

PROMOTING PHYSICAL EDUCATION, PHYSICAL ACTIVITY
AND SPORT PARTICIPATION WITH CHILDREN WITH
INTELLECTUAL DISABILITY IN AN INCLUSIVE SETTING

by

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Abstract

While the notion for students with ID to be included in inclusive education is sought to be as a human right, Malta is still struggling to include children with intellectual disability (ID) in physical education (PE), physical activity (PA) and sports. This is the driving force behind this PhD, which has three aims, namely, (a) to explore the barriers and struggles children with ID face when participating in PE, PA, and sports in and outside school; (b) to investigate the strategies used by PE teachers and LSEs to provide children with ID with quality inclusive PE, PA, and sports experiences; and (c) to understand who the promoters of inclusive PE, PA, and sports in Malta should be.

The study used a Community-Based Qualitative Research (CBQR) approach and comprised three qualitative research phases: Phase 1 which involved semi-structured interviews with 18 children with ID and their parents/guardians explored their lived experience in inclusive PE, PA, and sports in mainstream settings in Malta; Phase 2 which involved semi-structured interviews with 16 PE teachers and 16 LSEs working in secondary mainstream schools in Malta discussed strategies used and the requirements needed to deliver inclusive PE, PA, and sports activities for children with ID; and, Phase 3 which involved semi-structured interviews with 9 educational and government stakeholders which looked at how inclusive PE, PA, and sports could be promoted in mainstream settings in Malta.

The study found that there are a number of barriers hindering children with ID's participation in PE, PA, and sports that get worse as the children grow older as their physical and cognitive abilities remain inferior to those of typically developing peers (TDP). Their lack of a sense of competition leads them to be marginalised during PE lessons and sport club sessions. PE teachers and LSEs lack the knowledge, training,

equipment, and resources to support the diverse needs of these students and the large number of students in class makes it impossible for them to provide individual attention, leading to segregation.

The study suggests that tailormade educational courses and hands-on training be provided to PE teachers, LSEs, and sport coaches to give them the skills to embrace diversity in PE, PA, and sports. PE teachers, LSEs and sport coaches should make use of different pedagogical strategies to create a community of practice where every student is valued and included in PE, PA, and sports activities. It also recommends that children with ID be placed in educational settings which are suited to their needs. Lastly, while acknowledging the educational gap in Malta, stakeholders emphasised the importance of having every member of the community involved in the relevant decision and policy making, including the children with ID themselves, to truly achieve an inclusive environment for PE, PA, and sports for children with ID.

Keywords: Inclusive Physical Education, Intellectual Disability, Secondary Education, Adapted Physical Activity, Inclusive PA, Inclusive Sport

Dedication

To my late grandparents, who were always there for me throughout my life.

To every child with ID who is struggling to be accepted in inclusive PE, PA, and sports.

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Definition of Key Terms

It is fundamental to define the key terms used in this study to make it easier for the reader to understand the context. The following key terms are defined below:

1. Intellectual Disability (ID)
2. Quality Physical Education (QPE)
3. Inclusion PE, PA, and Sports
4. Individualised Education Plan (IEP)
5. Adapted Physical Education (APE)

Defining Intellectual Disability

Intellectual disability (ID) also known as intellectual developmental disorder (IDD) is a neurodevelopmental disorder which affects the neurological and intellectual growth of an individual (American Psychiatric Association (APA), 2013). Neurodevelopmental disorder is defined as a complex human condition, which affects an individual's intellectual development, resulting in social, behavioural, and psychomotor skills deficiencies (Mullin et al. 2013). It is important to note that individuals with ID may also be diagnosed with another neurodevelopmental disorder such as autism spectrum disorder (ASD), Down Syndrome (DS) and attention deficit hyperactivity disorder (ADHD) among other conditions (APA, 2013). For the purpose of this study ID will also refer to children on the ASD, DS and ADHD spectrum.

Quality Physical Education

Quality Physical Education (QPE) is an integral part of the curriculum which focuses on an enriching and inclusive environment from early childhood education up to the secondary school years. The main goal of QPE is to assist students with or without ID to develop holistically and to promote lifelong PA participation in line with their abilities. Thus, QPE provides students with tailor-made lessons to develop their motor skills, improve their cognitive abilities, learn how to cooperate and communicate with other peers and enhance their psychological aspects (UNESCO, 2015b).

