which allowed for a greater understanding of coaches' perspective on this complex issue. Whilst previous studies outlined in Chapter Two depicted coaching factors as barriers to participation (Arnell et al., 2020; Obrusnikova & Miccinello, 2012), the current research posed answers as to why such barriers may be in place and further offered solutions regarding same. A novel finding for the field was the discussion of trepidation across coaches which may serve to answer why certain coaches are hesitant to transition to disability coaching (Martin & Whalen, 2014). This understanding of coaching hesitation will prove useful in informing the infusion of disability training across sports (Townsend et al., 2021).

4.9.2 Implications for Macro-level Policy and Practice

This study's implications widen the accessibility of sport from a governmental level, supporting both international and national goals to get young people involved in community sport (Federation of Irish Sport, 2021a; UNESCO, 2021b). This research explicitly aimed to widen the accessibility of sport for individuals with ASD (Kimber et al., 2021). From a policy perspective, findings are significant in further enacting the UNCRPD across national platforms. Specifically, Article 4b outlines that nations who ratify the convention must "take all appropriate measures, including legislation, to modify or abolish existing laws, regulations, customs and

practices that constitute discrimination against persons with disabilities” (UN, 2006).

To this end, developing inclusion policies at an NGB level (as has been demonstrated within the Irish context; Federation of Irish Sport, 2021b) may be a worthwhile avenue.

From the perspective of NGBs, collating coaches’ knowledge, as in the current study is beneficial in supporting existing and new NGB coaching courses (Kimber et al., 2021). Given UNCRPD Article 4, the *EU White Paper on Sport* (2007), and the *EU Work Plan for Sport 2017-2020* (2017) highlight that disability training should be provided and coaches in the current project overwhelmingly called for further disability education, NGBs may benefit from reviewing how disability education could be infused into current coach supports (Townsend et al., 2021). The present findings explicitly emphasised a need for general disability language awareness and the request for sport specific training which may be of particular interest to NGBs (McMaster et al., 2012).

4.9.3 Implications for Micro-level Policy and Practice

The input gathered from coaches during this project ultimately responded to the need to develop an intra-club framework in the form of policies and pathways to facilitate the acclimatisation of young people with ASD in clubs (Edwards, 2015; Ohrberg, 2013). If inclusion policies were to be developed at the NGB level as outlined in Section 4.9.2, they could be tailored to respective club’s needs.

According to current findings, the promotion of such inclusion policies to the community may reduce parental fear of exclusion. On a very practical level, the club’s inclusion policy may simply initiate the dialogue for parental input in a non-threatening manner. This research also overwhelmingly highlighted the need for transparency at the club level, implying that once a diagnosis has been disclosed to

the club that all club personnel should be informed regarding same with parental consent (Kennedy-Lightsey et al., 2012).

Furthermore, coaches in this study advocated for the development of an inclusive pathway. This pathway may include a revised membership application with an additional section pertaining to disability, reflecting Cara's *Autism in Sport Passport* to identify needs (Cara, 2020a). Based on the current findings, such a pathway should direct both parent and young person's anticipated involvement in the club and provide coach guidance on any potential coaching adaptations.

With regard to implications for micro-level practice, this study builds on prior research towards the development of evidence-based practices amongst coaches (Duquette et al., 2016; McNamara et al., 2020). For example, this research further emphasised the importance of child-centred coaching, crucial for all young people (Jowett, 2017; Pill, 2017). Moreover, specific adaptations for those with ASD were mentioned, ranging from the use of visuals to identifying specific autistic strengths. Such strengths are often reflected through increased determination and focus (Kimber et al., 2021) and capitalising on these assets alongside the special interests of young people with ASD yields positive results (Davey, 2020). Developing such pedagogical skills and questioning personal coaching practices may lead to a richer understanding of coaching practices (Bowles & O'Dwyer, 2020) which could enhance the coaching of both young people with ASD and their neurotypical peers.

This project further emphasised the need for enhanced collaborative support, which echoes previous research (Arnell et al., 2020; Gregor et al., 2018), strongly implying that coaching athletes with ASD should not be left to one isolated coach in order to promote the longevity of inclusion in sport clubs. The potential benefits of

peer-led inclusion have also been discussed; therefore clubs should consider the assignment of peer specific roles to monitor inclusive practices in the sport club which extend beyond the coaches' environment (e.g., changing rooms).

The current findings may hold further implications for clubs if presented at committee meetings to stimulate dialogue amongst coaches and board members. Therefore, study findings and implications were shared with participating clubs to assist with this process (see Appendix M) with a further plan to develop a practical “toolkit” for clubs as outlined in Table 3.8. Given the positive response to AI from coaches in the current project, further internal club reviews may subsequently benefit from a similar strengths-based approach.

4.9.4 Implications to Educational Psychology Knowledge and Practice

This research is both timely and relevant to Educational Psychology. As a profession, Educational Psychologists (EP) are committed to the inclusion and development of young people (Kelly et al., 2008; Muscutt, 2020). As the role of the EP develops, so too does our remit whereby our engagement with young people and families now transcends environments beyond school (Fallon et al., 2010; Lee & Woods, 2017). However, EPs in the Republic of Ireland continue to focus on school inclusion (Anglim et al., 2018; Rodden et al., 2019) and the current research appears to be the first of its kind from the educational psychology perspective. The quickly evolving inclusive educational landscape in the Republic of Ireland is a positive advancement (Faas et al., 2018; Kubiak et al., 2018), yet it must be noted that little emphasis has been placed on full inclusion within extracurricular settings (Briere & Siegle, 2008). To this end, it is hoped that the success of the current research will encourage future EPs to consider research regarding extracurricular inclusion.

The inclusive practices and perspectives regarding the tension of full integration shared by coaches will also be of particular interest the knowledge of EPs. EPs may also benefit from reviewing the current use of AI to facilitate positive change and how using this method of inquiry as part of an ecosystemic framework (i.e., the SEM) can provide invaluable insights into the promotion of inclusion.

The contribution this research makes to the EP's knowledge is noted in Chapter Two where it was highlighted that sporting interventions outside of the clinical setting may be a worthwhile consideration to foster psychosocial development and daily living skills (Alaniz et al., 2017; Bass et al., 2009; Caputo et al., 2018). EPs should consider that promoting social skill activities in a young person's natural setting appears to be more effective than traditional clinical settings (Bellini & Peters, 2008). To this end, this research provides evidence-based practices and resources for EPs to share with families to support their children's introduction and assimilation within sport clubs.

Furthermore, the Republic of Ireland has moved towards Family Centred Practice in light of the recently adopted "*Progressing Disability Services for Children & Young People*" which emphasises supports in the young person's daily environments (HSE, 2013, 2021) similar to that of community sport. This is particularly timely from the EP's practice perspective, given parents of children with ASD often report insufficient provision of support from disability services (Jones et al., 2017). Specifically, there is an increasing demand on intervention services in the Republic of Ireland (Byrne et al., 2018; Kiernan et al., 2020) which has been further compounded by the COVID-19 pandemic (Courtenay & Perera, 2020; Doyle & O'Brien, 2020). Inclusion in club sports further bolsters the Family Centred Practice given such community participation would support families with a child with ASD

living in the Republic of Ireland who report feeling socially isolated from society (Byrne et al., 2018; Devenish et al., 2020).

The current research may also be of merit to the daily role and functions of the EP and may support consultation, assessment and intervention. With regard to the EP's consultation, adopting the AI approach requires the EP to be deliberate in their approach of avoiding assuming the traditional psychologist and teacher/parent roles of giver versus receiver (Ravenette, 1980, p. 120). Inquiring through the lens of AI would also allow the EP to perceive parents and/or school staff as the "expert" on the details of the problem (Altiere & von Kluge, 2009; Carr, 2015).

The success of the strengths-based approach applied within the current research may also inform ASD assessments which are embracing the strengths focus of neurodiversity (Brown, Stahmer, Dwyer, & Rivera, 2021; Urbanowicz et al., 2019). The use positive questioning (as discussed in Table 3.2; Cooperrider & Whitney, 1999; Fitzgerald et al., 2001) and knowledge of the 80/20 positivity ratio in contrast to the traditional 80/20 deficit bias (as discussed in Section 4.4.2; Cooperrider, 2012) may be prove to be of particular benefit when embracing this strength-based approach to ASD assessments.

This study may also provide further therapeutic confidence in the use of Solution Focused Brief Therapy (SFBT; de Shazer et al., 2021). Notably the SFBT use of looking for exceptions (Trepper, Dolan, McCollum, & Nelson, 2006) relates to the "*Discovery*" phase of AI; the SFBT "Miracle Question" (de Shazer et al., 2021) relates to the "*Dream*" phase of the current work and the SFBT art of reframing (Berg & De Jong, 1996) relates to the present study's use of the 80/20 positivity ratio. The success of these solution focused approaches within the current

research may enhance the EP's confidence and competency in their therapeutic approach.

4.9.5 Direction for Future Research

The current research adopted a strengths-based approach to explore coaches' perspectives regarding the inclusion of young people with ASD in sport clubs. As aforementioned, a natural progression of this work is to translate these findings into a pilot practical "toolkit" for the orientation and inclusion of young people with ASD in clubs (Edwards, 2015; Ohrberg, 2013). It is recommended the AI framework be used to determine the effectiveness of such a pilot initiative.

This research has also yielded many questions in need of further investigation, most notably regarding communication between coaches and parents. The issue of sharing of diagnoses is an intriguing, yet sensitive one which could benefit from further exploration (Hays & Butauski, 2018). To support further opportunities to capture more detailed information from coaches and families on this topic, multiple interviews over several sessions should be considered in future research. Given a single interview was noted as a potential limitation in the current study, serial interviewing would allow cross-checking of information to ensure dependability gained from previous responses (Read, 2018).

A noted limitation of this study is its sole focus on coaches' perspectives on inclusion, therefore, a further case study design would be appropriate to gather the viewpoints of multiple stakeholders (Arnell et al., 2020; Yin, 2003). Current findings highlight the crucial role that peers of young people with ASD play in club inclusion, thus eliciting the voice of this population as part of the case study, alongside coaches, parents and young people with ASD may further outline facilitators to inclusion in clubs. Within this case study, opportunities for observation within the club setting to

gather objective information regarding inclusive practices would be welcomed (Mertens, 2014).

Finally, the current work successfully adopted a strengths-based review of micro-level inclusion in individual sports. What is now needed is further macro-level research which may focus on more policy related factors (Eyler & Dreisinger, 2011). Such research could be considered in the GAA given its popularity in the Republic of Ireland (Delaney & Fahey, 2005). The current research did not target the GAA given the comprehensive work currently being done to roll out inclusive programmes for young people with ASD across three counties (Fogarty, 2021; McMahon, 2021). A strengths-based analysis, similar to this study, on these inclusion initiatives (GAA, 2019) could be completed to inform and support other NGBs.

4.10 Dissemination of Findings

Disseminating coaches' perspectives regarding the inclusion of young people with ASD aims to inform future club policies and practices (Kimber et al., 2021). To date, aspects of the literature review were published in the *Encyclopaedia of Autism* (O'Brien, 2020) and a manuscript has been prepared for submission to the journal, *Sports Coaching Review* in 2022 (see Appendix N). In addition, findings of this research have been well-received at both the 2021 Northern Ireland Branch of the British Psychological Society and PSI Annual Conferences. I also presented this research to the MIC Research and Graduate School as a representative of my doctoral programme in February 2022.

Given the practical implications of this project, it is crucial the findings be shared beyond such academic domains. Accordingly, this study was presented at Cara's SIDO Network Conference in 2020 and a condensed list of results and implications was sent to Cara and participating coaches (see Appendix M). Details of

the research were also shared with *AsIAM*, Ireland's national Autism Charity to support the established Autism Friendly Communities initiative (AsIAM, 2022). In order to further circulate findings across a wider audience, this study was discussed in the *Irish Examiner* national newspaper (Fogarty, 2022).

4.11 Concluding Remarks

“Sport is not the answer to all of society's problems, but ... it can make an important contribution to addressing them.”

- Tibor Navracsics, EU Commissioner for Sport (2019)

This research is in line with the goal of ensuring that sport is both recognised and adopted as a tool towards building a better Ireland (Federation of Irish Sport, 2021a). This study has specifically built on previous literature towards the development of evidence-based practices amongst coaches supporting athletes with ASD (McNamara et al., 2020). The findings demonstrate that through focusing on “what works,” it is feasible to identify interacting factors within a system which contribute to better outcomes. This strengths-focused approach allowed for coaches to explore a topic of which they are fearful and uncertain. Given my link with the Sport Ireland network and regional SIDOs, it is planned that that this approach can be instilled in clubs. This will hopefully promote a landscape where fear is exchanged for support for young people with ASD from coaches who are educated on inclusive practices. This hopeful future is demonstrated by kickboxing coach, Rachel: “If a kid with autism comes into me and says, ‘I can’t do this,’ I always think, ‘You can, you just haven’t done it yet.’”

5.0 Chapter Five: Impact Statement

This research widens the accessibility of sport for individuals with ASD through identifying facilitators to inclusion in community clubs (Kimber et al., 2021). Such work is timely given the rising number of young people diagnosed with ASD (Boilson et al., 2016) and the growing expectation for inclusive practices across the Republic of Ireland (National Council for Special Education, 2019).

It appears this research is the first of its kind to solely focus on community coaches' perspectives on the inclusion of young people with ASD. A notable strength of this study is the novel integration of AI, the SEM and reflexive TA. This allowed for a strengths-based inquiry which identified a number of inter-related inclusive factors which were analysed in a transparent yet reflexive manner to provide accessible findings (Braun & Clarke, 2022; Enright et al., 2014; Henderson & Baffour, 2015).

This research has the potential to make a unique contribution to the knowledge of educational psychology and the wider field of academia. Specifically, this thesis provided a novel timeline of both national and international inclusive initiatives providing insight into historical inclusion for individuals with ASD. It further produced empirical evidence on current successful club inclusive practices and additionally outlined what is envisioned and required for future inclusive sport settings (Townsend et al., 2018). With regard psychology, this study compliments the HSE's Family Centred Practice (2013, 2021) and could prospectively serve to alleviate some clinical pressures caused by COVID-19 (Doyle & O'Brien, 2020).

From a national perspective, this study is significant in furthering the enactment of the UNCRPD and henceforth the greatest impact of this study is its practical implications. Notwithstanding limitations, the current findings and

implications could support both macro-level organisations and local clubs in enhancing coach education programmes and making sporting environments more accessible for young people with ASD. Ultimately, the present study connects coaching with disability studies which is cited as the “fundamental starting point for the development of true athlete centred approaches” (Townsend & Cushion, 2018, p. 54).

Although this project advanced the developments of intra-club frameworks to facilitate the acclimatisation of young people with ASD (Edwards, 2015; Ohrberg, 2013), continued efforts are needed to make community sport more accessible to our children with ASD. Whilst this study was conducted at a micro-level, it is envisaged that it may inspire macro-level research within NGBs to generate organisational development. For example, the means by which AI (Cooperrider et al., 2008) may be adopted to review current strengths to harness positive change is outlined within this work.

Notably, dissemination in both academic and wider sporting communities has commenced. The publication accepted in the *Encyclopaedia of Autism* alongside the well-received presentations in the national media and at national psychological and sport inclusion conferences emphasise the importance and timeliness of this research. Before this study, coaches’ perspectives of inclusion of young people with ASD were anecdotal but these findings and subsequent dissemination add value to their voices and extend our knowledge of the complexity of inclusion in order to inform future inclusive policies and practices (Arnell et al., 2021).

6.0 References

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7.0 Appendices

Appendix A: Systematic Literature Review

Appendix A1: Excluded Studies with Rationale and Full Reference

<p>Alexander, M. G., & Gardin, F. A. (2017). Strategies for athletic trainers to provide effective treatment to people with autism spectrum disorder. <i>International Journal of Athletic Therapy and Training</i>, 22(6), 12-16.</p>	<p>4. Study Design. The study must be an empirical paper examining the perceived facilitators or barriers for young people with ASD in a structured PA setting. This paper is not an empirical study, but rather a review of previous literature.</p>
<p>Bassette, L., Kulwicky, J., Dieringer, S. T., Zoder-Martell, K. A., & Heneisen, R. (2018). The Use of a Multicomponent Behavioral Intervention to Promote Physical Activity in Adolescents with Autism Spectrum Disorders across Inclusive Community Settings. <i>Behavior analysis in practice</i>, 11(4), 358-369.</p>	<p>3. Participants. Young people <18 years old and have a diagnosis of ASD. Participants in this study have a mean age of 19.3 years.</p>
<p>Bittner, M. D., Rigby, B. R., Silliman-French, L., Nichols, D. L., & Dillon, S. R. (2017). Use of technology to facilitate physical activity in children with autism spectrum disorders: A pilot study. <i>Physiology & behavior</i>, 177, 242-246.</p>	<p>6. Outcome Variables. The study outcomes must review the perceived facilitators and/or barriers to structured PA settings in young people with ASD. The outcomes of this study evaluated the effectiveness of the ExerciseBuddy app on facilitating physiological responses to physical activity in young people with ASD.</p>
<p>Bowling, A., Blaine, R. E., Kaur, R., & Davison, K. K. (2019). Shaping healthy habits in children with neurodevelopmental and mental health disorders: parent perceptions of barriers, facilitators, and promising strategies. <i>International Journal of Behavioral Nutrition and Physical Activity</i>, 16(1), 52.</p>	<p>5. Intervention. Study must examine the perceived barriers and/or facilitators in a structured PA setting (i.e., sport, PE, formal exercise) in young people with ASD. This study examines the perceived barriers and/or facilitators to healthy lifestyle habits in young people with ASD.</p>
<p>Buchanan, A. M., Miedema, B., & Frey, G. C. (2017). Parents' perspectives of physical activity in their adult children with autism spectrum disorder: A social-ecological approach. <i>Adapted physical activity quarterly</i>, 34(4), 401-420.</p>	<p>3. Participants. Participants must be parents/guardians of young people <18 years old and have a diagnosis of ASD. Participants in this study are parents of individuals with ASD between 18 and 42 years of age.</p>