Inclusion in PE, PA, and sports

Inclusion refers to equal opportunities being presented to students with or without ID, eliminating discrimination or prejudice. This means that students learn together in an environment where everyone is accepted and valued. It is not the students who are forced to change their behaviour; it is the school or sport club which needs to adapt and create an environment suitable for their diverse needs. Moreover, inclusion should provide opportunities for students with ID and their typically developing peers to collaborate, create strong bonds and improve physical and cognitive competence (National Center on Health, Physical Activity and Disability, (NCHPAD), 2016).

Individualised Education Plan (IEP)

The IEP is an essential document containing individualised guidelines and recommendations for students with Special Educational Needs (SEN). These guidelines are discussed with the student's teachers and parents / guardians to determine the course of action to take during lessons. The document will highlight the student's strengths and weaknesses and set targets for the student with ID to enable them to reach their potential in a mainstream setting (MacLead et al, 2017).

Adapted Physical Education (APE)

Adapted physical education (APE) is modified physical education lessons where the PE teacher plans tailormade exercises and activities to meet the diverse needs of students with disabilities. Thus, the aim of APE is to provide students with various disabilities the opportunity to participate in PE lessons within the “least restrictive environment”, develop social, physical, and cognitive skills and be successful in line with their abilities (Yun and Beamer, 2018, p.8).

Glossary

ADHD – Attention Deficit Hyperactivity Disorder

APA – Adapted Physical Activity

APE – Adapted Physical Education

CPD – Continuous Professional Development

EBD – Emotional and Behavioural Disorder

GPE – General Physical Education

ID – Intellectual Disability

IEP – Individual Educational Plan

IPA – Interpretivist Phenomenological Analysis

LOFs – Learning Outcome Frameworks

LRE – Least Restricted Environment

LSE – Learning Support Educator

MVPA – Moderate to Vigorous Physical Activity

PA – Physical Activity

PE – Physical Education

PD – Professional Development

QPE – Quality Physical Education

SEN – Special Education Needs

SMT – Senior Management Team

SO – Special Olympics

SOM – Special Olympics Malta

SRM – Social Relational Model

TA – Teaching Assistance

TDPs – Typically Developing Peers

TDSs – Typically Developing Students

TGFU – Teaching Games for Understanding

UOM – University of Malta

WHO – World Health Organization

Chapter 1: Introduction¹

1.1 Introduction

This research study explores and evaluates how Physical Education (PE), Physical Activity (PA) and sports participation could be promoted and made more inclusive for students with an intellectual disability (ID) within schools and the wider community in Malta.

This introductory chapter gives an overview of the study. Section 1.2 explains the motivation behind my choice of research subject. Section 1.3 defines disabilities referring to the different models of disability. Section 1.4 provides the rationale behind the study and provides the background to the research topic, including a thorough conceptualisation of inclusion, the debates encompassing inclusive education, the inclusion in physical education, highlighting key policies, guidelines and recommendations for inclusive PE, PA and sports. Section 1.5. focuses on the development of inclusion in PE, PA, and sport in Malta, while section 1.6 addresses the school settings in Malta. Section 1.7 highlights this study's aims and objectives and presents the overarching research questions that served as the foundation of the research. Section 1.8 outlines the chapters of this dissertation.

1.2 Personal motivation²

Most of the research carried out within this field is conducted from the stakeholders' or the parents' / guardians' perspective (Morley et al., 2005; Hodge et al., 2009; Özer et al., 2013; Lieberman et al., 2017; Maher, 2017 and Qi, Wang and Ha, 2017) and not from the perspective of students with ID. I wanted to undertake research that

¹ This chapter will be published in the Palgrave Encyclopedia of Disability

² For more details about my personal motivation refer to appendix 25

empowers these students and that would allow them to voice their concerns regarding the barriers to and benefits of inclusion in PE, PA, and sports.

Thus, wanting to create a more inclusive PE, PA, and sports community and provide equal opportunities to students with and without ID, I embarked on this journey to (a) create more social awareness and promote inclusive PE, PA and sports in a mainstream setting; (b) address barriers and any other challenges which might prevent students with ID from participating freely in inclusive PE, PA and sports; (c) discuss concerns with academic, educational and government stakeholders and come up with strategies to assist PE teachers, LSEs, and sports coaches to create an inclusive environment; and (d) promote a community of practice to eliminate discrimination and improve participation.