<p>Egilson, S. T., Jakobsdóttir, G., Ólafsson, K., & Leósdóttir, T. (2017). Community participation and environment of children with and without autism spectrum disorder: parent perspectives. <i>Scandinavian journal of occupational therapy</i>, 24(3), 187-196.</p>	<p>5. Intervention. Study must examine the perceived barriers and/or facilitators in a structured PA setting (i.e., sport, PE, formal exercise) in young people with ASD. This study examines the perceived barriers and/or facilitators to community participation in young people with ASD, with a small minority (~20%) of the recreation activities focusing on structured PA.</p>
<p>Esentürk, O. K. (2020). Parents' perceptions on physical activity for their children with autism spectrum disorders during the novel Coronavirus outbreak. <i>International Journal of Developmental Disabilities</i>, 1-12.</p>	<p>5. Intervention. Study must examine the perceived barriers and/or facilitators in a structured PA setting (i.e., sport, PE, formal exercise) in young people with ASD. This study examined PA in the home during the COVID-19 pandemic. 6. Outcome Variables. Study outcomes must review the perceived facilitators and/or barriers to structured PA settings in young people with ASD. The outcomes of this study review the impact that the COVID-19 pandemic had on PA in young people with ASD.</p>
<p>Ghanouni, P., Jarus, T., Zwicker, J. G., Lucyshyn, J., Chauhan, S., & Moir, C. (2019). Perceived Barriers and Existing Challenges in Participation of Children with Autism Spectrum Disorders: "He Did Not Understand, and No One Else Seemed to Understand Him". <i>Journal of autism and developmental disorders</i>, 49(8), 3136-3145.</p>	<p>5. Intervention. Study must examine the perceived barriers and/or facilitators in a structured PA setting (i.e., sport, PE, formal exercise) in young people with ASD. This study examines the perceived barriers to social participation in young people with ASD and did not specify activities.</p>
<p>Haegele, J. A., Lee, J., & Chang, S. H. (2017). Physical activity of parents of children with autism spectrum disorder. <i>International Journal of Disability, Development and Education</i>, 64(4), 368-377.</p>	<p>6. Outcome Variables. The study outcomes must review the perceived facilitators and/or barriers to structured PA settings in young people with ASD. The outcomes of this study examine the level of PA in parents of young people with ASD.</p>
<p>Jachyra, P., Renwick, R., Gladstone, B., Anagnostou, E., & Gibson, B. E. (2020). Physical activity participation among adolescents with autism spectrum disorder. <i>Autism</i>, 1362361320949344.</p>	<p>6. Outcome Variables. The study outcomes must review the perceived facilitators and/or barriers to structured PA settings in young people with ASD. The outcomes of this study examine the perceptions, meanings and role of PA for young people with ASD.</p>
<p>Marchand, G., & Healy, S. (2019). Implementation of Project CHASE (Children with Autism Supported to Exercise): A Facebook-Delivered,</p>	<p>4. Study Design. The study must examine the perceived barriers and/or facilitators in a structured PA setting (i.e., sport, PE, formal exercise) in</p>

Parent-Mediated Physical Activity Intervention. <i>Palaestra</i> , 33(3).	young people with ASD. This paper is not an empirical study, but rather a review of previous literature.
Marggraff, A., & Constantino, J. N. (2018). Physical and Psychosocial Impact of a University-Based, Volunteer Student-Led Running Program for Children with Autism Spectrum Disorder. <i>Journal of the American Academy of Child and Adolescent Psychiatry</i> , 57(12), 974-977.	6. Outcome Variables. Study outcomes must review the perceived facilitators and/or barriers to structured PA settings in young people with ASD. The outcomes of this study evaluate the physical and psychosocial benefits of an ASD specific 8-week activity programme based on a university campus.
May, T., Rinehart, N., Barnett, L., Hinkley, T., McGillivray, J., Skouteris, H., . . . Goldfinch, D. (2018). ‘We’re Doing AFL Auskick as Well’: Experiences of an Adapted Football Program for Children With Autism. <i>Journal of Motor Learning and Development</i> , 6(1), 130-146.	6. Outcome Variables. Study outcomes must review the perceived facilitators and/or barriers to structured PA settings in young people with ASD. The outcomes of this study review specific feedback received regarding an ASD specific football programme which could not be generalised to facilitate young people with ASD in structured PA settings given its segregated and focused design.
Menear, K. S., & Neumeier, W. H. (2015). Promoting physical activity for students with autism spectrum disorder: barriers, benefits, and strategies for success. <i>Journal of Physical Education, Recreation and Dance</i> , 86(3), 43-48.	4. Study Design. Study must examine the perceived barriers and/or facilitators in a structured PA setting (i.e., sport, PE, formal exercise) in young people with ASD. This paper is not an empirical study, but rather a review of previous literature.
Nichols, C., Block, M. E., Bishop, J. C., & McIntire, B. (2019). Physical activity in young adults with autism spectrum disorder: Parental perceptions of barriers and facilitators. <i>Autism</i> , 23(6), 1398-1407	3. Participants. Participants must be young people <18 years old and have a diagnosis of ASD OR parents/guardians of young people <18 years old and have a diagnosis of ASD. Participants in this study are individuals with ASD who are >18 years old and parents of individuals with ASD who are > 18 years old.
Pan, C. Y., Tsai, C. L., Chu, C. H., & Hsieh, K. W. (2011). Physical activity and self-determined motivation of adolescents with and without autism spectrum disorders in inclusive physical education. <i>Research in Autism Spectrum Disorders</i> , 5(2), 733-741.	6. Outcome Variables. The study outcomes must review the perceived facilitators and/or barriers to structured PA settings in young people with ASD. The outcomes of this study examine young people with ASD and neurotypical young people’s motivational sequences in PE and their respective levels of PA.
Pfeiffer, B., Braun, K., Kinnealey, M., Derstine Matczak, M., & Polatajko, H.	5. Intervention. Study must examine the perceived barriers and/or facilitators in

<p>(2017). Environmental factors impacting work satisfaction and performance for adults with autism spectrum disorders. <i>Journal of Vocational Rehabilitation</i>, 47(1), 1-12.</p>	<p>a structured PA setting (i.e., sport, PE, formal exercise) in young people with ASD. This study examines the factors influencing work satisfaction and performance in adults with ASD 3. Participants. Participants must be young people <18 years old and have a diagnosis of ASD. Participants in this study are adults with ASD.</p>
<p>Smolinski, J., & Janda, J. (2020). Addressing barriers to participation in physical activity faced by children with autism spectrum conditions. <i>Clinical Psychology Forum</i>, 327, 43-47.</p>	<p>6. Outcome Variables. Study outcomes must review the perceived facilitators and/or barriers to structured PA settings in young people with ASD. The outcomes of this study review specific feedback received regarding a tailored 10-week activity programme which could not be generalised to facilitate young people with ASD in structured PA settings given its segregated and specific focus.</p>
<p>Stoner, J. B., Angell, M. E., House, J. J., & Bock, S. J. (2007). Transitions: Perspectives from parents of young children with autism spectrum disorder (ASD). <i>Journal of Developmental and Physical Disabilities</i>, 19(1), 23-39.</p>	<p>5. Intervention. Study must examine the perceived barriers and/or facilitators in a structured PA setting (i.e., sport, PE, formal exercise) in young people with ASD. This study examines the perspectives and concerns of parents/guardians of young people with ASD relating to transitions.</p>
<p>Taheri, A., Perry, A., & Minnes, P. (2016). Examining the social participation of children and adolescents with intellectual disabilities and autism spectrum disorder in relation to peers. <i>Journal of Intellectual Disability Research</i>, 60(5), 435-443.</p>	<p>5. Intervention. Study must examine the perceived barriers and/or facilitators in a structured PA setting (i.e., sport, PE, formal exercise) in young people with ASD. This study examined the social participation of young people with ASD, with only ~16% of the named activities focusing on structured PA.</p>
<p>Tonnsen, B. L., & Hahn, E. R. (2016). Middle school students' attitudes toward a peer with autism spectrum disorder: Effects of social acceptance and physical inclusion. <i>Focus on Autism and Other Developmental Disabilities</i>, 31(4), 262-274.</p>	<p>6. Outcome Variables. The study outcomes must review the perceived facilitators and/or barriers to structured PA settings in young people with ASD. The outcomes of this study examine young people's attitudes towards young people with ASD.</p>

Appendix A2: Summary of Included Studies

Study	Participants	Study Design	Measures & Analysis	Primary and Secondary Outcomes
<p>Arnell, Jerlinder & Lundqvist (2020)</p> <p>Country: Sweden</p> <p>This study explores the perspectives of parents of young people with ASD regarding their children's participation in structured PA</p>	<p>Parents young people with ASD (<i>n</i>=28) 25 mothers and 3 fathers</p> <p>Parental Age: 33-54 years (Mean: 43 years)</p> <p>Young people with ASD Male (<i>n</i>=16, 57%) Female (<i>n</i>=12, 43%) 12 years: (<i>n</i>=7, 25%) 13years (<i>n</i>=8, 29%) 14years (<i>n</i>=6, 22%) 15years (<i>n</i>=6, 22%) 16years (<i>n</i>=1,3.5%)</p> <p>Education of young people Mainstream: 14 (50%) Adapted: 9 (32%) Homeschool: 5 (18%)</p> <p>PE participation of young people Regular: 15 (54%) Occasional: 4 (14%) Never: 7 (25%)</p> <p>Convenience sampling of parents at the Child and Youth Habilitation Centre with a child aged between 12-16 years, diagnosed with ASD as per DSM-5 guidelines with no co-occurring conditions/comorbidities</p>	<p>Qualitative approach.</p> <p>Perspectives of parents of young people with ASD regarding structured PA participation of their children was gathered during semi-structured interviews.</p>	<p>Semi-structured interview schedule.</p> <p>Data was analysed using inductive qualitative content analysis</p>	<p>Participation in PA was described to be challenging due to:</p> <p>Transition into adolescence</p> <ul style="list-style-type: none"> • Other demands and difficulties which arise with age. Team sports were more feasible when the young person was young • Adolescent changes (physical and social) • Difficulties supporting teenager with ASD (using functional strategies to promote PA) • More interested in technology • Pressure to perform <p>Personal young person's obstacles to PA</p> <ul style="list-style-type: none"> • Motor difficulties • Social interaction difficulties • Social surroundings • Difficulties with the PA demands, rules and regulations • Unstructured activities in PA • Sound and noise • Fear of PA • Lack of motivation and inner drive • Lack of energy • Weather, temperature and outdoor issues <p>Parental burden of PA promotion</p> <ul style="list-style-type: none"> • Planning and preparing the young people for PA • Advocating for adapted participation (individualised sport; availability & access) • Limited resources • Knowledge of how to promote PA

Study	Participants	Study Design	Measures & Analysis	Primary and Secondary Outcomes
<p>Healy, Msetfi, & Gallagher (2013).</p> <p>Country: Republic of Ireland</p> <p>This study explores the experiences of young people with ASD during PE in mainstream education using semi-structured interviews</p>	<p>Young people with ASD (<i>n</i>=12)</p> <p>Sex: Male (<i>n</i>=11) Female (<i>n</i>=1)</p> <p>Mean age: 11 Age Range: 9-13</p> <p>Purposive Sampling through a week-long summer camp</p>	<p>Qualitative approach.</p> <p>Experiences of young people with ASD in mainstream PE were examined through a range of strategies and qualitatively analysed.</p>	<p>A variety of measures were employed to understand the experiences of young people with ASD in PE including:</p> <ul style="list-style-type: none"> • A semi-structured interview schedule • Unfinished statements, • Questions incorporated into PowerPoint slides • Visuals (slideshow on a laptop) • Quiz board poster (visuals and text to guide participants through the interview) <p>Interviews were transcribed verbatim, and analysed using Braun and Clarke's Inductive Thematic Analysis</p>	<p>Three themes were developed, each of which consisted of subthemes</p> <p>1. Individual Challenges</p> <ul style="list-style-type: none"> • Physical ability • Sensory challenges • Fear of injury <p>2. Peer interactions</p> <ul style="list-style-type: none"> • Initiation of friendship • Camaraderie • Social comparison • Bullying <p>3. Exclusion</p> <ul style="list-style-type: none"> • Excluded by teacher • Excluded as activities were too difficult • Request to be excluded

Study	Participants	Study Design	Measures & Analysis	Primary and Secondary Outcomes
<p>Lamb, Firbank, & Aldous (2016).</p> <p>Country: United Kingdom</p> <p>This study explores PE from the perspective of young people with ASD</p>	<p>Young people with ASD (<i>n</i>=5)</p> <p>Sex: Male (<i>n</i>=4) Female (<i>n</i>=1)</p> <p>Mean age: 14.4 Age Range: 11-16</p> <p>Comorbidities present: ADHD (<i>n</i>=1)</p> <p>Purposive recruitment from small, rural secondary school</p>	<p>Qualitative case study.</p> <p>“Auto driven” photo elicitation methodology was employed to inform semi-structured interviews to understand PE through the eyes of young people with ASD</p>	<p>Photo- elicitation and unstructured interviews were the employed measures.</p> <p>Negotiated interpretation was applied for analysis through “manual thematic analysis” with the framework of Bourdieu’s reflexive sociology concepts of “field, habitus and capital.”</p>	<p>Changing rooms were not a favoured place due to the noise and lack of rules, graffiti on the walls and feelings of worry reported in young people</p> <p>The PE teacher’s office were viewed as a quiet room for help from a supportive adult. The office was also associated with positive social interactions with peers</p> <p>3 of the 5 participants reported the PE corridor to be a worrying place as it could be noisy and unstructured, and the 2 remaining participants reported it to signal the beginning of a PE class.</p> <p>Opportunities to score a goal/ appear “heroic” on their team were positively reported</p> <p>Assignment of official role on a team was also positively regarded by all participants</p>

Study	Participants	Study Design	Measures & Analysis	Primary and Secondary Outcomes
<p>Must, Phillips, Curtin, & Bandini (2015).</p> <p>Country: USA</p> <p>This study compares the parent-reported barriers to PA in young people with ASD with their neurotypical peers. Study then examined the relationship between screen time, levels of PA and barriers to PA in young people with ASD.</p>	<p>Parents of neurotypical young people ($n=58$)</p> <p>Education of parent: Maternal \geq college: 72% Paternal \geq college: 67%</p> <p>Percentage of only children: 26%</p> <p>Age Range: 3-11 Mean age of young people: 6.7</p> <p>Sex of young people 78% male</p> <p>Race of young people 76% White</p> <p>Young person BMI: Underweight: 0% Overweight: 22% Obese: 9%</p> <p>Parents of young people with ASD ($n=53$)</p> <p>Education of parent: Maternal \geq college: 74% Paternal \geq college: 54%</p> <p>Percentage as only children: 11%</p> <p>Age Range: 3-11 Mean age of young people: 6.6</p> <p>Sex of young people: 83% male</p> <p>Race of young people 83% White</p> <p>Young people BMI: Underweight: 1.9% Overweight: 26% Obese: 17%</p> <p>Comprehensive recruitment from schools and community programmes, ASD support groups, on-line postings and existing databases</p>	<p>Quantitative approach.</p> <p>Collective case study with use of a comparison group of neurotypical young people</p>	<p>Prior to beginning the study, the Autism Diagnostic Interview-Revised (ADI-R), was administered by clinicians to the parents of young people with ASD to confirm diagnosis of ASD.</p> <p>The Vineland Adaptive Behavior Scales (2nd edition) was also used to characterise adaptive skills</p> <p>And the Differential Abilities Scale (original 1990 version) was used to assess the cognitive abilities of young people with ASD</p> <p>Parents completed questionnaire to assess barriers for their children to PA which was statistically analysed using a t-test</p> <p>Parents completed questionnaire to assess levels of their children's PA and screen-time. Correlational analyses (Spearman and Pearson correlations) were used to assess the relationship between levels of PA and screen-time and linear regression analyses were used to assess the relationship between PA participation, screen-time, and barriers to PA</p>	<p>Parents of young people with ASD reported significantly more barriers to PA than parents of neurotypical young people</p> <p>Barriers to PA for young people with ASD</p> <ul style="list-style-type: none"> • Young people with ASD required more supervision than neurotypical young people ($p<.001$; reported by 60% of parents of young people with ASD) • The supporting adults at PA lack the skills to support young people with ASD (reported by 58% of parents of young people with ASD) • Young people with ASD have few friends (reported by 45% of parents of young people with ASD) • Neurotypical young people exclude young people with ASD (reported by 23% of parents of young people with ASD) <p>Levels of PA and screen-time</p> <ul style="list-style-type: none"> • The number of barriers experienced by young people with ASD was inversely related with their PA ($r = -0.27$, $P = .05$) • The number of parent-reported barriers to PA was positively related to their screen time ($r = .32$, $P < .03$)

Study	Participants	Study Design	Measures & Analysis	Primary and Secondary Outcomes
<p>Obrusnikova, & Cavalier (2011).</p> <p>Country: USA</p> <p>This study examines the perceived barriers and facilitators to after school moderate to vigorous physical activity for young people with ASD</p>	<p>Young people with ASD ($n=14$)</p> <p>Age Range: 8-14</p> <p>Sex of young people: Males: ($n=12$) Females: ($n=2$)</p> <p>Convenience sampling from community ASD organisations</p>	<p>Mixed Methods</p> <p>Over a 1-week period, participants took 182 photos which were accompanied with an online questionnaire to describe each photo. Following the questionnaire, a semi-structured interview was conducted. Levels of PA were measured through an accelerometer and activity log</p>	<p>Prior to beginning the study, the Social Responsiveness Scale (SRS) was administered to parents to validate their children's diagnosis of ASD and was analysed using t-scores</p> <p>Qualitative: Photovoice methodology, online questionnaires and interviews were employed to assess barriers & facilitators. Interviews were transcribed verbatim and were coded and analysed over a three-stage process.</p> <ol style="list-style-type: none"> 1. Conduct systematic open coding and create code book 2. Assessment of Inter-coder reliability using Cohen-kappa. 3. Categorising concepts and fitting them into the socioecological model. <p>Frequencies of student responses and photos taken under each concept and level of the socio-ecological model were calculated.</p> <p>Quantitative: For 7 days, activity was recorded on an accelerometer and activity log was kept by young people. PA was analysed using a two-regression model designed for the Acical accelerometer and the activity log was analysed to determine what type of activity the young people engaged in.</p>	<p>143 barriers and 181 facilitators were reported</p> <ul style="list-style-type: none"> • Most commonly reported barriers: intrapersonal, followed by interpersonal, physical, community, and institutional. • Most frequently reported facilitators: physical, followed by intrapersonal and interpersonal, community, and institutional. <p>Low levels of PA were recorded</p> <ul style="list-style-type: none"> • 21% of young people with ASD accumulated 60 minutes of moderate to vigorous PA over the week • 36% of young people with ASD did not meet PA recommendations on any given day • No young person with ASD was found to meet the recommended 3x20minutes of continuous vigorous PA per week • Young people with ASD spend more time in light PA ($M=15.4$, $SD=5.8$, $range=6.2-28.4$) than moderate to vigorous PA ($M=6.0$, $SD=4.6$, $range=1.5-13.9$) whereby moderate to vigorous PA ranged from 0 to 14 min ($M=1.3$, $SD=0-4.9$) • Young people with ASD spent 79% of time engaged in sedentary activities ($SD=9.0$, $range=62.0-92.3$) • Young people with ASD who did meet the recommended 60 min of Moderate to Vigorous PA daily based on accelerometry generally cited more facilitators of than barriers to Moderate to Vigorous PA. • Young people with ASD who do not meet physical activity recommendations cited similar numbers of barriers and facilitators

Study	Participants	Study Design	Measures & Analysis	Primary and Secondary Outcomes
<p>Obrusnikova, & Miccinello (2012).</p> <p>Country: USA</p> <p>This study examines the parental perceptions of the benefits of PA for their children with ASD and the influences (barriers & facilitators) to after school PA for their children with ASD</p>	<p>Parents of young people with ASD (<i>n</i>= 100) *</p> <p>Age range: 29-57</p> <p>Birth mothers (<i>n</i>=90) Adoptive mothers (<i>n</i>=4)</p> <p>Stepmothers (<i>n</i>=1) Birth fathers (<i>n</i>= 7)</p> <p>Adoptive fathers (<i>n</i>=1)</p> <p>Race</p> <p>Caucasian: 93%</p> <p>Asian American: 3%</p> <p>African American: 2%</p> <p>Native Hawaiian/Pacific Islanders: 1%</p> <p>Mixed Race: 1%</p> <p>Highest Education</p> <p>High School: 23%</p> <p>Vocational degree: 3%</p> <p>Associate degree: 15%</p> <p>Bachelor's degree: 40%</p> <p>Master's degree: 10%</p> <p>Doctorate degree: 6%</p> <p>Household:</p> <p>1 child: 57%</p> <p>2 children: 28%</p> <p>3 children: 8%</p> <p>4 children: 5%</p> <p>5 or 6 children: 1%</p> <p>Sex of young people with ASD</p> <p>Male (<i>n</i>=85) Female (<i>n</i>=15)</p> <p>Age of young people with ASD:</p> <p>Mean: 12 Range: 5-21</p> <p>Convenience sampling from unspecified locations</p>	<p>Qualitative Approach</p> <p>Upon completing an online questionnaire, three semi-structured focus group interviews were conducted with 11 parents</p>	<p>Online questionnaires and semi-structured focus interviews were the employed measures, whereby the questionnaire was piloted, and dependability and credibility were confirmed.</p> <p>The data was analysed using a socioecological model which created a codebook. Intercoder reliability was calculated between the two researchers using Cohen's kappa.</p> <p>Frequency of themes was also measured</p>	<p>225 reported facilitators of PA</p> <ul style="list-style-type: none"> • Most frequently cited facilitators reported by parents were intrapersonal, followed by, physical, interpersonal, community and institutional <p>250 reported barriers of PA</p> <ul style="list-style-type: none"> • Most frequently cited barriers were intrapersonal in nature, followed by interpersonal, physical, community and institutional <p>The focus group interviews addressed public policy factors</p> <p>225 reported advantages of PA</p> <ul style="list-style-type: none"> • Most frequently cited advantages were physical, psychosocial, and cognitive <p>106 reported disadvantages of PA</p> <ul style="list-style-type: none"> • Most frequently cited disadvantages were psychosocial and physical in nature

*103 listed as n within study but only 85 males and 15 females were discussed

Study	Participants	Study Design	Measures & Analysis	Primary and Secondary Outcomes
<p>Pan, Tsai, & Hsieh (2011).</p> <p>Country: China</p> <p>This study examines the correlates that influence PA in young people during PE in comparison with their neurotypical peers</p>	<p>Young people with ASD ($n=19$) All male Mean age: 14.9</p> <p>Neurotypical young people ($n=76$) Mean age: 14.6</p> <p>Purposive recruitment from junior high schools</p>	<p>Quantitative approach.</p> <p>Collective case study of young people with ASD with use of a comparison group of neurotypical young people</p> <p>Physical education consisting of:</p> <ul style="list-style-type: none"> • 17 team activity lessons (e.g. basketball) • 14 individual activity lessons (e.g. tennis) 	<p>GTIM Actigraph and the wearing of an accelerometer were used to measure PA levels and were analysed statistically using the non-parametric Mann-Whitney <i>U</i> test and the Kruskal-Wallis test.</p> <p>Partial interval recording system to measure social engagement and was coded by trained observers with 85% interobserver agreement. Descriptive analyses were calculated for these social interactions/engagements. Spearman rank coefficients were used to correlate PA with social engagements</p>	<p>Influences on PA were</p> <ul style="list-style-type: none"> • PA content: young people with ASD engage in higher levels of PA during lessons with free-play and fitness testing compared with individual or team activities ($p=.001$). • Physical environment: young people with ASD engage in more moderate to vigorous PA during outdoor lessons compared with indoor lessons ($p=.001$). • Instructor characteristics: young people with ASD engage in higher levels of PA with female teachers ($p=.011$), non-certified PE teachers ($p=.001$) <p>Young people with ASD are less active than their neurotypical peers, taking significantly fewer steps during PE (effect size, Cohen's $d=1.55$; Pan, Tsai, & Hsieh, 2011)</p> <p>PA of young people with ASD is positively related to their social interaction with peers</p>

Study	Participants	Study Design	Measures & Analysis	Primary and Secondary Outcomes
<p>Stanish, Curtin, Must, Phillips, Maslin, & Bandini (2015).</p> <p>Country: USA</p> <p>This study compares PA enjoyment, self-efficacy, perceived barriers, and beliefs between young people with ASD and their neurotypical peers</p>	<p>Young people with ASD (<i>n</i>=35) Sex: Male (<i>n</i>=29) Female (<i>n</i>=6) Mean age: 15.9 1≤ parent with college degree: (<i>n</i>=24)</p> <p>Neurotypical young people (<i>n</i>=60) Sex: Male (<i>n</i>=36) Female (<i>n</i>=24) Mean age: 15.3 1≤ parent with college degree: (<i>n</i>=49)</p> <p>Comprehensive recruitment from special schools, disability services, community organisations, Special Olympics, online postings, parent councils and previous databases</p>	<p>Quantitative approach.</p> <p>Collective case study of young people with ASD with use of a comparison group of neurotypical young people</p>	<p>Verbally administered close-ended questions questionnaire was the employed measure.</p> <p>Data was analysed using Pearson chi-square</p>	<p>Although many young people with ASD reported PA as fun (84%), the proportion was lower than neurotypical young people (98%, <i>p</i> = .03)</p> <p>Young people with ASD were more likely to indicate a dislike for team sports (<i>p</i><.001) and PE (<i>p</i>=.02), were less likely to report PA as a way to make friends (<i>p</i><.001) and more likely choose an activity other than PA in their spare time (<i>p</i><.01). No significant difference was identified between groups on preference for technology (<i>p</i>=.35), reading (<i>p</i>=.91), or art (<i>p</i>=.10) over PA</p> <p>Significantly more young people with ASD reported that PA was challenging to learn compared with reports from neurotypical young people (16% vs. 0%, <i>p</i> < .01)</p>

Appendix A3: Weight of Evidence (WoE) Information

Weight of Evidence A: Methodological Quality

WoE A rated each of the selected studies on their methodological quality. The selected studies were a variety of qualitative, quantitative and mixed methods. Given the chosen appraisal tool and framework influences synthesis findings (Heyvaert et al., 2016, p. 152) and the use of a single tool ensures consistency (Butler et al., 2016), this review sought one dependable and credible tool to assess qualitative, quantitative and mixed methods studies concomitantly. As there is no consensus on the appraisal criteria for mixed methods research (O'Cathain et al., 2008), an integrative mixed methods research appraisal tool with a framework that cuts across different designs was deemed most appropriate (Heyvaert et al., 2016, p. 152). Therefore the Mixed-Method Appraisal Tool (MMAT; Hong et al., 2018) was adopted for appraisal given its ability to flexibly evaluate the methodological quality of qualitative, quantitative and mixed methods studies (Hong et al., 2018). Moreover, it has established psychometric properties (Hong et al., 2019; Pace et al., 2012; Souto et al., 2015) and was recently updated following a comprehensive evaluation (Hong et al., 2018). The MMAT and the MMAT scoring protocol (Hong, 2020) were employed to appraise all qualitative, quantitative and mixed methods studies and the MMAT scoring protocol was adapted to adhere to Gough's WOE framework (2007). See Appendix A4 for adapted scoring protocol with rational. WOE A had unique appraisal criteria under the respective research approach domain. Each domain holds five criteria to be appraised on a "Yes...No...Cannot Tell" basis, whereby "Yes" = 1 and "No/Cannot Tell" = 0 (see Appendix A5 for an example of a completed MMAT coding protocol).

- Qualitative studies are appraised using 5 qualitative quality criteria to obtain a methodological quality rating. The adapted scoring protocol is then applied (see Appendix A4) to produce WOE A.
- Quantitative studies are reviewed under the appropriate approach (quantitative randomised control trials; quantitative non-randomised or quantitative descriptive) which each contain 5 quantitative quality criteria for appraisal to obtain a methodological quality rating. The adapted scoring protocol is then applied (see Appendix A4) to produce WOE A.
- Mixed methods studies are appraised through a combination of the qualitative quality criteria, the appropriate quantitative quality criteria and 5 mixed methods quality criteria. The adapted scoring protocol was then applied (see Appendix A4) to produce WOE A scores for each. The weightings from each section (where relevant) are averaged to give an overall WOE A score

A study must have an average rating of 2.4 or above to obtain a "high" WoE A rating.

A study must have an average rating between 1.8 or 2.4 to obtain a "medium" WoE A rating.

A study must have an average rating of 1.7 or below to receive a "low" WoE A rating.

MMAT Quality Criteria for measurement (summarised from Hong et al., 2018)

Qualitative Quality Criteria	Quantitative randomised controlled trials	Quantitative non-randomised	Quantitative descriptive	Mixed Methods
1.1. Is the qualitative approach appropriate to answer the research question?	2.1. Is randomisation appropriately performed?	3.1. Are the participants representative of the target population?	4.1. Is the sampling strategy relevant to address the research question?	5.1. Is there an adequate rationale for using a mixed methods design to address the research question?
1.2. Are the qualitative data collection methods adequate to address the research question?	2.2. Are the groups comparable at baseline?	3.2. Are measurements appropriate regarding both the outcome and intervention (or exposure)?	4.2. Is the sample representative of the target population?	5.2. Are the different components of the study effectively integrated to answer the research question?
1.3. Are the findings adequately derived from the data?	2.3. Are there complete outcome data?	3.3. Are there complete outcome data?	4.3. Are the measurements appropriate?	5.3. Are the outputs of the integration of qualitative and quantitative components adequately interpreted?
1.4. Is the interpretation of results sufficiently substantiated by data?	2.4. Are outcome assessors blinded to the intervention provided?	3.4. Are the confounders accounted for in the design and analysis?	4.4. Is the risk of nonresponse bias low?	5.4. Are divergences and inconsistencies between quantitative and qualitative results adequately addressed?
1.5. Is there coherence between qualitative data sources, collection, analysis, and interpretation?	2.5. Did the participants adhere to the assigned intervention?	3.5. During the study period, is the intervention administered (or exposure occurred) as intended?	4.5. Is the statistical analysis appropriate to answer the research question?	5.5. Do the different components of the study adhere to the quality criteria of each tradition of the methods involved?

Summary of methodological quality

Studies	Qualitative					Quantitative randomised controlled trials					Quantitative non-randomised					Quantitative descriptive					Mixed Methods				
	1.1	1.2	1.3	1.4	1.5	2.1	2.2	2.3	2.4	2.5	3.1	3.2	3.3	3.4	3.5	4.1	4.2	4.3	4.4	4.5	5.1	5.2	5.3	5.4	5.5
Arnell et al. (2020)	*	*	*	*	*																				
Healy et al. (2013)	*	*	*	*	*																				
Lamb et al. (2016)	*	*		*																					
Must et al. (2015)																*					*				
Obrusnikova & Cavalier (2011)	*	*	*	*	*											*		*	*	*	*	*	*	*	*
Obrusnikova & Miccinello (2012)	*	*	*	*	*																				
Pan et al. (2011)																*			*	*					
Stanish et al. (2015)																*	*	*	*	*					

Not Applicable

* = Fulfilled criterion

WOE A Summary

Study	Qualitative	Quantitative	Mixed Methods	Overall WoE A
Arnell et al. (2020)	3			3 (High)
Healy et al. (2013)	3			3 (High)
Lamb et al. (2016)	1.8			1.8 (Medium)
Must et al. (2015)		1.2		1.2 (Low)
Obrusnikova & Cavalier (2011)	3	2.4	3	2.8 (High)
Obrusnikova & Miccinello (2012)	3			3 (High)
Pan et al. (2011)		1.8		1.8 (Medium)
Stanish et al. (2015)		3		3 (High)

Not Applicable

Weight of Evidence B: Relevance of the Methodology

WoE B rated each of the selected studies on the relevance of their employed methodology in answering the specific review question (Gough, 2007). Petticrew and Roberts (2003) and Guyatt et al. (2008) guided the design of criteria, ratings and rationale of WoE B as they assert that certain methodology is more appropriate for answering review questions and highlight that study design has substantial impacts on quality of research and potential limitations effecting research quality. Studies were appraised as low (1), medium (2) or high (3) regarding the relevance of the methodology to the review topic. Any given study must meet all assigned criteria pertaining to a numerical rating to receive that rating. The total average rating was then calculated to produce the overall WoE B rating for each study (see WoE B Summary below).

Criteria	Ratings	Rationale
Credibility and dependability of measures	<p>1= Qualitative study does not pilot data collection strategy. Quantitative study does not employ standardised measure and/or does not pilot questionnaire. Mixed-methods studies provided neither criteria</p> <p>2= Qualitative study pilots data collection strategy on non-target population. Quantitative analysis employs standardised measure and/or employs piloted questionnaires on non-target population. Mixed-methods studies provided one of the two criteria</p> <p>3 = Qualitative study pilots data collection strategy on target population. Quantitative analysis employs standardised measure with provided dependability and/or pilots questionnaires with target population. Mixed methods studies provided both the criteria</p>	<p>It is crucial for studies to state in which way credibility of their primary measure was assessed (Kratochwill & Stoiber, 2002, p. 27) to allow for a sound interpretation of the measure's results (American Educational Research Association, American Psychological Association, & National Council on Measurement in Education, 1999). Piloting new measures ensures participant understanding of the questions and reduces the researchers' barriers to instrumentation (Marshall & Rossman, 2014, p. 105)</p>
Methodological sound data analysis	<p>1= Qualitative studies do not provide details of analysis nor of analysis dependability. Quantitative studies state the</p>	<p>Hong et al. (2018) emphasise that the analysis tool must be explicitly named and data analysis</p>

	<p>employed statistical analysis. Mixed-methods studies provided neither criteria</p> <p>2= Qualitative studies present the analysis tool (thematic analysis) but do not outline transparent steps (in subjective reflexive approach) or state inter-coder reliability was checked but no details are provided. Quantitative studies clearly state and justify the statistical analyses employed. Mixed-methods studies provided one of the two criteria</p> <p>3= Qualitative studies outline detailed steps as to how analysis was conducted and provide transparent overview of subjective reflexive approach or inter-coder reliability. Quantitative studies clearly state and justify the statistical analyses employed, provide full outcome data, and outline any limitations within the data analysis. Mixed methods studies provided both the criteria</p>	<p>appraised to ensure that findings are adequately derived from the data. Hong et al. (2018) equally emphasise that the selected statistical analysis should be clearly stated and justified in order to judge if it is appropriate for the design and research question. To this end, it is advocated that a transparent overview of analysis be provided if a reflexive analysis is employed (Braun & Clarke, 2022; Tracy, 2010) or in non-reflexive analyses, Kratochwill and Stoiber (2002, p. 26) emphasise the need for inter-rater/test-retest reliability to be provided to ensure dependability</p>
<p>Data comparison group (employment of an ASD and non-ASD comparison group)</p>	<p>1= Study does not include a comparison group of young people with no diagnosis of ASD</p> <p>2= If study does not include a data comparison group of young people with no diagnosis of ASD, then explanation of its absence is provided</p> <p>3= Study includes a comparison group of young people with no diagnosis of ASD</p>	<p>When examining the perceived barriers and facilitators to a specific physical activity in young people with ASD, it is paramount that a comparison group of young people without ASD is employed to ensure any reported barriers/ facilitators can be correlated with the diagnosis of ASD. The inclusion of a comparison group is a common research design in PA research in young people with ASD</p>

		(Bandini et al., 2013; Stanish et al., 2015)
Data gathered via multiple methods	<p>1= Data regarding facilitators and barriers gathered via one method</p> <p>2= Data regarding facilitators and barriers gathered via one or more methods</p> <p>3= Data regarding facilitators and barriers gathered via two or more methods</p>	<p>The dependability of data collected from multiple methods is outlined in Kratochwill's (2003) coding protocol, (p.27/70). Moreover, social communication is regarded a deficit in young people with ASD (APA, 2013), therefore to ensure transferability, data regarding the facilitators and barriers to organised PA in young people with ASD should be obtained via multiple methods beyond an interview with the young person</p>

WoE B Summary

Study	WoE B Rating
Arnell et al. (2020)	2
Healy et al. (2013)	2.5
Lamb et al. (2016)	1.75
Must et al. (2015)	1.75
Obrusnikova & Cavalier (2011)	2.5
Obrusnikova & Miccinello (2012)	2.5
Pan et al. (2011)	2.25
Stanish et al. (2015)	2.25

Weight of Evidence C: Relevance of the focus of the evidence to the review question

WoE C rated each of the selected studies on the focus of the evidence in relation to the current review question (Gough, 2007). The following were considered features pertaining to the review question:

1. Accurate representativeness of the ASD population,
2. Clear outline of the reviewed structured physical activity,
3. Theoretical Framework,
4. Inclusion of coherent articulation of results.

Studies were appraised as low (1), medium (2) or high (3) regarding their relevance of evidence to the review topic. Any given study must meet all assigned criteria pertaining to a numerical rating to receive that rating. The total average rating was then calculated to produce the overall WoE C rating for each study (see WoE C Summary below).

Criteria	Ratings	Rationale
Accurate representativeness of the ASD population	<p>1= No females in the sample</p> <p>2= Inclusion of females in the sample but no ratio of 4:1 male to females in the sample</p> <p>3= Inclusion of 4:1 ratio of males to females during recruitment or justification provided regarding the higher number of males to females in the sample (e.g., highlighted within limitation)</p>	<p>The male to female prevalence ratio of ASD range from 4.3:1 to 5.5:1 in groups within the normal IQ range (Fombonne, 2003, 2005, 2009) and 1.95:1 for moderate to severe intellectual disability (Fombonne, 2005; Volkmar et al., 2007). Therefore, to ensure this population is accurately represented, a similar ratio should be recruited in research</p>
Clear outline of the reviewed structured physical activity	<p>1= Study does not provide sufficient information regarding the reviewed structured physical activity</p> <p>2= Study provides a broad overview of the reviewed structured physical activity</p> <p>3 = Study provides a specific overview of the reviewed structured physical activity, including examples of sessions and information regarding instructors</p>	<p>Details of the reviewed structured physical activity are crucial to ensure credibility and dependability and to allow for potential replication of study's findings, (Kratochwill & Stoiber, 2000). According to Lechago & Carr (2008), high quality research requires details which may include training format and</p>

		duration required to deliver the reviewed structured physical activity
Theoretical Framework	<p>1= Study did not apply a theoretical framework</p> <p>2= Study provided a theoretical framework to the research question or the analysis or the outcome data</p> <p>3= Study is built on a theoretical framework</p>	The usefulness of findings and conclusions are limited in the absence of a theoretical framework to justify the research question and subsequent research design (Sarter, 2006, p. 494)
Inclusion of coherent articulation of results	<p>1= Study includes one of the following: (i) research focus aligns with the review question (ii) usefulness of findings (iii) associated implications for field</p> <p>2= Study broadly aligns with the current review question and provides useful evidence or implications for the field</p> <p>3= Study is closely aligned to the current review questions and provides very strong evidence upon which to base future policy/action</p>	Brantlinger et al. (2005) emphasise the need for coherent articulation of results to ensure study results are credible and trustworthy. This is particularly pertinent to qualitative studies

WoE C Summary

Study	WoE C Rating
Arnell et al. (2020)	2.5
Healy et al. (2013)	2
Lamb et al. (2016)	2.75
Must et al. (2015)	1.25
Obrusnikova & Cavalier (2011)	2.75
Obrusnikova & Miccinello (2012)	2.75
Pan et al. (2011)	1.75
Stanish et al. (2015)	2

Weight of Evidence D: Overall weighting of the Evidence

The WoE scorings for A, B, C were then averaged to create the overall weighting of evidence (WoE D) which conveys the overall evidence each study provided to answer the review question.