1.3 Conceptualising disability

The conceptualization of disability has been framed through various models each offering distinct perspectives on its nature and causes, as well as on the interventions required to address it. Understanding these different ideas is critical for shaping inclusive education policies, support the development on students with intellectual and/or physical disabilities, enhancing the knowledge and understanding of teachers and other educators working alongside students with disabilities, developing a positive learning experiences for both students with and without a disability, and refining pedagogical and instructional strategies for teaching students with disabilities (Haslett and Smith, 2020; Heagele and Hodge, 2016).

The four models of disabilities which will be discussed in this section and referred to in the discussion chapters of this study are the (a) medical model; (b) social model; (c) social relational model (SRM); and (d) human rights model of disability.

1.3.1 The medical model

Dominated in Western culture (Bogart and Dunn, 2019), the medical model positions disability as an issue rooted in the individual (Carlson, 2010), defining it as “a defect in, or a failure of, bodily system that is inherently abnormal and pathological” (Goodley, 2016, p7). Barnes and Mercer (2003) describe the medical model of disability as encompassing three key dimensions. First, disability is viewed as an inherent characteristic or individual trait. Second, it considers how disability impacts an individual's ability to function within society. Finally, it emphasizes the medical interventions required for a person with a disability to function effectively within their community. This model asserts that an individual's impairment leads to disabilities, which are perceived as challenges that hinder their ability to perform everyday activities (Fitzgerald and Long, 2017). Thus, the medical model argues that disability is a result of a psychological and/or physiological abnormality (Retief and Letšosa, 2018; Carlson, 2010) that can only be supported through medical and/or psychological interventions (Haslett and Smith, 2020; Fitzgerald and Long, 2017). This model thus, requires medical specialists to diagnose, treat and support rehabilitation for individuals with a disability to live a ‘normal’ and have a functional life in society (Bogart and Dunn, 2019; Fitzgerald and Long, 2017). Also referred to as the “personal tragedy” (Fitzgerald and Long, 2017, p.127) this model is regarded as effecting the individual with a disability negatively and thus needs to be “prevented and, if possible cured” (Carlson, 2010, p5).

Even though this model highly influenced the medical advancement (Haslett and Smith, 2020), it still faces a lot of criticism specially from the activists and academics working in the disability field (Goodley, 2016). Firstly, since this model takes a

pathological stance, it does not view “disability as a continuum” (Haslett and Smith, 2020, p.49), and thus, does not take a holistic view of what could influence the individuals’ function in society. Moreover, the medical model relies on what is assumed to be normal and abnormal thus “the disabled (not normal)” are seen to have defects which contributes to lack of power in the community whereas the “able (normal) gain power” (Haslett and Smith, 2020, p.50). These negative perceptions surrounding disability brought about by the medical model, highlights the individuals’ limitations rather than their abilities (Fitzgerald and Long, 2017; Fitzgerald, 2006). Thus, this model influences the provision provided to individuals with a disability in PE, PA, and sports (Fitzgerald and Long, 2017, p.127), as it is assumed that individuals with a disability will not be able to sustain the “physical demands” brought about by PE, PA, and sports participation. Consequently, individuals with a disability are either being segregated, provided special provision or just not included in any PE, PA, and sports activities (Fitzgerald and Long, 2017). With this respect, Humpage (2007) asserts that medical professionals should be considered the experts to diagnose and treat illness however should not be given the right to decide on how individuals with disability be integrated and included in the community. Considering the challenges associated with the medical model and the increasing criticism it has drawn, alternative perspectives have been developed, including what is commonly known as the social model of disability (Haslett and Smith, 2020).

1.3.2 The social model

Rooted in the “British disability rights organisation – Union of the Physically Impaired Against Segregation (UPIAS)” (Haslett and Smith, 2020, p.50), the late 20th Century saw the development of the social model which presented an alternative view on

disability (DePauw, 2023; Retief and Letšosa, 2018). The main idea was to develop a model which could eliminate any form of discrimination and enhance quality of life (Barton, 2009). Contrary to the medical model which perceived disability “as an abnormality” to the individuals’ body and/or mind (DePauw, 2023, p.11), the social model asserts that society is the main cause of disability through societal barriers and systemic oppression (Bogart and Dunn, 2019; Goodley, 2016; Haegele and Hodge, 2016). Therefore, in this case disability is caused by environmental inaccessibility and societal discrimination towards individuals with different impairments (Bogart and Dunn, 2019; Oliver, 1990). With this respect, the social model distinguishes between the concepts of impairment and disability, asserting that impairment does not inherently result in disability (Haslett and Smith, 2020; Haegele and Hodge, 2016). Impairment is viewed as a biological condition, whereas disability is subject to a social construct (Haslett and Smith, 2020).