A study must have an average rating of 2.5 or above to obtain a “high” WoE D rating.

A study must have an average rating between 1.5 or 2.4 to obtain a “medium” WoE D rating.

A study must have an average rating of 1.4 or below to receive a “low” WoE D rating.

WoE D Summary

Study	WoE A	WoE B	WoE C	WoE D
Arnell et al. (2020)	3 (High)	2 (Medium)	2.5 (High)	2.5 (High)
Healy et al. (2013)	3 (High)	2.5 (High)	2 (Medium)	2.5 (High)
Lamb et al. (2016)	1.8 (Medium)	1.75 (Medium)	2.75 (High)	2.1 (Medium)
Must et al. (2015)	1.2 (Low)	1.75 (Medium)	1.25 (Low)	1.4 (Low)
Obrusnikova & Cavalier (2011)	2.8 (High)	2.5 (High)	2.75 (High)	2.7 (High)
Obrusnikova & Miccinello (2012)	3 (High)	2.5 (High)	2.75 (High)	2.8 (High)
Pan et al. (2011)	1.8 (Medium)	2.25 (Medium)	1.75 (Medium)	1.9 (Medium)
Stanish et al. (2015)	3 (High)	2.25 (Medium)	2 (Medium)	2.4 (Medium)

Appendix A4: Mixed-Method Appraisal Tool Adapted Scoring Protocol with Rationale

The MMAT scoring protocol (Hong, 2020) produces the following percentages:

*5***** or 100% quality criteria met*

*4 ***** or 80% quality criteria met*

*3 *** or 60% quality criteria met*

*2 ** or 40% quality criteria met*

*1 * or 20% quality criteria met*

For the purpose of this review, the MMAT scoring protocol was adapted to adhere to Gough' WOE (2007). The above percentages were applied to a maximum score of 3, which is commonly the highest numerical rating employed with Gough's (2007) WoE (Berezcki & Karpati, 2018). See table below for the adjusted weighting.

Dr Quan Nha Hong highlighted that a numerical score could be provided for each study to adhere to Gough's WOE (2007) and advised that the ratings for each category within respective research methods domain (qualitative, quantitative etc.) also be provided to provide comprehensive information regarding methodological quality which is not available in one numerical score (Hong, personal communication, July 9th, 2020). Such information was provided in Appendix A3.

Number scored from MMAT appraisal	Percentage equivalent as outlined by Hong (2020)	Percentage of 3 to adhere to Gough WOE framework (2007)
5*****	100%	3
4*****	80%	2.4
3***	60%	1.8
2**	40%	1.2
1**	20%	.6

Methodological quality ratings of Low Quality (<1.7), Medium Quality (1.8-2.4) and High Quality (>2.5) are assigned based on numerical value as demonstrated in recent systematic reviews which employed the MMAT (Pimentel et al., 2020; Wong et al., 2020).

Appendix A5: Mixed-Method Appraisal Tool Coding Protocol Example

Study Reference	Obrusnikova, I., & Cavalier, A. R. (2011). Perceived barriers and facilitators of participation in after-school physical activity by children with autism spectrum disorders. <i>Journal of Developmental and Physical Disabilities</i> , 23(3), 195-211				
Category of study designs	Methodological quality criteria	Responses			
		Yes	No	Cannot tell	Comments
Screening questions (for all types)	S1. Are there clear research questions?	✓			Clear from abstract
	S2. Do the collected data allow to address the research questions?	✓			
	<i>Further appraisal may not be feasible when the answer is “No” or “Can’t tell” to one or both screening questions.</i>				
1. Qualitative	1.1. Is the qualitative approach appropriate to answer the research question?	*			
	1.2. Are the qualitative data collection methods adequate to address the research question?	*			Photovoice was very appropriate for young people who experiences difficulties with communication
	1.3. Are the findings adequately derived from the data?	*			Tested reliability between coders
	1.4. Is the interpretation of results sufficiently substantiated by data?	*			Clear subthemes with quotes
	1.5. Is there coherence between qualitative data sources, collection, analysis, and interpretation?	*			Provides % of participants who provided each answer, well linked to quotes and research
2. Quantitative randomised controlled trials	2.1. Is randomisation appropriately performed?				N.A.
	2.2. Are the groups comparable at baseline?				N.A.
	2.3. Are there complete outcome data?				N.A.
	2.4. Are outcome assessors blinded to the intervention provided?				N.A.
	2.5 Did the participants adhere to the assigned intervention?				N.A.
3. Quantitative non-randomised	3.1. Are the participants representative of the target population?				N.A.
	3.2. Are measurements appropriate regarding both the outcome and intervention (or exposure)?				N.A.

	3.3. Are there complete outcome data?				N.A.
	3.4. Are the confounders accounted for in the design and analysis?				N.A.
	3.5. During the study period, is the intervention administered (or exposure occurred) as intended?				N.A.
4. Quantitative descriptive	4.1. Is the sampling strategy relevant to address the research question?	*			Convenience sample with clear inclusion criteria
	4.2. Is the sample representative of the target population?		*		6:1 Male to Female ratio which is not representative of the 4:1 ratio
	4.3. Are the measurements appropriate?	*			PA as measured by accelerometer is well defined with concise instructions
	4.4. Is the risk of nonresponse bias low?	*			Provided extensive training. 100% participant completion
	4.5. Is the statistical analysis appropriate to answer the research question?	*			Regression further confirmed qual findings and correlations highlighted further facilitators
5. Mixed methods	5.1. Is there an adequate rationale for using a mixed methods design to address the research question?	*			Yes, to assess levels of and influences on PA
	5.2. Are the different components of the study effectively integrated to answer the research question?	*			Quant confirms and strengthens qual findings. Conclusion & discussion integrated findings well
	5.3. Are the outputs of the integration of qualitative and quantitative components adequately interpreted?	*			Separate analyses yet woven together in results and conclusions
	5.4. Are divergences and inconsistencies between quantitative and qualitative results adequately addressed?	*			No divergences present
	5.5. Do the different components of the study adhere to the quality criteria of each tradition of the methods involved?	*			Qual: 100% and Quan: 80%

Appendix B: Mapping of Interview Questions onto the Three AI Phases

<p>Appreciative inquiry (AI) methodology (Tschannen-Moran & Tschannen-Moran, 2011; Watkins et al., 2011)</p>	<p>Research Question:</p> <p>What are the experiences and perspectives of mainstream community coaches regarding the inclusion of young people with ASD within their clubs?</p>
<p><i>Discovery</i></p> <p>From the coaches' perspectives, what facilitates the current inclusion of young people with ASD in sports clubs?</p>	<ul style="list-style-type: none"> ➤ Have you experience coaching a young person with ASD? ➤ If coach has experience coaching young people with ASD: <ul style="list-style-type: none"> ○ What is working well in relation to the inclusion of young people with ASD at your club? ○ What have the positive experiences of inclusion of young people with ASD been at your club? ➤ What made you interested in this research project? ➤ What personal strengths as a coach are you most proud of? ➤ How does your club build upon the strengths of its athletes? ➤ What club strengths come to mind when thinking about inclusion of young people with ASD?
<p><i>Dream</i></p> <p>What does the ideal inclusion of young people with ASD in a sport club look like from the coaches' perspectives?</p>	<ul style="list-style-type: none"> ➤ What might the inclusion of young people with ASD look like in your club? ➤ How do you feel the club could ideally include young people with ASD? ➤ How can your club values lend themselves to including young people with ASD? ➤ How would you feel best supported as a coach to include young people with ASD?

<p><i>Design</i></p> <p>What needs to happen to further promote the inclusion of young people with ASD in sport clubs?</p>	<ul style="list-style-type: none"> ➤ What already existing strengths within the club can be built upon to assist with the inclusion of young people with ASD? ➤ What needs to be done differently in order to achieve this inclusion of young people with ASD? ➤ What does the club need to do overall as an organisation to support this inclusion? ➤ Which resources (already existing or required) will assist with bringing about this change? ➤ In what way (if any) could current athletes positively support the inclusion of young people with ASD? ➤ In what way (if any) could parents of young people with ASD assist the club with the inclusion of young people with ASD? ➤ Any other comments?
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Appendix C: Coach Recruitment Email to Sport Club President/Captain/Secretary

Dear President/Captain/Club Secretary of X,

I hope this email finds you well.

My name is Kate O' Brien and I am currently carrying out research for my Doctorate in Educational and Child Psychology in Mary Immaculate College.

As part of my doctoral thesis, I am carrying out research on the inclusion of children/young people with autism in community sport organisations in Ireland. The research will focus on individual sports as the communication and interaction required for team-based sports are areas of need in individuals with autism. Examples of individual sports include athletics, swimming, cycling, martial arts, racquet sports, rowing etc.

I'm going to employ appreciative inquiry (AI) as a means to do this. AI is a strengths-based approach to research and does not focus on deficits but instead it focuses solely on strengths and what is "going well."

This research would involve coaches from community sport organisations. Coaches might include, paid coaches, volunteer coaches, helpers, parents or any individuals who facilitates the participation of children/young people within the community sport organisation. Coaches do not require experience coaching a child/young person with autism or participation in a Sport Ireland recognised coaching course to be eligible to participate in this research.

The semi-structured interviews with coaches should take no longer than 30-40 minutes. I wonder whether you might send the attached information sheet to coaches within your club who would be eligible to participate and interested in taking part in this research?

Best Wishes,

Kate O' Brien

Appendix D: Sample Semi-Structured Interview Template

Introduction: Thanks very much for taking the time to speak with me today. I just want to briefly remind you that your participation today is completely voluntary, and you withdraw from the project and the interview at any stage without giving any reason – is that ok? I also want to remind you that I will also be recording today's interview as per your consent. (*Show participant the recording device if on phone/explain recording protocol if on Zoom*) Are you happy for me to begin recording now?

I am just going to ask you a few questions today about your perspectives as a community coach in relation to the inclusion of children or young people with autism in community sport clubs. In order to research this area, I'm going to employ appreciative inquiry (AI). AI is a means of exploring data which is strengths focused and not deficits focused which is beneficial for researching data of a sensitive nature, such as the data being collected for this study. In the spirit of the use of AI, we will be looking at the strengths within your club as well as focusing on what could be done to best support the club to facilitate children/young people with autism. Do you have any questions?

Questions:

Just to start, how long have you been involved with....[sport club]?

- Have you experience coaching a young person with autism?
- *If coach has experience coaching young people with ASD, ask the following two questions:*
 - What worked well/is working well in relation to the inclusion of young people with autism at your club?
 - What have the positive experiences of inclusion of young people with autism been at your club?
- If coach has no experience, proceed to the following:
 - What made you interested in this research project?
- What personal strengths as a coach are you most proud of?
- Strengths in club general.....
 - How does your club build upon the strengths of its athletes?
- What club strengths come to mind when thinking about inclusion of children/young people with autism?

- What might the inclusion of young people with autism look like in your club?
- How do you feel the club could ideally include young people with autism?
- How can your club values lend themselves to including young people with autism?

- What could the club need to do overall as an organisation to support this inclusion?
- What already existing strengths within the club can be built upon to assist with the inclusion of young people with autism?

- What needs to be done differently in order to achieve this inclusion of young people with autism?
- In what way (if any) could athletes at your club positively support the inclusion of young people with autism?
- In what way (if any) could parents of young people with autism assist the club with the inclusion of young people with autism?
- How would you feel best supported as a coach to include young people with autism?
- Which resources (already existing or required) will assist with bringing about this change?
- Is there anything else you would like me to know about the inclusion of young people with autism in your club?

Conclusion: I want to thank you again for participating in today's interview. We had a great discussion and have gathered a lot of useful information. Just before we finish today, I want to explain again how what we discussed today will be used and remind you that all this information is on your information sheet.

The recorded interview will be deleted from the digital recorder/Zoom desktop folder today and transferred to a secure flash drive which only I will have access to. Your interview will be transcribed and analysed on my password protected computer and combined with that of the other participants in this study and used to form the results section of my thesis. The information will be completely anonymous. No coach, young person or community sport club information/identifying information will appear on any findings linked to this research. All coaches will be assigned a fictitious name (which you have already kindly shared with me) and no regional data will be given. Unfortunately, individual feedback will not be available, however, recommendations made post thesis review will be sent to participating community sport organisations as a support around how they might support children/young people with autism within their clubs. In accordance with the MIC Records Retention Schedule the anonymised data that is gathered in the study may be retained indefinitely as required by the lead researcher (which is me).

Finally. I want to remind you that my contact details and the contact details of my supervisor are on the information sheet. If you should have any queries or concerns, please do not hesitate to get in touch.

Appendix E: Zoom Information Sheet





Zoom Information Sheet


The semi-structured interviews involved in this research will be conducted via the online platform, Zoom. Zoom is an online audio and web conferencing platform which is available free of charge.

Preliminary Steps to using Zoom

Before using Zoom for the semi-structured interview, you will need the following equipment/tools:

- A computer, tablet/iPad, or phone that has a camera, a microphone, and internet connection.
 - It is highly recommended that you either use Wi-Fi or use a desktop computer with an Ethernet connection – this will provide you with the clearest and most consistent connection to participate in a video meeting.
- The Zoom programme software or Zoom Cloud Meetings app downloaded onto your device.
 - To download the Zoom computer software for your Windows or Mac computer, please visit <https://zoom.us/support/download>.
 - To download Zoom on your iPad or iPhone, please look up the “Zoom Cloud Meetings” app on the App Store. The app icon looks like this: 
 - To download Zoom on your Android, download the “Zoom Cloud Meetings app,” available on Google Play. The app icon looks like this: 

Joining the Zoom meeting

- On the Zoom home page click “Join a Meeting,” which is a blue button. 
- Once you click that button, a new screen will pop up requesting meeting ID, password and your name. Join
- Enter the Meeting ID and password number provided to you by the researcher.
- Type in the name you want to display in the video session. Usually, this is your first and last name.
- There are two check boxes below those text boxes. You will want to make sure that the researcher will see you and hear you in the meeting, so make sure both of those check boxes are left unchecked.
- Finally, click the “Join” button to join the meeting.

Further information on using Zoom

- <https://www.customguide.com/cheat-sheet/zoom-quick-reference.pdf>
- The researcher is also available to address any questions or concerns relating to the use of the Zoom:
 - **Contact name and email of Project Investigator:**
Kate O’ Brien, Trainee Educational Psychologist, (Trainee Psychologist)
Mary Immaculate College Email: 18174167@micstudent.mic.ul.ie

Appendix F: Online Counselling Statement of Participation



Statement of participation

Kate O' Brien

has passed the free course including all mandatory tests for:

How to do counselling online: a coronavirus primer

This CPD course has been jointly developed by the OU and the BACP as a response to the coronavirus (COVID-19) pandemic to offer a primer on working online as a counsellor or psychotherapist at a time when face-to-face therapy is neither possible nor safe.

Issued date: 31 August 2020

Issued by: The OU and the BACP

Licence Attribution: Attribution-NonCommercial-ShareAlike: CC BY-NC-SA

<https://www.open.edu/openlearncreate>

OpenLearn Create is hosted by The Open University whose mission is to widen access to education. This statement does not imply the award of credit points or the conferment of a University or College qualification. This statement confirms that this free online course and all mandatory tests were passed by the learner.

Please go to the course on OpenLearn Create for full details.
<https://www.open.edu/openlearncreate/course/view.php?id=5639>



Course summary

How to do counselling online: a coronavirus primer

This CPD course has been jointly developed by the OU and the BACP as a response to the coronavirus (COVID-19) pandemic to offer a primer on working online as a counsellor or psychotherapist at a time when face-to-face therapy is neither possible nor safe.

View this course at

<https://www.open.edu/openlearncreate/course/view.php?id=5039>

Learning outcomes

By the end of this course you will:

- understand the range of technology-based counselling types
- be aware of key technological, legal, ethical and clinical considerations for safe and effective online counselling
- have sound knowledge and critical understanding of key concepts relevant to online counselling
- have reflected on the meaning of your own opinions, experiences and use of digital communication technologies in terms of online counselling practice.

Completed study

The learner has completed the following:

- Introduction
- 1 Technology and me
- 2 Technological, legal, ethical and practical considerations
- 3 General considerations for online counselling
- 4 Counselling using videoconferencing platforms
- 5 Audio-only and phone-based counselling
- 6 Text-based counselling
- 7 Mental health apps and computer programs
- 8 End-of-course quiz
- 9 Conclusion

<https://www.open.edu/openlearncreate>

OpenLearn Create is hosted by The Open University whose mission is to widen access to education. This statement does not imply the award of credit points or the conferment of a University or College qualification. This statement confirms that this free online course and all mandatory tests were passed by the learner.

Please go to the course on OpenLearn Create for full details.
<https://www.open.edu/openlearncreate/course/view.php?id=5039>



OpenLearn
create

Create and publish your own free courses

Badges for this course

You have passed this free course including all mandatory tests and gained the following badges:



C19OT_1

ABOUT THIS BADGE

<https://www.open.edu/openlearncreate/badges/>

[badge.php?hash=b8a1fd6b874f34aa44db09956a760aa1695622e5](https://www.open.edu/openlearncreate/badges/badge.php?hash=b8a1fd6b874f34aa44db09956a760aa1695622e5)

<https://www.open.edu/openlearncreate>

OpenLearn Create is hosted by The Open University whose mission is to widen access to education. This statement does not imply the award of credit points or the conferment of a University or College qualification. This statement confirms that this free online course and all mandatory tests were passed by the learner.

Please go to the course on OpenLearn Create for full details.
<https://www.open.edu/openlearncreate/course/view.php?id=5639>

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Appendix G: Mary Immaculate College Research Ethics Committee Ethical

Approval



**Mary Immaculate College
Research Ethics Committee**
MIREC-4: MIREC Chair Decision Form

APPLICATION NO.

A20-056 FINAL

1. PROJECT TITLE

Parent, young people and coaches' perspectives on the inclusion of young people with autism in community sport organisations in Ireland

2. APPLICANT

Name:	Kate O'Brien
Department / Centre / Other:	EPISE
Position:	Postgraduate Researcher

3. DECISION OF MIREC CHAIR

<input type="checkbox"/>	Ethical clearance through MIREC is required.
<input type="checkbox"/>	Ethical clearance through MIREC is not required and therefore the researcher need take no further action in this regard.
<input checked="" type="checkbox"/>	Ethical clearance is required and granted. Referral to MIREC is not necessary.
<input type="checkbox"/>	Ethical clearance is required but the full MIREC process is not. Ethical clearance is therefore granted if required for external funding applications and the researcher need take no further action in this regard.
<input type="checkbox"/>	Insufficient information provided by applicant / Amendments required.

4. REASON(S) FOR DECISION

A20-056 – Kate O'Brien - Parent, young people and coaches' perspectives on the inclusion of young people with autism in community sport organisations in Ireland

I have reviewed this application and I believe it satisfies MIREC requirements. It is, therefore, approved.

5. DECLARATION (MIREC CHAIR)

Name (Print):	Dr Marie Griffin
Signature:	
Date:	20 th December 2020

Appendix H: Coach Information Letter



Parent, young people and coaches' perspectives on the inclusion of young people with autism in community sport organisations in Ireland

Coach Information Letter

Dear Coach,

As part of my doctoral thesis, I am carrying out research on the inclusion of children/young people with autism in community sport organisations in Ireland. The research will focus on individual sports as the communication and interaction required for team-based sports are areas of need for individuals with autism. Examples of individual sports include athletics, swimming, cycling, martial arts, racquet sports, rowing etc.

This research will employ appreciative inquiry (AI) to explore children/young people, parent and coach's perspectives on what is working well in community sport organisations in Ireland to include children/young people with autism. More traditional means of inquiry can involve a "deficits" oriented and problem-based research approach. AI differs from more traditional approaches as it will review the already existing strengths regarding inclusion and explore how they can be built upon in collaboration with children/young people with autism, their parents and community sport coaches. The use of AI will inform future change regarding the inclusion of children/young people with autism within community sport organisations.

What is the study about?

This study aims to explore the inclusion of children/young people with autism in community sport organisations in Ireland. The researcher will hold semi-structured interviews with parent/guardians of children/young people with autism and coaches (separately) on a one-to-one basis. The researcher will also hold semi-structured interviews and facilitate drawings with children/young people with autism regarding their experiences in community sport organisations. This is not an inspection of any kind within community sport organisations. The researcher is interested in their potential role in facilitating inclusion of children/young people with autism. There are no wrong answers in relation to this research and coaches do not need to have experience coaching a child/young person with autism to participate in the research. The goal is to review the coaches' perspectives regarding the inclusion of children/young people with autism and explore the possible facilitators regarding future inclusion of children/young people within community sport organisations.

What will coaches have to do?

Coach involvement in the study will be scheduled for a time that is convenient for them. Coaches who have experience coaching children/young people under the age of 18 will be invited to take part in a 30–40-minute semi-structured interview with the researcher. Coaches might include, paid coaches, volunteer coaches, helpers, parents or any individuals who facilitate the participation of children/young people within the community sport

organisation. Coaches do not require experience coaching a child/young person with autism or participation in a Sport Ireland recognised coaching course to be eligible to participate in this research.

Where will the study take place?

Given COVID-19 restrictions, interviews will be facilitated via the online platform, Zoom in accordance with telepsychology guidelines. Participants will be emailed a meeting ID and password to the Zoom meeting in advance of the interview. Detailed instructions regarding the use of the Zoom platform will also be provided to participants in advance of the interview.

What are the benefits?

The findings of this study are intended to support parents and coaches in facilitating the inclusion of children/young people with autism in community sport organisations. The findings could assist with the implementation of prospective policies in relation to sport inclusion.

What are the risks?

Participants might decide that they don't want to answer a question. If this happens, they do not have to answer any question that they do not wish to. All participation is entirely voluntary.

What if prospective participants do not want to take part?

Participation in this study is voluntary and participants can choose not to take part or to stop their involvement in this study at any time. Participants who would like to cease their participation can do so by contacting the researcher directly via email (on the email address supplied on the bottom of this information sheet). Participants who chose to withdraw will be immediately removed from the study along with any data they might have submitted.

What happens to the information?

With your permission, the interview would be recorded on a digital device. The recorded interview will be deleted from the digital recorder on the day of the interview and transferred to a secure flash drive which only the researcher will have access to. The information will be securely stored on the researcher's password protected computer. The data from the interview will be transcribed and combined with that of the other participants in this study. At the end of the study the information will be used to present results. The information will be completely anonymous. No participant or community sport organisation information/identifying information will appear on any findings linked to this research. All participants will be assigned a fictitious name and no regional data will be given. Information gathered will be written in a thesis/report by the researcher. Unfortunately, individual feedback will not be available, but recommendations made post thesis review will be sent to participating community sport organisations as a support around how they might support children/young people with autism within their clubs. In accordance with the MIC Records Retention Schedule the anonymised data that is gathered in the study may be retained indefinitely as required by the researcher.

What if prospective participants have more questions or do not understand something?

If anyone has any questions about the study they may contact the principal investigator, Kate O' Brien. It is important that prospective participants feel that all of their questions have been answered prior to committing to engage in this study.

What happens if anyone should change their mind in relation to participating in the study?

At any stage should any participants feel that they want to stop taking part in the study, they are free to cease participation and take no further part. There are no consequences for changing your mind about being in the study.

Thank you for taking the time to read this. I would be extremely grateful if you would consider participating in this study. If you would like to participate in this study or you have any further queries, please feel free to email the principal investigator on the address below.

Yours sincerely,



Kate O' Brien, Trainee Educational Psychologist



Dr Órla Slattery, Research Supervisor

Contact name and number of Project Investigator:

Kate O' Brien
Trainee Educational Psychologist
Mary Immaculate College
Email: 18174167@micstudent.mic.ul.ie

Research Supervisor(s):

Dr Órla Slattery
Inclusion Co-ordinator
Department of Educational Psychology,
Inclusive and Special Education Mary Immaculate College
Email: Órla.slattery@mic.ul.ie

Dr Richard Bowles
Mary Immaculate College
Email: richard.bowles@mic.ul.ie

Dr Niamh Kitching
Mary Immaculate College
Email: niamh.kitching@mic.ul.ie

This research study has received Ethics approval from Mary Immaculate Research Ethics Committee (MIREC). However, if you have concerns about this study you may contact:

Mary Collins, MIREC Administrator,
Mary Immaculate College, Limerick
E-mail: mirec@mic.ul.ie
Telephone: 061-204980

Appendix I: Coach Consent Form



Parent, young people and coaches' perspectives on the inclusion of young people with autism in community sport organisations in Ireland

Community Sport Organisation Coach Informed Consent Form

Dear Coach,

As outlined in the coach's information letter, the current study will explore the inclusion of children/young people with autism in community sporting organisations in Ireland as reported via the experiences and perspectives of children/young people with autism, their parents and community sport coaches.

The information sheet outlines what will be involved in this research project. This should be read fully and carefully before consenting to take part in the research project.

Your anonymity is assured, and you are free to withdraw from the research at any time. All information gathered will remain confidential and will not be released to any third party. The researcher's supervisors, the research coordinator and data analysis support in Mary Immaculate College will have access to this data. Anonymised quotes from individual participants may be used in the researcher's thesis or publications arising from the research. In accordance with the MIC Record Retention Schedule all participant data will be stored for the duration of the project plus three years at which time it will be destroyed. Anonymised research data may be held indefinitely or as required by the researcher.

Please read the following statements before signing the consent form.

- I have read and understood the participant information sheet.
- I understand what the project is about, and what the findings will be used for.
- I am fully aware of all of the procedures and of any risks and benefits associated with the study.
- I agree to have my interview recorded.
- I know that my participation is voluntary and that I can withdraw from the project at any stage without giving any reason.
- I am aware that my responses to questions in the interview will be anonymised.
- I am aware that anonymised responses may be used in the researcher's thesis or publications arising from the research.

Name of Coach (Printed): _____

Name of Coach (Signature): _____

Date: _____

26/02/2021

Reflections on Zoom interview
with tennis coach "Hannah"

#first coach to have supported
numerous children w/ ASD

Upon reflection (30 minutes post
interview) the following thoughts
come to mind:

① AI Principles came to light.
Particularly the simultaneity
principle. Through Hannah knowing
she would be speaking with me,
she had already begun speaking
about the inclusion of children
w/ ASD in her club with fellow
coaches and friends.

worry/fear?

② Hannah noted areas of concern
↳ language of ASD (frequently
apologised or questioned her phrases)
↳ what it takes for coaches to
"transition" to disability coaching
↳ spoke a lot about coach pigeon holing

③ Highlighted benefits of full integration to typically developing peers.

④ Noted communication as both strength, and area for development, discovery?? design??

disclosed diagnosis?
⑤ All positive experiences of working with young people w/ ASD shared by Hannah feature a case where the parent had disclosed diagnosis of ASD to Hannah & where Hannah frequently spoke w/ parents (e.g., after training/on phone)

no reference to winning?
⑥ Hannah placed emphasis on developing whole person & focus on child-centered practices (e.g., allowing child to be as loud & verbal on court)

⑦ I was struck by how emotional Hannah became while describing her own qualities & her honesty in this project as worthwhile yet very challenging

Appendix K: Phases of Thematic Analysis and Sample Coding

Data was analysed using reflexive thematic analysis (TA; Braun & Clarke, 2019, 2021) whereby data was not analysed in a singular procedural method (Braun & Clarke, 2021; Clarke & Braun, 2018) but rather in a recursive approach which is guided by six phases. The themes developed were predominantly latent in nature (Braun & Clarke, 2006).

Phase One

Given I had independently conducted all 13 interviews, I was familiar with the data before beginning transcription and analysis. I listened to each interview twice, once for further data immersion and I then transcribed the interview upon the second listening. During this familiarisation period, I paid close attention to how things were said, relying on non-verbal cues (silences, realisations etc.) which are just as important as the spoken word in producing quality TA (Trainor & Bundon, 2020). I then read each transcript several times in order to further engage with the data and become familiar with the content before beginning coding, though time consuming this re-reading is strongly promoted by Braun and Clarke as forming the “bedrock for the rest of the analysis” (Braun & Clarke, 2006, p. 87). This was particularly pertinent during certain SSIs whereby coaches became emotional while reflecting on their personal coaching strengths. The notes that I had taken in my reflexive research journal both during and after interviews also added to these notes during the transcription phase. I reviewed all research journal notes upon transcription completion which informed the initial coding in the ensuing TA phases. Throughout this phase, I inserted Microsoft Word comments in the document margins which would serve as memory aids for me in the subsequent phases (Braun & Clarke, 2012).

Phase Two

Certain quotes and ideas which were of significance to the research questions, and which frequently re-appeared were coded during phase two. All initial codes were simple and precise and easily evoked and represented the data (Clarke & Braun, 2013). At this initial stage, I coded for as many potential patterns and themes as possible as guided by Braun and Clarke (2006) who advocate that “you never know what might be interesting later” (p.89). My initial codes also maintained surrounding data given a common criticism of coding is the lack of context (Braun & Clarke, 2006). The NVivo 12 software programme was employed for the coding and analysis. Adopting a two-phased approach (deductive then inductive) in phase two assured that a detailed description of the information pertaining to each node was maintained and ensured that a sole deductive approach did not reduce the depth of data (Braun & Clarke, 2006). During the initial stage of phase two, I analysed the data in a deductive or theory-driven manner whereby codes encompassing certain phrases which aligned with the research questions or the AI model and SEM were initially created (Braun & Clarke, 2006). Following this stage, I began the inductive, or data-driven coding whereby all transcripts were re-read and further analysed with the aim of coding data which did not align with the research question, and which shared new perspectives regarding the inclusion of young people with ASD in sport clubs. Inductive TA has been adopted as the means of analysis in previous research pertaining to the PA inclusion of young people with ASD (Healy et al., 2013; Kimber et al., 2021). The codes pertaining to the theme of trepidation (i.e., taboo, uncertain language, perceived parental fear of exclusion of fear etc..) were developed at this time. Such codes were not considered under the strengths-based model of AI,

yet further contribute to understanding how to foster further inclusion within clubs.

An excerpt of coded transcript is presented below.

<p>Researcher: And in that time have you had experience coaching a child or young person with autism?</p> <p>Rachel: Am so we've definitely had kids who've had autism – am – with their parents, like with the child sort of having that diagnosis or whatever and the parent sort of coming back to tell us am – that's probably been the minority though and I know I'm not going to diagnose anybody but there's definitely been children where we felt that they may have had autism and the parents either – like either that child hasn't had that diagnosis yet or the parents maybe aren't aware of it or just maybe aren't comfortable telling us in case it affects them here. We definitely have had some kids whose parents have come back to us and told us and that is the preferred way – like we always prefer that cause it means the parents are aware of it, we're aware of it – and if they've got any needs whether – like I remember one child – we were doing a grading night one night and we probably had about 30 parents sitting and another 30 to 40 children in the hall at the same time and the little boy, he was probably about 8, came in with his mam and he was just not feeling it – he was very overwhelmed but because the mother stayed on and because we were aware that he had autism, she was like “this probably isn't going to work, he's very uncomfortable” and we were like “that's no problem, come back next week and we'll just do it separately where it will just be himself” so having that relationship and being able to have those conversations is very helpful and means we can sort of meet the child where they're at rather than them having to meet us where we're at – if that makes sense?</p> <p>Researcher: Absolutely - it sounds like what's worked well is that open relationship with the parents and that you're meeting halfway. Could you tell me more about what the positive experiences of inclusion of young people with autism have been at your club?</p> <p>Rachel: Am like I think for us – like we start teaching children at – from 4 years on so like those kids, I've never seen a kid who has autism come into the club and not leave the club more open, more engaged and an awful lot of the time we would have had the parent say similar things where it's like “they're much more outgoing or they're much more comfortable within themselves” am</p>	<p>Diagnosis disclosed to club</p> <p>Perceived parental fear of exclusion</p> <p>Diagnosis disclosed to club Open communication with parents</p> <p>Parent stays at session</p> <p>Parent provides information on young people</p> <p>Young person focused coaching</p> <p>Build confidence</p>
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and I think it's just because when you start teaching children from that age when they're so young whether they have autism or they don't – they're small children so you need to meet them where they're at and we're very much – when we're teaching kids like there's nothing worse than having someone look down on you, so like an awful lot of the time, we'll get down or we'll crouch down on our knees and we'll sort of meet the child where they're at. I will say an awful lot of the parents have come and told us they'd be more likely to hang around especially for those first couple of weeks and that's sort of – well you have the benefits there of having that sort of transition period where if a child is kind of getting upset or they're overwhelmed the parent is there to sort of step in and maybe get the child a drink or calm them down a little bit and then they come back.

Researcher: So it sounds like those positive experiences have been an open relationship with the parents and then coaching techniques in the club. So with all that in mind what kind of general club strengths come to mind in your club – like you mentioned things like crouching down and meeting the child where they're at...

Rachel: Am I'd say - it's also been a very open sort of atmosphere like everybody's welcome so whether that's somebody from a different nationality or somebody with special needs or everybody and anybody has the opportunity to come in and be treated the same – there's no favouritism, there's none of that – it's very much “Come in and give it a shot, if you like it great and if you don't, you don't” there's no onus on anybody to come back – there's no onus on anybody to – and also the beauty of martial arts and kickboxing anyway is we're very – it doesn't matter your ability. Like we have a belt grading system so you may never be a great competitor or a great fighter, but pretty much everyone will get their yellow belt or their orange belt you know. There was a couple of kids who sort of got to that sort of senior level and I can't say that they had autism but they had some learning issues and we would have gotten them up to maybe brown belt and we kind of had to say “ok we're going to pause now” cause as you get higher on the grading belt system, there's more of a teaching aspect and even with them – those two boys in particular like they were brothers and the change and improvement in their confidence was phenomenal like at one point we had sort of gotten into the habit of when we'd be doing stretches, we'd sort of if we had maybe 12 or 13 kids we'd say “ok you count now” so they had that sort of little bit of

Young person focused coaching

Coach attribute of compassion

Parent stays at session

Inclusive and welcoming environment

Club membership is not ability tested

Develop sport
Young person focused coaching

Uncertainty regarding ASD

<p>authority and then if they didn't want to go then they didn't want to go – but those two in particular – actually they started off not really wanting to go but then they started like roaring which was really nice but we did eventually get to that point where those two boys we were like “we're just going to take a pause now – we won't say no, but we need a pause” and I don't think those two boys came back much after that.</p>	<p>Build confidence Caution</p>
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Phase Three

Codes were then reviewed to identify similarities across the data. This is considered an active process of identifying and developing themes from the collated codes (Braun & Clarke, 2013, 2019a). My research questions aided with the preliminary stages of theme development helping to decipher “what is, and what is not, relevant in terms of potential clusters of patterned meaning” (Terry et al., 2017, p. 35). Using the NVivo nodes feature, similar codes were then collated into groups to create initial categories. The singular codes which did not align with any developing category were categorised under a miscellaneous label. Eighteen categories were initially developed. Codes within categories were merged together if they captured the same idea. For example, “coach attribute of compassion,” “coach attribute of respect” and “coach attribute of patience” were all merged to the one code of “coach attribute.” Other initial codes were split. For example, the initial code of “education” was split to represent the complexity of the data representing education to further codes such as “Coach the sport club on ASD” and “Educate parents on sport clubs.” Moreover, categories which were similar in nature were merged together as part of an active process of developing themes. Singular codes not aligning with any theme were categorised under a miscellaneous label (Braun & Clarke, 2012). This phase ended with the initial categories and codes. It should be noted that the decision to stop coding is a complex and subjective one, and was

guided by Braun and Clarke's "take away the data" exercise whereby the researcher is encouraged to reflect as to whether the code labels provide a diverse summary of the dataset (Braun & Clarke, 2022, p. 71).

Phase Four

This recursive phase focused on further refining themes and consisted of three stages. In the first stage of phase four, codes categorised under the miscellaneous label were further refined and added to the study if deemed relevant. For example, the code "previous exclusion in other sport settings" previously under the miscellaneous label was added to the theme of "Sporting context" at this point. Certain codes were excluded from the study if they were noted as irrelevant to the aim of the research. For example, the code pertaining to "existing club protocol" was excluded as it neither explored inclusion nor young people with ASD thus bore no relevance to the research aim.

During the second stage of phase four, I reviewed the main themes against the initial codes. All coded extracts pertaining to each theme were reviewed to ensure they aligned with the theme. Certain extracts were re-coded to other themes. The overall thematic map was created at this point to establish and clarify the relationship "between codes, between themes, and between different levels of themes" (Braun & Clarke, 2006, p. 89). Transcripts were re-read once again, and new extracts were coded which had been missed during the initial coding in phase two (Braun & Clarke, 2006). This recoding reflected the recursive nature of TA.