As noted in Palmer and Harley (2012, p.358) “impairment itself is not important, but rather accommodations made for persons to function in society determine, and therefore are able to ameliorate, disability (e.g. change in attitudes, physical accessibility)”. Therefore, individuals with impairments may be disabled by “disabling environment within society” (Fitzgerald and Long, 2017, p. 128), which excludes individuals from being active participants in the community (Fitzgerald and Long, 2017; Haegele and Hodge, 2016; Palmer and Harley, 2012; Barton, 2009). By highlighting how disability is socially constructed (Palmer and Harley, 2012), the social model does not constitute solutions through medical interventions but by removing “disabling barriers such as inaccessible transport, buildings and amenities, lack of opportunity and prejudicial attitudes” (Fitzgerald and Long, 2017, p.128). As a result, the “Disability

Movement” was initiated to provide individuals with disabilities a platform to express their concerns, address challenges and oppression, and advocate for improved services (Barton, 2009, p.42). This movement aimed to empower and inspire individuals with disabilities, fostering a sense of belonging, competence, and autonomy, while enabling them to play an active role in society (Barton, 2009).

Efforts have been directed toward understanding the abilities of individuals with disabilities and implementing adaptations to enhance access and opportunities for PE, PA, and sport participation (DePauw, 2023). Thus, in the context of PE, PA, and sport, the social model of disability encourages those managing facilities and activities to break down barriers and assess how their programs, staff, resources and equipment being used, may hinder rather than promote participation of individuals with disability (Fitzgerald and Long, 2017). Therefore, the aim is to eliminate social barriers which are creating challenges and difficulties for individuals with a disability to participant in PE, PA, and sport activities (Haslett and Smith, 2020).

While the social model has been effective in combating discrimination and marginalization and empowering individuals with disabilities to assert their rights in society (Retief and Letšosa, 2018), it has faced significant criticism from various perspectives (Haslett and Smith, 2020). One of the main criticism is that the social model does not account for the experiences of individuals with disabilities in relation to other aspects of their identity, such as gender, ethnicity, or sexism. Additionally, while the social model emphasizes the need for societal change to support individuals with disabilities (Fitzgerald and Long, 2017; Palmer and Harley, 2012) the concept of intersectionality suggests that this alone may not be sufficient (Haegele and Hodge, 2016). Fitzgerald (2006) argues that society would also need to address other forms

of prejudice, as individuals with disabilities may possess additional characteristics that are often subject to social oppression. Another criticism is that a better understanding of disability and impairment is highly necessary (Thorneycroft, 2024; Thomas, 2014). As noted in, Haslett and Smith (2020, p.52) “the social model makes no attempt to conceptualise the many components of disability”. Furthermore, Thorneycroft (2024), believes that the social model should move beyond the notion of social oppression and focus on ableism and disablism to give a broader and more detailed understanding of disability. This would mean referring to ableism as the social mechanisms that limits individuals within society (Thorneycroft, 2024) and disablism as “discriminatory, oppressive or abusive behaviour arising from the belief that disabled people are inferior to others” (Miller, Parker and Gillinson, 2004, p.9)

Although the social model and the medical model represent opposing perspectives, they share similar limitations in explaining and understanding disability. Both models conceptualize disability as a problem, whether it is seen as an issue with the body or with society (Haslett and Smith, 2020).

1.3.3 The social relational model

While the medical and social models view "disability, disablism, and impairments" as conditions stemming from the individual (Haslett and Smith, 2020, p.53), the Social Relational Model (SRM) argues that these concepts arise from social relations (Thomas, 2007). SRM turns its attention on how disablism is perceived and takes a unique stance to explain it. Thomas (2012) refers to disablism as an unnecessary restriction imposed by society on the life activities, aspirations, and psycho-emotional well-being of individuals labelled as ‘impaired’ by those considered ‘normal’. Furthermore, Reeve (2014) and Thomas (2010, p.37) suggest that “Disablism is social

– relational in character and constitutes a form of social oppression in contemporary society – alongside sexism, racism, ageism and homophobia.”

In SRM, the intrapersonal aspect is not the primary cause of oppression but rather a consequence of oppressive interpersonal relationships and community structures (Haslett and Smith, 2020; Riendal, 2008). As Reeve (2014) explains, social oppression can arise from several sources: psycho-emotional disablism, where oppression occurs at a social or cultural level; structural disablism, where individuals face exclusion due to inaccessible facilities or educational opportunities; and internalized oppression, where self-perception and internal beliefs contribute to the experience of oppression. Furthermore, Reeve (2014) identifies two distinct sources of psycho-emotional disablism, categorizing it as either direct or indirect. Direct psycho-emotional disablism refers to discrimination and negative interpersonal experiences (Haslett and Smith, 2020). Being ignored or devalued in a social context, “experiencing patronizing comments” or receiving odd or judgmental looks are experiences that could lead to “emotional distress” (Haslett and Smith, 2020, p.53). On the other hand, indirect psycho-emotional disablism is linked to “the experience of structural disablism, recognising the psycho-emotional consequences of exclusion and discrimination” (Reeve, 2014, p.93). Thus, it refers to when a person feels discriminated or humiliated due to inaccessible facilities.

An individual's psychological state can be affected by negative social interactions, attitudes, and discourse. These influences could contribute to the lack of self-efficacy, confidence, and self-esteem, potentially resulting in decreased participation or complete withdrawal from PE, PA, and sports (Haslett and Smith, 2020). Therefore, rather than focusing on what these individuals can do, the psycho-emotional

perspective focuses on what disabled individuals can become (Haslett and Smith, 2020; Goodley, 2016).

In addition to define and expand the understanding of disablism, the SRM seeks to provide a clearer understanding of impairment. According to Thomas (2014), impairment and disablism cannot be separated and thus it is important to examine the relationship between the two. For this reason, Thomas (2010, p.37) introduced the concept of "impairment effects," noting that physical, intellectual, and sensory impairments can directly or indirectly influence an individual's daily life, while still emphasising the importance of prioritizing the effects of disablism driven by social mechanisms (Townsend, Cushion and Smith, 2017; Thomas, 2014). Thus, disablism cannot be fully understood without analytically addressing impairment effects (Thomas, 2010). In this regard, the SRM allows scholars to differentiate and examine the oppressions and barriers within the community that originate from impairments (impairments effects) and those resulting from socially imposed limitations (Townsend, Cushion and Smith, 2017). Thus, this model allows scholars to explore the distinction between an individual's experiences of social limitations resulting from the impairment effects and the externally imposed social restrictions present within the community (Reindal, 2008). Individuals with disabilities are continually striving to obtain greater autonomy and rights within their communities (Barton, 2009) which turns our attention to the last disability model explored in this chapter.

1.3.4 Human rights model of disability

The final disability model examined in this chapter is the human rights model. This model is grounded in "rights-based principles," which emphasize various policies, laws, and legislations, including: (a) the Rehabilitation Act of 1973, highlighting the necessity

of equality in school and extracurricular PA and sports for children with disabilities; (b) the Individuals with Disabilities Education Act (IDEA) of 1990, designed to ensure that students with disabilities receive free education tailored to support their learning and developmental needs; (c) the Americans with Disabilities Act of 1990, which mandated that PE equip students with disabilities with the skills needed to engage in community-based physical activities; and (d) Every Student Succeeds Act of 2015, which affirmed the right of students with disabilities to access high quality PE (Winnick and Porretta, 2016). Since not all countries had policies safeguarding the rights of individuals with disabilities, the UN (2006) established the Convention on the Rights of Persons with Disabilities (UNCPRD) followed by UNESCO's (2015a) publication of the International Charter of Physical Education and Sport. Both are discussed later in the chapter. In addition, the UNESCO (2017) Kazan Action Plan makes provision for disability by establishing three main policy areas as seen in Table 1.