The third and final stage of phase four of this TA was the second coder's review of the coding. In reflexive TA, analysis is frequently completed by one person (Braun & Clarke, 2019a), however I contacted the second coder to ensure coded themes reflected data and to aid with the development of a richer and more

nuanced understanding of the data. This second coder was personally known to me from prior professional experience. The second coder holds a BS and MSc in Psychology, is seeking a PhD in Clinical Psychology and has experience with Braun and Clarke's TA in qualitative research. Redacted transcripts and research questions were shared with the second coder via password protected email given the COVID-19 pandemic restrictions. I briefed the second coder on the research questions and the established practice of coding in relation to the questions given the initial deductive phase analysis. As guided by previous research, inconsistencies regarding code meanings and categorisations between myself and second coder were clearly identified and were discussed until a consensus was agreed upon via multiple Zoom meetings until a consensus was reached (Henderson & Baffour, 2015; May et al., 2018). For example, we initially disagreed whether the data relating to "safety concerns" would be appropriately placed under the theme "trepidation" or "improved organisation of sport club." Following discussion, it was concluded that coaches discussed safety concerns with regard areas for improvement in the "*Design*" phase of AI. Towards the end of this phase, I shared the updated visual thematic map with my supervisors which encouraged discussion regarding the meaning of the themes and how they addressed my research question. My supervisors also encouraged further thought to be paid as to how the additional finding regarding trepidation could be introduced into the research findings. Although I was the independent researcher, meaning my supervisors were not immersed in the data (Trainor & Bundon, 2020), these comments and feedback enhanced the iterative nature of the reflexive TA process encouraging me to constantly reflect and review the data (Trainor & Bundon, 2020).

Phase Five

During the final refinement in phase five, I aimed to further define and subsequently refine all themes. Extracts under each overarching theme were reviewed to ensure they each evoked the theme. The most pertinent extracts were then selected for use in phase six. Subthemes were concretely organised under each theme at this point and were reviewed to ensure they were relevant to both the research question and their respective overarching theme. Subthemes were then added to the thematic map to ensure that the developed themes and subthemes accurately evoked the meaning of the data. The final themes, subthemes, and codes were collated in table format (see Appendix L). This phase further involved the selection of extracts which best provide a vivid example of the theme (Braun & Clarke, 2012). I paid particular attention to ensure that extracts were selected from across the dataset, which as outlined in prior work is challenging at times as some coaches aptly articulated the issues at hand (Braun & Clarke, 2012).

Phase Six

Phase six of TA consisted of presenting and further discussing the salient themes and relevant subthemes. Given TA is a technique distinct to the theoretical framework of the research in which its employed (Braun & Clarke, 2014) both AI and the SEM informed the analysis and write-up in a logical order (Braun & Clarke, 2012). As outlined in Section 3.3.1.2.1, all data was categorised under three of the 5ds from the AI process (*Discovery*, *Dream* and *Design*) for both data collection and data analysis. The “*Discovery*” phase reviewed how coaches have perceived the inclusion of young people with ASD in clubs in their experiences to date. The “*Dream*” phase explored what the future inclusion of young people with ASD in sport clubs looks like from the coaches’ perspective and the “*Design*” phase

examined what would need to happen to further create a club which encourages full inclusion of young people with ASD. A visual thematic map pertaining to each research question is provided in Figure 3.5 in the results section.

In the final write up of results, I assigned themes to different levels of the SEM which is a useful strategy in linking interactions between different system levels of PA inclusion (Henderson & Baffour, 2015). Moreover, the provision of results according to the SEM provides an analytic strategy for constructing a practical model for the facilitation of young people with ASD in sport clubs (Henderson & Baffour, 2015).

Appendix L: Final Themes, Subthemes and Codes

Research Question 1: From the coaches' perspectives, what facilitates the current inclusion of young people with ASD in sports clubs?		
Discovery: Current sport club strengths		
Themes	Subthemes	Codes
Sporting Context (n=13)	Appropriate sport (n=5)	(i) Individual sport; (ii) Previous exclusion in other sport settings
	Inclusive ethos (n=11)	(i) Inclusive and welcoming environment; (ii) Sport club membership is not ability tested; (iii) Mixed ability train together
	Club coaches have disability education and experience (n=8)	(i) Professional job with disability experiences; (ii) Previous disability experience in sport club; (iii) Attendance at sport inclusion workshop;
Supportive relationships (n=9)	Sport club supports its coaches (n=7)	(i) Committee support; (ii) Support from other coaches
	Parents support sport club (n=8)	(i) Parents stays at sessions; (ii) Parent has coaching role; (ii) Parent provides information on young people
Coach Qualities (n=13)	Specific coach attributes support the inclusion of young people with ASD (n=9)	(i) Coach attribute of compassion; (ii) Coach attribute of respect; (iii) Coach attribute of patience
	Coach goals are process oriented rather than results focused (n=12)	(i) Build confidence; (ii) Foster life lessons; (iii) Have fun; (iv) Develop the sport
	Coaches employ specific coaching practices to support inclusion of young people with ASD (n=11)	(i) Adjusted instruction; (ii) Adjusted pace of session; (iii) Young person focused coaching; (iii) Set role assignment; (iv) Set routine

Research Question 2: What does the ideal inclusion of young people with ASD in sport clubs look like from the coaches' perspectives?

Dream: Ideal inclusion in sport clubs

Themes	Subthemes	Codes
Deliberate sport club resolution (n=9)	Formalised approach (n=7)	(i) Inclusive sport club philosophy; (ii) Club-made decision; (iii) Adopt top down approach; (iv) Advertising of inclusive sport club
	Willing group of adults (n=6)	(i) Interested coaches; (ii) Increased number of volunteers
Focus on needs rather than labels (n=13)	Format of programme is needs dependent (n=11)	(i) Ability; (ii) Broad spectrum of need; (ii) Benefits of integration; (iv) Benefits of segregation
	Destigmatise the spectrum (n=12)	(i) Diagnosis would be disclosed to sport club; (ii) Sport club has understanding of ASD; (iii) Strengths of ASD will be recognised

Research Question 3: What needs to happen to further promote the inclusion of young people with ASD in sport clubs?		
Design: Pathway to dream sport clubs		
Themes	Subthemes	Codes
Increased education (n=12)	Sport club to receive education (n=11)	(i) ASD info from educated source; (ii) Coach the sport club on ASD; (iii) No knowledge of inclusive sport training
	Sport club to provide education (n=8)	(i) Educate parents on sport club (ii) ASD awareness in peers
Enhanced collaborative practices (n=12)	Organisational support (n=10)	(i) National Governing Body (NGB) support; (ii) ASD organisation support
	Parental Involvement (n=12)	(i) Open communication with parents; (ii) Parents' physical presence to support young people; (iii) Parents volunteering; (iv) Parents not required
	Peer led inclusion (n=5)	(i) Assigned roles; (ii) Fostering relationships
Improved organisation of sport clubs (n=10)	Develop formal pathway of procedures (n=5)	(i) Develop pathway; (ii) Develop documentation; (iii) Use code of conduct and child protection as template
	Environmental and coaching developments (n=9)	(i) Additional resources; (ii) Adapted equipment; (iii) Coaching adaptations; (iv) Plan for safety

Additional themes unrelated to research questions but relevant to project:

Theme	Subtheme	Coding
Trepidation (<i>n</i> =12)	Fear (<i>n</i> =8)	(i) Perceived parental fear of exclusion; (ii) Taboo; (iii) Caution
	Uncertainty (<i>n</i> =10)	(i) Limited ASD knowledge; (ii) Uncertain language; (iii) Isolated coach

Appendix M: Summary of Findings and Implications



Summary of research: *What was this research about?*

As part of my doctoral thesis, I completed research on the inclusion of young people with autism spectrum difference (ASD) in sport clubs in Ireland. Specifically, I focused on coaches' experiences and perspectives regarding such inclusion given their voices on the issue have been underrepresented to date. Appreciative inquiry was employed as a means of exploring coaches' valuable input. Appreciative inquiry is a strengths-based approach to research which focuses on what is working rather than what's not working - identifying new directions and possibilities to maximise future potential. This approach structured coach interviews into four stages:

1. Discovery: **Appreciating the best of “what is.”** *From the coaches' perspectives, what facilitates the current inclusion of young people with ASD in sports clubs?*
2. Dream: **Imagining “what could be.”** *What does the ideal inclusion of young people with ASD in sport clubs look like from the coaches' perspectives?*
3. Design: **Determining “what should be.”** *What needs to happen to further promote the inclusion of young people with ASD in sport clubs?*
4. Delivery: **Creating “what will be.”** *Feedback will be given to participating coaches and sport clubs and Cara to inform future initiatives.*

Thirteen coaches gave up their time to participate in this research in completing in-depth interviews. Coaches were from rural and urban settings across eight counties spanning all four provinces. They represented archery, athletics (both track and field), kickboxing, rowing, squash, surfing, swimming and tennis. Coaches had an average of 16 years coaching junior athletes, with experiences ranging from 1 year to 42 years with varied national and international success. Three of the coaches additionally discussed experience in ASD specific programmes. In total, 549 minutes of interview data was gathered and analysed.

Summary of findings: What did this research find?

<p>DISCOVERY: <i>What do coaches perceive to have facilitated the participation of young people with ASD in sport clubs in their experiences to date?</i></p>	
<p>Intrapersonal Factors: <i>Characteristics of individual (coach, parent, young person etc.)</i></p>	<p>Coach attributes support inclusion of young people with ASD</p> <ul style="list-style-type: none"> - Compassion - Respect - Patience <p>Coach goals are process oriented rather than results focused</p> <ul style="list-style-type: none"> - Build confidence - Foster life lessons - Have fun - Develop the sport
<p>Interpersonal Factors: <i>Formal and informal social networks and support systems</i></p>	<p>Sport clubs support coaches</p> <ul style="list-style-type: none"> - Committee support - Support from other coaches <p>Parents of young people with ASD support sport clubs</p> <ul style="list-style-type: none"> - Parents stay at session - Parent has coaching role - Parents provide information to club on young people
<p>Physical Factors: <i>Physical context in which the sport takes place</i></p>	<p>Appropriate sport</p> <ul style="list-style-type: none"> - Individual sport - Young person had previously been excluded in other sport settings
<p>Institutional Factors: <i>Formal and informal contexts within social institutions</i></p>	<p>Inclusive ethos</p> <ul style="list-style-type: none"> - Welcoming environment - Club membership is not ability tested - Mixed ability train together in club <p>Specific coaching adaptations to support inclusion of young people with ASD</p> <ul style="list-style-type: none"> - Adjusted instruction (i.e., visuals/reduced language etc.) - Adjusted pace of session - Young person focused coaching - Set role assignment of peers - Set routine
<p>Community Factors: <i>Relationship among organisations and informal networks within geographic boundaries</i></p>	<p>Coaches have disability education and experience</p> <ul style="list-style-type: none"> - Coach has professional job with disability experiences - Previous disability experience in sport club - Coach attended sport inclusion workshop

DREAM: <i>What does the ideal inclusion of young people with ASD in sport clubs look like from the coaches' perspective?</i>	
Intrapersonal Factors: <i>Characteristics of individual (coach, parent, young person etc.)</i>	Willing group of adults needed - Coaches interested in coaching individuals with ASD - Increased number of volunteers
Institutional Factors: <i>Formal and informal contexts within social institutions</i>	Formalised approach to ASD inclusion is adopted - Inclusive club philosophy - Club-made decision - Adopt top-down approach - Mixed views on direct advertising of inclusive clubs Format of programme is needs dependent - Young person's ability should determine the programme - Benefits of integration - Benefits of segregation Spectrum would be destigmatised - Diagnosis of ASD would be disclosed to club - Sport club has understanding of ASD - Strengths of ASD will be recognised

DESIGN: <i>What needs to happen to further create sports club which encourage full inclusion of young people with ASD?</i>	
Interpersonal Factors: <i>Formal and informal social networks and support systems</i>	Peer led inclusion - Assigned roles - Fostering relationships Parental involvement - Open communication with parents - Parents' physical presence to support young people - Parents volunteering in sports club - Parents not required in club due to advocacy burden
Physical Factors: <i>Physical context in which the sport takes place</i>	Environmental adaptations in sport clubs - Additional resources - Adapted equipment
Institutional Factors: <i>Formal and informal contexts within social institutions</i>	Coaching developments - Coaching adaptations - Plan for safety Develop formal pathway of procedures - Develop pathway - Develop documentation - Use code of conduct and child protection as template
Community Factors: <i>Relationship among organisations and informal networks within geographic boundaries</i>	Organisational support - NGB support - ASD organisation support Sports clubs to provide education - Educate parents on sports club - Raise ASD awareness in peers
Public Policy: <i>National and international policies that affect participation in sport</i>	Sports clubs to receive education - ASD information from source educated on the source - Coach the club on ASD - No knowledge of inclusive sport training

Implications of research: *What do the findings of this study mean for national organisations and clubs and what can be recommended?*

Implications for Policy, Practice and Future Research	
<i>Implications for national organisation policy and practice</i>	
1.	Sport Ireland may be particularly interested in this project as the current findings have significant implications for the understanding of how to support the needs of those with disabilities in their participation across the sport spectrum alongside the further enactment of the <i>Sport Ireland Policy on Participation in Sport by People with Disabilities</i> .
2.	It is recommended that inclusion policies are developed at the National Governing Body (NGB) level with support and input from Cara, as has been done by six NGBs to date. Notably, Badminton Ireland, Basketball Ireland and Swim Ireland successfully completed Cara’s Xcessible Bronze Programme and commenced the Silver stage of the programme in 2021. A guide to developing a Disability Inclusion Policy for your club is available via https://caracentre.ie/fact-sheets/inclusion-resources/
3.	It is advisable that NGBs coordinate with Cara in order to promote disability training and education workshops on a national level. The available programmes include <i>Sport Inclusion & Disability Awareness Online Workshop; Autism in Sport Online Workshop; Inclusive Fitness Training Online Workshop; Disability Inclusion Training Online Workshop; Inclusive Adventure Activities Training Online Workshop</i> and <i>Accessibility and the Great Outdoors Online Workshop</i> with further information available from https://caracentre.ie/training/
4.	NGBs should consider reviewing how disability awareness training could be infused into coach education whereby a more formalised disability training would remain under Cara’s autonomy. This infusion is due to the coach demand for input regarding general language pertaining to disability. Provision of this infused education will target coaches’ request for sport specific guidelines and input regarding general language pertaining to disability.
5.	The insights gained from this study may be of assistance to Local Sport Partnerships (LSPs) who aim to increase participation in sport with specific focus on the inclusion of individuals with disabilities. Findings will also be of particular interest to Sport Inclusion Disability Officers (SIDOs) within their local LSPs whom had previously called for further input regarding inclusive practices in community clubs and whom continue to support coach disability trainings.
<i>Implications for micro-level/club policy</i>	
1.	It is recommended that NGB inclusion policies are tailored to the specific sport club’s needs. Moreover, this study suggests that the club should promote such full inclusion policies to the community though direct reference to “Autism Friendly” clubs may not be warranted. It is anticipated that the promotion of such policies would reduce the perceived parental fear of exclusion.
2.	Led by their NGBs, a key policy priority for clubs would be to review their model of participant development to identify and signpost key aspects to inclusion (i.e., a revised membership application to include a section pertaining to disability). Reviewing and potentially enhancing current models could direct both parent and young person’s anticipated involvement in the sport club and provide coach guidance pertaining to any potential coaching adaptations. Clubs

<p>may consider the <i>Lifelong Involvement in Sport & Physical Activity</i> framework (https://www.sportireland.ie/coaching/coaching-development-programme-for-ireland/lispa-model) and the implementation of some of the many available Cara’s resources (e.g., Cara’s Autism in Sport Passport available from https://caracentre.ie/fact-sheets/disability-resources/) helpful when considering this review.</p>
<p>3. A reasonable approach to foster more collaborative and open relationships between sport clubs and the parents of children with ASD would be the enactment of the previous two implications and more open opportunities for parent volunteering.</p>
<p>4. It is recommended that once a diagnosis has been disclosed to higher authorities within the sport club that all personnel working with the young person are informed (with parental consent) regarding same.</p>
<p>5. The importance of peer-led inclusion cannot be underestimated. Fostering such inclusion might involve assigning peer specific roles (e.g., junior captains) to monitor inclusive practices in the sport club which extend the coaches’ environment (e.g., changing rooms). These captains can be assigned by club personnel or peer voting.</p>
<p>6. Clubs are recommended to make use of the aforementioned training and education workshops. Moreover, it is advisable that clubs familiarise themselves with the available resources from Cara which cover areas such as <i>Return to Sport after Lockdown; Inclusive Fitness; Inclusion Resources; Disability Factsheets</i>. These resources and more are available via the dropdown tab under, “Resources” at https://caracentre.ie/</p>
<p style="text-align: center;"><i>Implications for coaching practice</i></p>
<p>1. To promote the longevity of the inclusion in the sport club, it is advisable that coaching athletes with ASD should not be left to one isolated coach.</p>
<p>2. If coaches felt they were not best supporting a young person’s needs, they could refer to the club’s inclusion policy or adapt the <i>Cara Autism in Sport Passport</i> (https://caracentre.ie/fact-sheets/disability-resources/) to seek parental input in supporting the young person in the club in a non-threatening manner.</p>
<p>3. Continued efforts are needed to adhere to child-centred coaching practices. Coaches may consider the more frequent use of visuals alongside the reduction of verbal instructions.</p>
<p>4. Coaches are strongly encouraged to familiarise themselves with their athletes’ strengths, most notably those which are autistic in nature. These strengths are often reflected through increased determination and focus and capitalising on such admirable strengths alongside the special interests of young people with ASD has previously been found to yield positive results.</p>
<p style="text-align: center;"><i>Implications for future research</i></p>
<p>1. It is recommended that further research at a NGB level is conducted to review best practices supporting young people with ASD at a macro national level. A strengths-based analysis, similar to the present study on other inclusion initiatives could be completed to inform and support other NGBs.</p>
<p>2. The findings of the current research may be presented at sport club committee meetings to stimulate dialogue amongst coaches and board members. The Appreciative Inquiry framework may be then employed to encourage a strengths-based internal review and change.</p>

An Appreciative Inquiry into Coaches' Perspectives on the Inclusion of Young People with Autism in Sport Clubs

Young people with autism spectrum difference (ASD) engage in fewer physical activities and participate less frequently in sport than their peers. To date little emphasis has been placed on inclusion of individuals with ASD in mainstream community sport and there is a noted absence of coaches' voices in available research. This study explores the perspectives and experiences of coaches on the inclusion of young people with ASD in community sport clubs, aiming to identify facilitators for future inclusion. Underpinned by the socio-ecological model, this qualitative research applied appreciative inquiry (AI) to explore coaches' perspectives and experiences regarding the inclusion of young people with ASD in sport clubs. Coaches (n=13) completed semi-structured interviews via Zoom. A number of inter-related factors within the club environment were generated through reflexive thematic analysis.

Current strengths were linked to the sporting context, supportive relationships, and coach qualities. The ideal inclusive club required deliberate resolution with a focus on the needs rather than labels of young people with ASD. The prospective pathway to attain this inclusive setting was noted to warrant increased education, enhanced collaborative practices and improved club organisation. Trepidation also arose as a finding whereby coaches discussed the inclusion of young people with ASD with fear and uncertainty. Results indicate that guidance on the inclusion of young people with ASD in clubs is in its infancy and warrants further education on both macro and

micro levels. Implications for policy and practice across national governing bodies of sport and clubs are considered.