Table 1: UNESCO (2017) Kazan Action Plan main policy areas

Kazan Action Plan	
Main Policy Area	Description/ Recommendations
Area 1: “Developing a Comprehensive Vision of Inclusive Access for All” (UNESCO, 2017, p.7)	This policy area strengthens the right to participate in PE, PA, and sport by linking it to the Sustainable Development Goals issues by UN in 2015. It highlights the importance of establishing new collaborative work with different stakeholders, reaffirming the role of PE, promoting gender equality, supporting the involvement of youth participation in policymaking, and ensuring inclusivity in future programs (UNESCO, 2017).
Area 2: “Maximizing the Contributions of Sport to Sustainable Development and Peace” (UNESCO, 2017, p.9)	The second policy area connects the recent advancements achieved in the field of PE, PA, and sport, following the 2013 Declaration of Berlin, which highlighted the importance of recognizing sport as a fundamental human right, increasing

	financial investment in PE, PA, and sports programs, and safeguarding sport integrity (UNESCO, 2013), with the “2030 Agenda and the Sustainable Development Goals” (UNESCO, 2017, p.9).
Area 3: “Protecting the integrity of Sport” (UNESCO, 2017, p.12)	The third policy area focuses on the importance of creating a safe environment for every group member in the community involved in PE, PA, and sport in which human rights are fully adhered to and respected. Moreover, it highlights the significance of fostering respect, integrity, and positive relationships in sports to promote a sustainable, inclusive community for all (UNESCO, 2017).

(Source: UNESCO, 2017)

Disability should not be viewed as a punishment, tragedy, or illness requiring a cure. It is not a matter for charity, patronizing attitudes, or relationships that foster dependence. Instead, it is a fundamental human rights issue (Barton, 2009). When addressing human rights in the context of PE, PA, and sport, scholars argue that even though there is a lot of positive aspects, unfortunately students still experience discrimination and segregation (Lieberman and Block, 2019; Fitzgerald and Long, 2017). Thus, this model often fails to align with reality and can obscure the fact that many children with disabilities lack fair and meaningful opportunities in PA, and sports (Pearce and Sanderson, 2024). When sport is offered, children with disabilities are frequently segregated from their TDPs. Therefore, the human rights model should aim at eliminating discrimination to ensure that students with and without disabilities have equal experiences when participating in PA, and sport (Pearce and Sanderson, 2024).

1.4 Background of the study

Children who are diagnosed with ID experience difficulties with cognitive processes, social difficulties due to lack of communication skills and motor skill limitations due to

their “neurodevelopmental” disorder (Mullin et al., 2013, p1). The aetiology of ID can either be a genetic malfunction in neurodevelopment, an environmental incident, or a combination of both (American Psychiatric Association (APA), 2013). As a result of their condition, children with ID experience low levels of PA when compared to their typically developing peers (TDP) (Stanish et al., 2019; Golubović et al., 2012). To the best of my knowledge, prevalence data of level of participation for children with ID in Europe are limited, but some relevant research studies have been carried out in Iceland and New England. Einarsson et al. (2015) found that Icelandic secondary school children tend to be 40% more active than their peers with ID during the week. Furthermore, children with ID in Iceland spend approximately 9% more of their time being sedentary than their TDP (Einarsson et al., 2015). A similar study conducted in New England found that children with ID tended to be 38.8% less active than their TDP (Stanish et al., 2019). A study involving 68 participants with “moderate - to - severe ID”, aged between 2 and 18 years, highlighted that 53% did not meet the WHO PA daily (Wouters, Evenhuis and Hilgenkamp, 2019, p. 137). According to a WHO (2020) report, participating in 60 minutes of moderate to vigorous physical activity (MVPA) daily can improve the physical condition and cognitive state of children and adolescents aged from 5 to 17 years. Therefore, this sedentary behaviour and lack of PA levels lead to health concerns, which is more alarming in children with ID as they are born with more health complications than TDP (Oeseburg et al., 2011). These health concerns include musculoskeletal and respiratory problems that increase the risk of stroke and angina pectorals (Phillips and Holland, 2011; Blick et al., 2015; Chow et al., 2016; Collins and Staples, 2017). Therefore, it is essential that children with ID are given equal opportunities to participate in PE, PA, and sports. Literature states that children with ID

who are given the opportunity to participate in regular PA, both in school and outside the school community, experience social and physiological benefits (Lante et al., 2011; WHO, 2020; Kreinbucher-Bekerle et al., 2023), a reduction in chronic illnesses and diseases and an improvement in mental health (Lin et al., 2010; Lante et al., 2011; Chow et al., 2016; WHO, 2020).

Although these benefits are widely promoted and highlighted as being essential for the development of children with and without ID, children with ID still struggle to be included in PA when compared to their TDP (Wouters et al., 2020). The lack of facilities and accessibility (Stanish and Frey, 2008; Pochstein, 2022), hostile environments that marginalise children with ID (Einarsson et al., 2016), sport coaches' and PE teachers' lack of knowledge (Stanish and Frey, 2008), limited support from parents/guardians (Lin et al., 2009; Lante et al., 2011), the lack of motivation on the part of the children with ID (Blick et al., 2015) and their lack of physical attributes and abilities (Wouters, Evenhuis and Hilgenkamp, 2019), the lack of professionals working within the field (Pochstein et al., 2023) and the lack of consideration in national PE, PA, and sports policies across Europe (Kreinbucher-Bekerle et al., 2023) are factors that contribute to the disparity in PE, PA, and sports participation of children with ID when compared to their TDP. Thus, more legislation and policies to make PE, PA, and sport more inclusive and accessible for children with ID are required. Such policies would go a long way to help promote and guide entities and schools on how best to create PE, PA, and sports opportunities for children with ID (Kreinbucher-Bekerle et al., 2023). However, before we consider policies and legislations it is essential to understand the concept of inclusion.

1.4.1 Conceptualising Inclusion

The conceptualization of inclusion has been an evolving process, particularly in educational contexts, where the need to support diverse learners has become increasingly recognized (Meda et al. 2023; Obrusnikova and Block, 2020; Vickerman and Maher, 2019; Kiuppis, 2018; UNESCO, 2017). Inclusion can be understood through two distinct perspectives: the descriptive definition, which explains how inclusion is implemented in practice, and the perspective-based definition, which reflects personal ideologies about inclusion and expectations for its application by others (Ainscow, Booth and Dyson, 2006). Education plays a crucial role in shaping communities and societies (Westwood, 2018), equipping students with the knowledge, skills, and attitudes necessary to lead meaningful lives and actively contribute to society (UNESCO, 2017). An individual's self-perception and self-worth grow when they experience a sense of belonging, respect, and value (Meda et al. 2023; Obrusnikova and Block, 2020). As a result, inclusive education has become a key focus of government agendas, emphasizing students' fundamental right to learn in mainstream settings alongside peers without disabilities (Liasidou, 2015).

Although widely discussed and a topic of significant interest, inclusive education raises the debated question of how effectively education can contribute to building a society that is free from discrimination and oppression (Barton, 2009). Historically education has been defined by segregation, marginalization of minorities, and inequalities, which hindered equal access for students from diverse backgrounds and abilities, moving away from the core concept of inclusion (Meda et al. 2023).

1.4.1.1 Debates in inclusive education

The 1950s, saw a great increase in the placement of students with mild disabilities in mainstream schools. This educational shift was referred to as integration, where the three main pillars were; (a) “rights to schooling and education for disabled children”; (b) “rights to education in local schools”; and (c) “total reorganisation of the special education system” (Vislie, 2003, p.19). This introduction to general schooling was brought about with the introduction of policies and legislative mandates issued both on a supranational level and macro level (Kirk, Macdonald and O’Sullivan, 2006). However, integration led to struggles and challenges, as schools were not sufficiently prepared to support students with diverse needs. These students were accepted by educators and their TDPs as long as they did not disrupt others and adhered to the norms of the school community (Obrusnika and Block, 2020). However, if they were unable to keep up with their TDPs, exhibited behavioural issues, or had disabilities deemed too severe for a general educational setting, these students were marginalized and redirected to home schooling or special education institutions (Obrusnika and Block, 2020; Vislie, 2003). This meant that students with severe disability who did not conform with the socially accepted norm imposed by the educational system, were often segregated in special schools (Obrusnika and Block, 2020; Vislie, 2003). Therefore, this emerging educational approach focused on forming distinct groups by placing students in special classrooms based on their abilities (Goodwin, Watkinson, and Fitzpatrick, 2003). At this stage the primary goal of the educational system was to integrate students with disabilities into mainstream schools, which required schools to create spaces where these students could interact and socialize with their TDPs (Castillo Rodriguez and Garro-Gil, 2015). Therefore, the introduction of integrating

students with disabilities in mainstream and general education required a thorough reassessment of school structures and curriculum content (Obrusnika and Block, 2020). However, the integration of students with disabilities and the provision of special education raised several concerns. One concern was that students with disabilities continued to be marginalized and taught in separate environments from their TDPs (Vislie, 2003). Another major issue was that placing students with disabilities in special education settings could limit their opportunities and restrict access to further educational opportunities (Obrusnika and Block, 2020; Rodriguez and Garro-Gil, 2015).