Keywords: autism, inclusion, coaches, sport club, appreciative inquiry

Introduction

Autism spectrum difference³ (ASD) is characterised by diagnostic criteria of delayed or limited communication skills, social interaction difficulties, and the presentation of restricted, repetitive behaviours (American Psychiatric Association [APA] 2013). In addition, individuals with ASD may also present with impaired motor skills (Green et al., 2009; Ozonoff et al., 2008). Physical activity (PA) offers young people with ASD improved motor skills and a reduction in aggressive behaviour, inattention, vocalisations and stereotypy (Lang et al., 2010; Sorensen, 2019). It additionally fosters improvements in social development (Alaniz et al. 2017; Caputo et al., 2018) whereby the inclusion of young people with ASD in sport settings offers multiple benefits to young people with and without ASD (Grandisson et al., 2012; Matsunaga, 2019). Moreover, the participation of individuals with ASD in sports is a fruitful arena to promote social inclusion and has received increasing attention in mainstream sports studies for other traditionally marginalised youth (Doidge et al., 2020; Storr & Richards, 2022).

However, despite a history of international sport inclusive initiatives (Roy 2007; United Nations Economic Scientific Cultural Organization 1978), the 2006 Convention on the Rights of Persons with Disabilities (UNCRPD) is the only legally binding instrument promoting the inclusion of disabilities in PA settings (United Nations [UN] 2006). Article 30.5 of the UNCRDP called for the ‘participation, to the fullest extent possible’ of individuals with disabilities in sport on an equal basis with peers and emphasised that individuals with disabilities can ‘participate in mainstream

³ The term autism spectrum difference (ASD) is employed in place of autism spectrum “disorder” in line with the paradigmatic shift facilitated by Mary Immaculate College (MIC) staff towards an appreciation of the neurodiversity of ASD opposed to the historical focus on the ASD impairments (Ring et al., 2018).

sporting activities' (UN 2006). However, this convention is only as effective as the nations which apply it (International Council of Sport Science Physical Education, 2013).

Unfortunately to this end, young people with ASD are not meeting the World Health Organisation's recommended PA guidelines (Memari et al., 2015). As a population, they are less active (McCoy & Morgan, 2020) and less likely to participate in structured PA settings when compared with their neurotypical peers (Hilton et al., 2008). ASD idiosyncratic symptomology and lack of parental and peer support commonly hinder their participation in PA programmes (Arnell et al., 2020). Moreover, parents describe difficulties regarding access and opportunities to PA for their children with ASD (Arnell et al., 2020; Blagrove & Colombo-Dougovito, 2019; Nichols et al., 2019).

Inclusion in community sport organisations

Although opportunities at PA in community sport clubs (hereafter referred to as clubs) are reported to reduce health disparities between young people with ASD and their neurotypical peers (Tyler et al., 2014), inclusion in clubs is generally thought of as a 'separate activity' (Jeanes et al., 2018). This separation causes concern given when individuals with disabilities are excluded from activities that could otherwise be inclusive, it creates a negative impact on how they are perceived by others (Stanescu et al., 2009). However, the concept of inclusion is complex and it requires more than physical integration (Eldar et al., 2010) as integrated settings without appropriate implementation exacerbate risks of bullying and stigma in young people with ASD (Humphrey & Symes, 2013; Sreckovic et al., 2014). Further understanding regarding the complexities of the inclusion of this population in sport is warranted to allow policy makers and service providers facilitate inclusion of

young people with ASD in clubs (Ryan et al., 2018). Recent research regarding the inclusion of young people with ASD in sport captures the voice of the young people (Arnell et al., 2018) and their parents (Arnell et al., 2020) yet there is a noted absence of the voice of the community coach regarding the inclusion of young people with ASD in clubs (Duquette et al., 2016; Nichols et al., 2019).

Voice of the coach

Coaches play a vital part in the success of athletes with additional needs through encouraging and facilitating participation (Martin & Whalen, 2014). Their role is even more crucial to the development of athletes with ASD given a positive coach relationship predicts a young person's sport frequency and engagement with the sport (Rosso, 2016; Ryan et al., 2018) and features as a key facilitator in young people with ASD's development in sport (Lamb et al. 2016; Obrusnikova & Miccinello, 2012; Patterson & Smith, 2012, p. 51). To date, research has focused on the challenges of coaching and integrating athletes with 'hidden disabilities' such as ASD (Vargas et al., 2015) yet it is unclear what clubs and coaches are currently doing to positively support the inclusion and how they could be supported with such inclusive practices (Geidne & Jerlinder, 2016). Collating the experiences of coaches contributes to the growing field of inclusive sport and may help to inform future policies and facilitators to the inclusion of young people with ASD. Moreover, inclusion policies will not make significant momentum or be applied in clubs without coaches' support (Braun et al., 2011).

The current study

Our aim in the current exploratory study is to identify facilitators for the inclusion of young people with ASD in sport clubs as reported by coaches. This aim is encompassed in one core research question embedded with three sub-questions:

What are the experiences and perspectives of mainstream community coaches regarding the inclusion of young people with ASD within their clubs?

1. What do coaches perceive to have facilitated the participation of young people with ASD in sport clubs in their experiences to date?
2. What does the ideal inclusion of young people with ASD in sport clubs look like from the coaches' perspectives?
3. What needs to happen to further promote the inclusion of young people with ASD in sport clubs?

Although most organised sports occur in group contexts, young people with ASD report a preference for individual sports (Stanish et al., 2015) noting less stress when their performance may not impact the team (Patterson & Smith, 2012). Therefore, the current project focused on individualised sports in line with recent recommendations (McCoy & Morgan, 2020).

Methods

Study Design

This research is positioned within a social constructivist paradigm and adopts a qualitative approach to understand the lived experiences of the coaches (Sparkes & Smith, 2013). Underpinned by the social-ecological model (SEM), it applies the strengths based model of exploration of appreciative inquiry (AI), to identify a number of strengths focused inter-related factors within the sport club, which are perceived to promote inclusion (Cooperrider & Whitney, 2001; McLeroy et al., 1988). Figure A highlights how AI is applied in the project and Figure B provides a visual depiction of the integration of AI and SEM.

Procedure

Sampling and Recruitment

Criterion-based purposive sampling identified clubs which met the inclusion criteria (i.e. individual sport with junior membership available) through the National Governing Bodies of Sport in the Republic of Ireland (Federation of Irish Sport, 2021c). The presidents/club secretaries/captains of the targeted clubs and those more directly involved with the NGB (i.e., regional director/child officer etc.) were contacted and asked to disseminate this information letter to coaches. Interested coaches then initiated contact with the researcher

Participants

A heterogeneous approach ensured maximum variation whereby participants were recruited across different geographic and sporting backgrounds (Mertens, 2014). Thirteen coaches participated in this study and had an average of 16 years coaching junior athletes. Coaches were asked to select their own pseudonyms and coach information details are listed in Table A.

Data collection

Semi-structured interviews

Semi-structured interviews (SSI) were employed as an appropriate measure to gather perspectives on this complex issue (DeJonckheere & Vaughn, 2019). SSIs were systematically developed using the interview protocol refinement framework (Castillo-Montoya, 2016) and pilot interviews were held with two coaches. Interviews were completed over a six-month time period and each interview was conducted at one single point in time by the lead author. Interviews ranged from 25 minutes to an hour with the average interview lasting 42 minutes.

Given this research was conducted during the COVID-19 pandemic and its accompanying lockdown restrictions, SSIs were facilitated via Zoom, which is a

valid alternative to face-to-face SSI (Lo Iacono et al., 2016). Prior to interview, participants were provided with a Zoom information sheet along with a meeting identification and password to the meeting. Two participants requested their SSIs be completed over the phone and were therefore called to minimise a cost barrier for participation (Drabble et al. 2016).

Data analysis

In total, 549 minutes of interview data was gathered. Interviews were recorded and were transcribed verbatim by the lead author. Participants were invited to complete an interview transcript review (ITR), commonly employed in qualitative research (Bowes & Kitching, 2021) to ensure accuracy (Hagens et al., 2009) and to respect participants' contribution to the study . No participant omitted nor added significant insights which is a potential concern regarding ITR (Hagens et al., 2009). Reflexive thematic analysis (TA) was then employed whereby data was analysed in a recursive approach (Braun & Clarke, 2006, 2012, 2019; Clarke & Braun, 2013) using the NVivo 12 software. Analysis adopted both deductive and inductive approaches and was reviewed by a second independent coder to develop a richer understanding of the data (Braun & Clarke, 2019) and was subsequently reviewed using the updated checklist for producing good TA (Braun & Clarke, 2022). With respect to researcher reflexivity and to enhance sincerity and transparency (Tracy, 2010), observational memos and theoretical notes were logged in a reflexive journal throughout the project (Barrett et al., 2020).

Results and discussion

The findings of the current study are explored in an integrated results and discussion. Initially the results from the deductive analysis which generated participants' reflections on the discovery, dream, and design phases of AI regarding

the inclusion of young people with ASD in sport clubs will be explored. The theme of trepidation which permeated all interviews and was developed through inductive analysis will then subsequently be discussed.

Discovery

Participants' reflections on the discovery phase of what has worked to support the inclusion of young people with ASD in clubs merged through three themes: (i) sporting context, (ii) supportive relationships and (iii) coach qualities.

Sporting context

Coaches indicated that their club was an appropriate context for young people with ASD given its appropriate sport, inclusive ethos, and previous club disability experience. The importance of an appropriate sporting context has previously been explored in research with parents describing certain sports as 'inherently unsuitable' for their children with disabilities (Shields & Synnot, 2016) and sport coaches also reporting on the exclusion of young people with ASD (Kimber et al., 2021). Such beliefs were echoed in current findings:

Most of the sports kids would have tried up to that point - would have required am...physical challenges like tackling or whatever like that, like all the ball sports ...the kids who come to us then, wouldn't have done well there or would have been excluded there. (James)

An inclusive ethos consisting of a welcoming environment was also referenced by many coaches to support the inclusion of young people with ASD and key to developing this ethos is that membership is not ability tested and mixed abilities train together:

It's also been a very open sort of atmosphere like everybody's welcome so whether that's somebody from a different nationality or somebody with

special needs... anybody has the opportunity to come in and be treated the same – there's no favouritism, there's none of that. (Rachel)

This creation of a supportive environment and promotion of inclusive attitudes is frequently credited for successful meaningful inclusion (May et al., 2019; Shields & Synnot, 2014).

Prior disability education and experience within the club was also noted to support the inclusion of young people with ASD, for example Ichobod stated 'We have a kind of combination of a few special needs teachers and things like that, like the club isn't ignorant to this,' mirroring previous work which highlighted that experience working with individuals with a disability appears to shape coaches' willingness to commit to coaching (Jeanes et al., 2018).

Supportive relationships

Nine coaches emphasised the value of supportive relationships. The role of the sport club in backing coaches was expressed as committee assistance and support between coaches such as shared knowledge, reiterating that coaches often rely on fellow coaches when working with young people with ASD (Kraft & Leblanc, 2018). Parental involvement in supporting their children in PA is also frequently documented in the literature (Gregor et al., 2018). Coaches in the current study emphasised the benefits of parents providing information on their children, 'thankfully once again it's down to his parents who have given me the information' (Hannah) and supporting the 'transition period where if a child is kind of getting upset or they're overwhelmed the parent is there to sort of step in.' (Rachel)

Coach qualities

Coaching qualities which promoted the inclusion of young people with ASD was a theme that arose in all interviews through the subthemes of coaching

attributes, coach goals and specific coaching practices. The attributes of compassion, respect and patience were frequently mentioned which are conducive to positive coaching practices for all young people (Forlenza et al. 2018) regardless of an ASD diagnosis.

An additional quality reported amongst all participants was that their goals for young people were not limited by results and equally allowed for a focus on the process. Coaches expressed the goal of building confidence, having fun, fostering life lessons, and developing the sport in young people. Hannah aptly described these goals noting:

Even watching his ability to communicate with his peers and his understanding of his own limitations...you're not just developing tennis players- you're developing tennis people; you're developing rounded people.

Such findings further emphasise recent research in the field of coaching participants with ASD. Kimber et al. (2021) recognised empathy and humour as crucial in engaging young people and noted the development of life skills as key in fostering a relationship with young people to ultimately promote inclusion. However, interestingly no coaches in the current study discussed social integration as a personal coaching strength nor as a focus for young people with ASD. This contrasts with previous interviews with coaches of individuals with disabilities whereby Hassan et al. (2012) discovered that coaches targeted sport specific skills alongside fostering teamwork and social practices. This inconsistency may be due to the focus on the individualised sport in the current context which could be further compounded by the fact that communication and interaction difficulties are hallmarked by the ASD diagnosis (APA, 2013).

A child-centred approach was recognised by coaches as key to promoting the participation of young people with ASD in this project and previous studies (Kimber et al., 2021). Such practices included adapted instruction and specific role assignment as outlined by Shanny:

If I notice one of my kids with autism getting overwhelmed with an activity...I often give them a special job to go set up the long jump or something. So, they are happy out with their job, while the rest of the group move onto the maybe more intensive task.

Such conventions have long been advocated for in psychological and educational settings to enhance young people's autonomy (Hart, 1992; Ingram, 2013) and are becoming increasingly popular in coaching pedagogy (Prophet et al. 2017). Key authors have described the coach-athlete relationship as the heart of effective coaching (Jowett, 2017) and have provided guidance on the process oriented development of athlete-centred practice on the basis of the empowerment and enhanced intrinsic motivation (Pill, 2017).

Dream

Participants' dream regarding what the ideal inclusion of young people with ASD in sport clubs looks like is reflected into two themes (i) deliberate club resolution and (ii) a focus on needs rather than labels.

Deliberate sport club resolution

The theme of deliberate club resolution consisted of the subthemes of formalised approach and a willing group of adults. Consistent with previous literature (Shields & Synnot, 2016), a formalised approach was noted to promote an inclusive ethos, with an emphasis on a top-down manner, where 'the club culture

falls in on the kids so if you're the coach then you have to maintain those values of inclusivity and balance of competition' (James).

With regard to promoting inclusion in clubs, some coaches expressed that there should be no direct advertising, as it would suggest 'something different about these kids' (Michael) while others considered that direct recruitment may be beneficial, suggesting 'We could approach...part of society where there are autism schools. Like maybe contact them directly to say...we would most definitely welcome you' (Robert). This indecision is not representative of Ireland's Sport Inclusion Disability Charter which emphasises clubs 'should be stating everyone is welcome' noting 'they need to be more vocal about it' (Cara, 2019). This inconsistency may explain parental confusion regarding accessing inclusive settings (Arnell et al., 2020).

Coaches also highlighted that a formalised approach would require a willing group of adults who were both large in numbers and interested in inclusion. Speaking on this issue, Edmond said, 'People need to be comfortable with and willing to do it and then...you do need to make sure that you've got enough volunteers or adults.' Interestingly, under the Sport Inclusion Charter in the Republic of Ireland (2019), 'the biggest obstacle is not coaches' willingness but rather their ability to adapt, suggesting that the task of transferring coaching skills to work with individuals with ASD would need to be readily addressed with any coaches (Rosso, 2016). Without an understanding of disabilities, coaches may attribute a child's inability to perform a task to the child's ability to perform rather than to their coaching practice (Vargas et al., 2015).

Focus on needs rather than labels

When asked about the ideal inclusion of young people with ASD, the coaches were unanimous in that this scenario would feature a club where the spectrum would be destigmatised and whereby the programme provision would be needs dependent. In outlining how they could destigmatise the spectrum, coaches emphasised the need to be aware of the diagnosis, given it was noted that ‘there doesn’t seem to be an identification by parents an awful lot of the time’ suggesting ‘a glitch in the system’ (Hannah). While it is strongly advocated that parents communicate such information to the coach (Arnell et al., 2020), this is not always the case. In a 2016 study, sport coaches were not named on a list of personal networks to be informed by parents of an ASD diagnosis (Hays & Butauski, 2018). Coaches should emphasise the diagnosis is not for exclusionary purposes but rather for them to be able to understand the young person’s idiosyncrasies and abilities (Hays & Colaner, 2016) highlighting ‘it’s not a label, it’s actually a tool that could help them down the road’ (Hannah). The disclosure of diagnoses is a complex issue and one which clubs should approach with sensitivity with an emphasis that it is to best support the young person (Hays & Colaner, 2016).

Coaches also indicated that ‘there would have to be an understanding and an awareness [of ASD] brought to coaches’ (Edmond). Understanding how ASD symptomology may present in a sporting context is important to those in sport clubs (Patterson & Smith, 2012, pp. 52-53) prior to any formalised training. Without ASD knowledge, coaches may misattribute idiosyncratic behaviours and not understand these behaviours as stemming from ASD, further highlighting the need for coach education (May et al., 2019). Moreover, it was reported that if sport clubs held such

an understanding, they could foster a club ‘where the strengths are recognised’ (Rachel) which was further built on by Sadie who highlighted that:

Children with autism can get obsessive about things sometimes or they find this focus and that kind of like draws them....like if you can harness that obsession with kids with autism...

Although previous work has similarly noted that autistic strengths can be reflected in sporting determination and focus (Kimber et al., 2021), further research is warranted as to how the strengths can be further fostered to enhance inclusion. This is an area well worth investigation given the harnessing of special interests of young people with ASD has previously enhanced meaningful engagement with school curricula (Davey, 2020).

There were varied opinions whether the ideal programme would feature an integrated or segregated setting. Whereas Elizabeth noted ‘there wouldn’t need to be any kind of special group...it’s nice for everyone to have a mix,’ Robert discussed the fact that ‘if there was a big demand, then it might be better to teach everybody together with autism.’ Commenting on the dilemma, Niall, a coach with experience in ASD specific programmes questioned:

Do we need to have an inclusive athletics programme or are we happy to stay as we are?...I keep asking that question “do you want something separate for your children with autism or do you want them to be part of it?” and I still never get a majority answer, it’s always split down the middle.

This tension echoes other coaches working with young people with ASD (Kimber et al., 2021). However, what is clear from this research and the studies preceding it is that coaches acknowledge that it is about ‘meeting their needs rather than meeting

their label' (Hannah) and that a one size fits all approach is not appropriate (Shields & Synnot, 2014).

Design

Coaches' reflections on what needs to happen to promote inclusion within sport clubs is presented into the following themes (i) increased education, (ii) enhanced collaborative practices and (iii) improved organisation of sport clubs.

Increased education

Two discrete subthemes emerged from this theme which included the club receiving education (n=11) and the club providing education (n=8).

Overwhelmingly, coaches indicated a lack of knowledge regarding sport inclusion training. For example, Elizabeth stated:

We weren't sure how to include her... We were kind of not sure how to go about it and we didn't know where to go to get information and advice... there was definitely the interest, we just didn't know where to get support. I haven't heard of any programmes or training or anything.

Hannah further emphasised the need for training noting, 'I think we need more coach education... coaches still don't seem to be coached through how to deal with that [ASD].' This process of how disability could be 'infused' into coach education and development has been recently reviewed by Townsend et al. (2021) which referred to the neglect of disability education in coaching courses as 'an indirect form of disablism' which goes against Article 30.5 of the CRPD. The lack of education had previously been described as a 'social barrier to inclusion' (Townsend et al., 2018) and may shed light on why coaches are hesitant to transition to coaching individuals with ASD (Shields et al. 2012; Rosso, 2016).

In addition to coaches receiving education, the current study highlighted the need for clubs to provide education to parents on how to approach sporting clubs and the importance of an active lifestyle for their child:

I think the parents of kids with autism would also need to be, if they were educated also in how they approach sporting clubs... I would also say is that if parents of autism or disability want their children to be included in sport then they need to be responsible and think that this child needs to be fit and active. (James)

Parents of young people with ASD have previously highlighted the need for education regarding the most appropriate sport for their child (Arnell et al., 2020) and whether clubs have worked with similar young people (Patterson & Smith, 2012).

Few coaches also noted that sport clubs could educate peers to increase ASD awareness:

When the other kids understand the reasoning behind it or the way these kids interact in the lane, like some of these kids aren't very socially interactive or good with other kids in the lane and they don't understand this and when you actually explain the situation, they just say, 'oh ok, it's fine' and they try then to include and make that person feel wanted. (John)

The education of peers as suggested by the current study has been noted to promote peer acceptance and involvement which fosters the participation of young people with disabilities (Shields & Synnot, 2014).

Enhanced collaborative practices

This theme captured coaches' reports of a need for enhanced organisational support, parental involvement, and peer led inclusion. In line with prior research,

(Shields & Synnot, 2014) coaches expressed a desire for the backing of the national governing body (NGB) of sports noting, ‘the governing bodies need to support the club and say, “look this is something that we’re going to approach nationally”’ (James) as it was noted that each NGB should ‘create individual tailored programmes’ (John) given the variability between sports.

Parent involvement was discussed as a requirement across all interviews. Two coaches stated parents should not be expected as they ‘might just want a little bit of a break from it all’ (Sophie), emphasising the need to relieve the burden on parents (Arnell et al., 2020). However, the majority of coaches emphasised an urgency for open communication with parents, noting ‘they could share what is kind of effective in communicating with their particular child and whether we [sport club] could kind of customise things a little bit for, to suit their child’ (Robert) emphasising that parents know what best works for children based on home experiences (Kimber et al., 2021).

The importance of having ‘the parents of children with autism to be down in the club as volunteers’ (Niall) was discussed by many coaches and it was further noted that having parents’ physical presence in the sport club would be beneficial, ‘cause at least we’d know is this normal– you know if they are having a bit of an episode’ (Ichobod) reiterating the previously discussed ‘family-centred collaborative teaming approach’ (Potvin et al., 2008).

Five coaches discussed peer led inclusion through the use of assigned roles (e.g., club captains and elite players) and through coaches fostering relationships between young people with ASD and peers.

Improved organisation of sport clubs

The development of a formal pathway of procedures was discussed as a necessary component to future inclusion, as James outlined, ‘what isn’t in rowing is a club development framework, so you want that.’ Many coaches alluded to the notion that such procedures should be complimented with documentation derived from a code of conduct or child protection procedures, which Niall noted that ‘like your code of conduct they [parents] talk their children through it and they’re made aware that we are inclusive club.’ Although formalised guidelines and documents in clubs may limit the capacity for action (Arnell et al., 2021), a sport development continuum with a logical progression from participation to high performance has previously been proposed to social integration in clubs (Spaaij et al., 2014) and towards the development of an inclusive pathway (Shields & Synnot, 2016).

Such guidelines would also cater for the professional development (Shields & Synnot, 2014) required for learning the adaptations to meet the individual and specific needs of adolescents with ASD (Arnell et al., 2021), which is crucial given the majority of coaches outlined a need for environmental and coaching adaptations. Environmental changes mainly referred to equipment, noise, and lighting. Examples were ‘much larger boards...so they have more stability’ (Sadie) and to ‘try and change, lessen noise again and a few other bits and pieces...like if they don’t like the feel of the string on their finger, there are these things...ah they’re basically like rubber to cover the string’ (Ichobod).

Trepidation

As aforementioned, the theme of trepidation was developed through inductive analysis. This theme permeated all interviews from which two subthemes of fear and uncertainty were developed. *Fear*

The topic of young people with ASD in clubs was depicted as a ‘whispered conversation’ (Rachel) and ‘a taboo subject...it seems to be a very hush hush area’ (Hannah) which is ‘quite tricky to discuss’ (John). Hesitation was expressed regarding the introduction of young people with ASD to sport clubs, noting coaches would have to be ‘cautious...[and]...careful at the start’ (Robert). The trepidation expressed by the participants further contributes to the notion that coaches are “working at the edge of chaos” (Bowes & Jones, 2006, p. 235) in a role characterised by obscurity and ambiguity.

Coaches in the current study attributed parental fear as a plausible explanation for not disclosing a diagnosis as outlined under the Dream phase, noting ‘they don’t want to give you the full info because they don’t want their child to be excluded you know?’ (James) which is supported by research (Hays & Butauski, 2018) as there is parental conflict whether a disclosure of an ASD diagnosis will support inclusion or increase the risk of bullying (Thompson-Hodgetts et al., 2020). Interestingly, those without lived experiences of ASD perceive the disclosure of a diagnosis to inform actions and advocate that it should be shared contrasting to the thoughts of those personally affiliated with the individual with ASD (Thompson-Hodgetts et al., 2020).

Uncertainty

Uncertainty arose across interviews as ten coaches highlighted their limited ASD knowledge, as in Edmond’s sentiments, ‘I’m a little bit ah- unaware of the ah - the full-blown symptoms’ were frequently echoed. Confusion regarding the language of ASD was also discussed. For example, while describing one young person with ASD, James stated ‘maybe a mild form [of ASD] if I have that right?’ whilst Hannah repeatedly questioned her phrasing saying, ‘Is that how you phrase it? I’m sorry if

I'm saying the wrong phrasing of things – sorry I'm so bad.' The discomfort expressed by coaches regarding the appropriate disability language is not novel (Davey, 2014) though holds potentially negative impacts for inclusive practices (Townsend et al., 2021). While the issue of language pertaining to ASD is an area of growing discussion, there remains no universally accepted term (Kenny et al., 2016; Vivanti, 2020)

Coaches in the current study alluded to the fact that they were rather isolated in their positions which lead to further uncertainty, a point which John spoke about, 'Really as a coach, I'm sort of left to my own devices.' Such experiences lead to feelings of isolation in that no other coach is going through the same thing (Wareham et al., 2018). Hannah extended upon this adding that coaches feared that they may be 'pigeon-holed' through promoting inclusion, 'I just think that there's a fear of any coach saying, "Oh I work with autistic children" and then all of a sudden that's all you can do, you just work with them.' This finding is reminiscent of evidence suggesting that the enactment of inclusive practices in sport clubs is usually driven by one disability advocate (Jeanes et al., 2018), though the fear of being pigeon-holed is a novel finding for the field.

Implications of findings

The research findings are outlined in Table B through the SEM which is a useful strategy in linking interactions between different sport system levels (Henderson & Baffour, 2015). Such findings pose a number of implications for policy, practice and future research pertaining to sport clubs and coaching practices for young people with ASD, as outlined in Table C.

Conclusions and future research directions

This exploratory research adopted a strengths-based approach in AI to examine the experiences and perspectives of 13 community coaches regarding the inclusion of young people with ASD in Irish clubs. Given the novelty of this field of research, it is necessary to consider both strengths and limitations of the current study' to provide an overall context for the aforementioned findings and to inform future research directions.

A strength of the current study is the adoption of AI as a method of inquiry as it allowed for a strengths based approach in a field which prioritises problems (Enright et al., 2014) particularly regarding individuals with ASD in sport (Blagrove & Colombo-Dougovito, 2019; Must et al., 2015). Furthermore, including an inductive thematic analysis produced additional findings that would not have been discussed through a deductive analysis (i.e., theme of trepidation) ensuring that findings strongly linked to the raw data (V. Braun & Clarke, 2006).

Given COVID-19 has caused a dramatic shift in the research landscape (Alam et al., 2021), the effects of the pandemic permeated the research. Due to the lockdown restrictions, SSIs were conducted via Zoom whereby data collection was dependent on participants' digital literacy (Archibald et al., 2019). However, Zoom information sheets were shared with participants prior to interviews and two SSIs were conducted over the phone as coaches reported a lack of digital literacy. Moreover, online SSIs allowed for the recruitment of more participants across a wider geographic region (Upadhyay & Lipkovich, 2020). Therefore, future studies working with coaches may seek to adopt a blend of online and face-to-face SSIs.

This study has built on previous literature towards the development of evidence-based practices amongst coaches supporting athletes with ASD (McNamara et al., 2020). The findings demonstrate that through focusing on 'what

works', it is possible to identify the interacting factors within a system contributing to better outcomes. This strength focused approach allowed for coaches to explore a topic of which they are fearful and uncertain. Given my link with the Sport Inclusion Ireland network and the regional sport inclusion disability officers in the Republic of Ireland, it is planned that that this approach can be instilled in sport clubs. This will hopefully promote a landscape where fear is met with support for young people with ASD in coaches who are educated and confident on inclusive practices. This hopeful future is demonstrated by Rachel: 'If a kid with autism comes into me and says, "I can't do this," I always think, "You can, you just haven't done it yet."'

Figure A. Visual overview of the application of AI

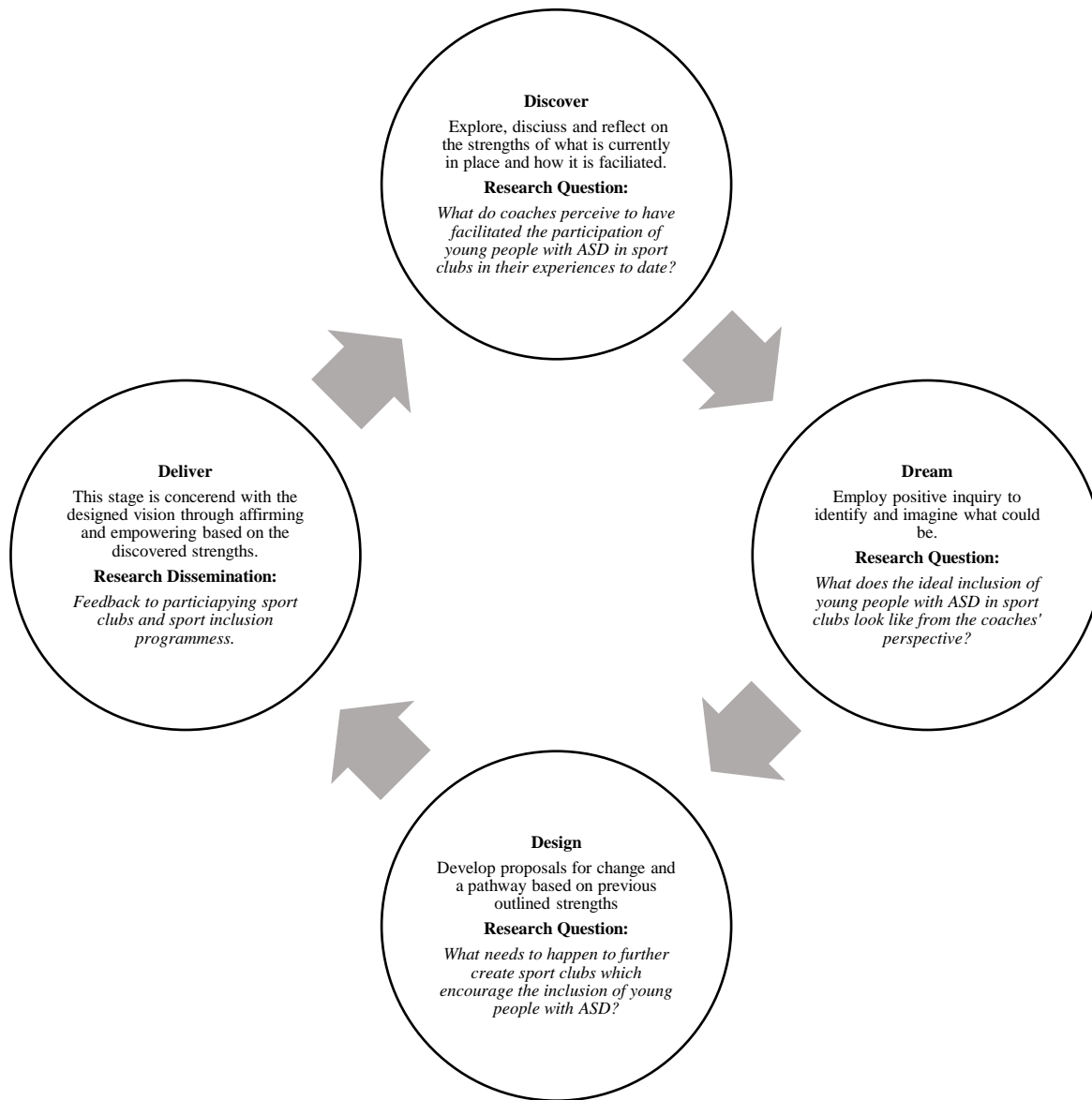


Figure B. Visual integration of AI and SEM

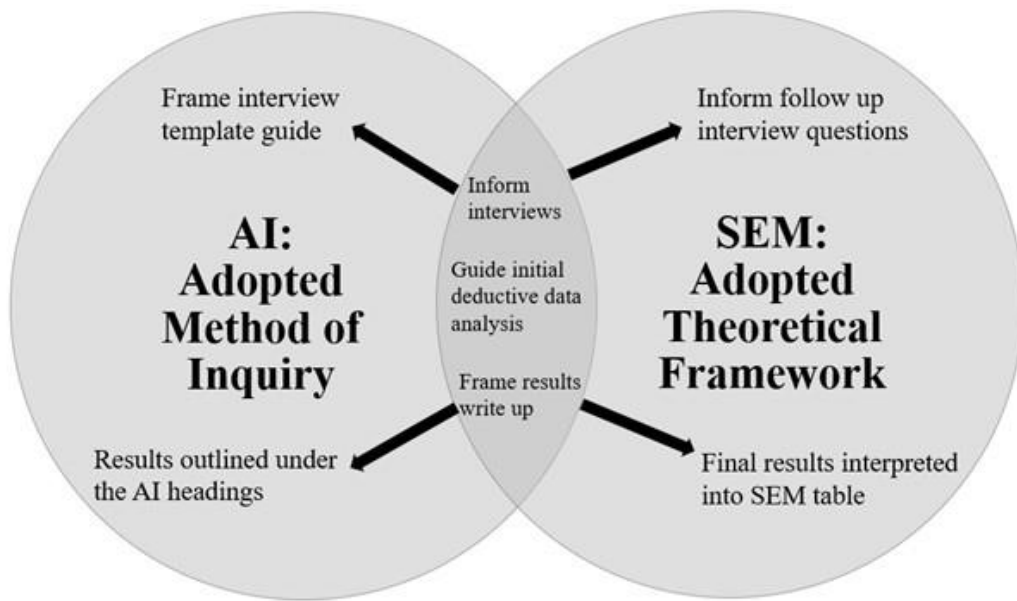


Table A. Coach Information details

Coach pseudonym	Sport	Years coaching experience	Coaching Level	Experience coaching young person with ASD
Robert	Archery	6	Local	No
Ichobod	Archery	5	Local	No
Shanny	Athletics (javelin)	43	Local/ National	Suspected but not confirmed to coach
Niall	Athletics (running)	5	Local	Yes (alongside prior experience in ASD specific cycling programme)
Rachel	Kickboxing	15	Local	Yes
Edmond	Rowing	22	Local	Yes
James	Rowing	7	Local	Yes
Elizabeth	Rowing	2	Local	Yes
Michael	Squash	40	Local/ National	Suspected but not confirmed to coach
Sadie	Surfing	1	Local	Yes (alongside prior experience in ASD specific surfing programme)
Sophie	Surfing	1	Local	Yes (alongside prior experience in ASD specific cycling programme)
John	Swimming	30	Local/ National	Yes
Hannah	Tennis	31	Local/ National	Yes

Table B. Discovery, Dream and Design phases assigned to the multilevel socio-ecological model

Appreciative inquiry (AI) phases	Socio-ecological model multilevel influences					
	Intrapersonal Factors: <i>Characteristics of individual</i>	Interpersonal Factors: <i>Formal and informal social networks and support systems</i>	Physical Factors: <i>Physical context in which the PA takes place</i>	Institutional Factors: <i>Formal and informal contexts within social institutions</i>	Community Factors: <i>Relationship among organisations and informal networks within geographic boundaries</i>	Public Policy: <i>National and international policies that affect PA participation</i>
DISCOVERY: <i>What do coaches perceive to have facilitated the participation of young people with ASD in sport clubs in their experiences to date?</i>	Coach attributes support inclusion of young people with ASD Coach goals are process oriented rather than results focused	Sport clubs supports coaches Parents support sport clubs	Appropriate sport	Inclusive ethos Coaches employ specific coaching practices to support inclusion of young people with ASD	Coaches have disability education and experience	
DREAM: <i>What does the ideal inclusion of young people with ASD in sport clubs look like from the coaches' perspective?</i>	Willing group of adults needed			Formalised approach to ASD inclusion is adopted Format of programme is needs dependent Spectrum would be destigmatised		
DESIGN: <i>What needs to happen to further create sports club which encourage full inclusion of young people with ASD?</i>		Peer led inclusion Parental involvement	Environmental adaptations in sport clubs	Coaching developments Develop formal pathway of procedures	Organisational support Sports clubs to provide education	Sports clubs to be educated

Table C. Implications for Policy, Practice and Future Research

Implications for Policy, Practice and Future Research
<i>Implications for National Governing Body (NGB) policy</i>
1. It is recommended that inclusion policies are developed at the NGB level.
2. NGBs should consider reviewing how disability awareness training could be infused into coach education whereby a more formalised disability training would remain under Cara’s autonomy. This infusion is due to the coach demand for input regarding general language pertaining to disability.
<i>Implications for sport club policy</i>
1. It is recommended that NGB inclusion policies are tailored to the sport club’s needs and that the club would promote this inclusion policy to the community to reduce the perceived parental fear of exclusion.
2. It is recommended that once a diagnosis has been disclosed to higher sport club authorities within the club that all personnel working with the young person are informed.
3. It is advisable that sport clubs consider the development of an inclusive pathway. This pathway may include a revised membership application to include a section pertaining to disability, a clear pathway of both the parent and young person’s anticipated involvement in the sport club and coach guidance pertaining to any potential coaching adaptations.
<i>Implications for coaching practice</i>
1. It is advisable that coaching athletes with ASD should not be left to one isolated coach, in order to promote the longevity of the inclusion in the sport club.
2. If coaches felt they were not best supporting a young person’s needs, they could refer to the club’s inclusion policy or seek parental input in supporting the young person in the club in a non-threatening manner.
3. Coaches may consider the more frequent use of visuals alongside the reduction of verbal instructions.
<i>Implications for future research</i>
1. It is recommended that further research at a NGB level is conducted to review best practices supporting young people with ASD at a macro level.
2. The findings of the current research may be presented at the sport club’s committee meetings to stimulate dialogue amongst coaches and board members. The AI framework may be then employed locally to encourage a strengths-based change.