These concerns highlighted the need for a reassessment of the educational system, advocating for a broader and more inclusive vision. This shift marked the transition from integration to inclusive education which occurred in the 1990s with the launch of two key initiatives (Graham, 2020). The first was the "World Conference on Education for All" in 1990 (Miles & Singal, 2010), which was a milestone in the field of inclusive education as it brought to light the importance of extending inclusive education beyond mainstream schooling and moving towards a holistic inclusive community (Miles and Singal, 2010). This conference paved the way to other legislation, policies and conventions related to inclusive education and the rights of individuals with ID and other marginalised populations. One of the most influential educational conventions was held in Salamanca, Spain, in 1994. This convention brought together representatives from ninety-two countries and twenty five international organisations to discuss and develop guidelines and recommendations aimed at facilitating learning for individuals of all ages and of diverse abilities within mainstream educational settings (Graham, 2020; Castillo Rodriguez and Garro-Gil, 2015). At the heart of this convention

was the concept that education is a fundamental human right. During this discussion, stakeholders emphasised the importance of providing children free access to education in mainstream schools, regardless of their age, gender, cultural background, social status, physical and cognitive abilities, or race (UNESCO, 1994). One of the key guidelines indicated was that academic and educational stakeholders should design curricula and syllabi which are sufficiently adaptable and flexible to reach every learner in class (UNESCO, 1994) and were, thus, able to cater for the diverse needs of students in mainstream settings. The aim was to reduce discrimination in academic and educational institutions and create a positive and inclusive environment within which students with and without disabilities could learn and develop harmoniously (Obrusnikova and Block, 2020; Lieberman and Block, 2019; Barton, 2009).

Furthermore, it was recommended that governments globally provide more financial support, provide better professional development programmes for teachers and any other professionals working within the field of inclusive education and strive to create collaborations with parents to facilitate learning and create a bridge between home and the educational setting. This framework also highlighted the importance of having global organisations and stakeholders working together and promoting inclusive education in their conferences, seminars, and forums to enhance social awareness and create more pressure on academic and educational systems globally (UNESCO, 1994).

This convention saw the start of a global evolution towards inclusion. Countries started including education for students with disabilities in political agendas, policies, and legislation (Vickerman and Maher, 2019). However, the concept of inclusive education raised concerns about whether mainstream schooling was a more suitable placement

for students with disabilities compared to special education (Zigmond, 2003). For inclusive education to work, the curricula needed a revamp and teachers and educators needed to learn and adapt strategies that allowed for differentiated learning (UNESCO, 2005). Thus, to further support governments and educational policymakers, UNESCO (2005) issued a set of guidelines that aimed to eliminate discrimination and embrace diversity in mainstream educational settings. These guidelines suggested that apart from “putting in place recently - developed inclusive policies”, educational institutions responsible for primary, secondary, and tertiary education, shift their ethos and culture towards a more inclusive environment, where every student was given the opportunity to learn and develop (UNESCO, 2005, p.20). Without such changes, the success of inclusive education would not have been possible (Wright, 2004). Inclusion is not a standalone process; it demands modifications and improvements to the educational system to guarantee that all students within the general educational setting are supported, irrespective of their abilities (Weddell, 2008). However, Castillo Rodriguez and Garro-Gil (2015), argues that mainstream education may not be the most suitable option for every student with a disability. This is because special education teachers possess greater expertise and are better equipped to recognize individual differences (Zigmond, 2003). Despite their best efforts and quality instruction, some students may struggle to learn at the same pace as their peers, they may require additional time to grasp certain concepts, and they may need to be taught material that is not typically found in the standard curriculum. To try to minimise this challenge the Individualised Educational Program (IEP) was initiated for children with disabilities, allowing the creation of tailored instructional plans to address each students’ unique needs (Zigmond, 2003).

When considering educational placement, it is important to remember that education must be individualised, rather than a one-size-fits-all approach, whether it is special education or mainstream education (Castillo Rodriguez and Garro-Gil, 2015). Each student learns and processes information differently, so educators must tailor their teaching to meet the needs of every student in the classroom (Vickerman and Maher, 2019; Lieberman and Houston-Wilson, 2018).

1.4.1.2 Debates in inclusive physical education

The inclusion of PE for students with disabilities in mainstream education aligns with the global movement toward fostering more inclusive communities, enabling students with ID and other forms of disabilities to learn and grow alongside their TDPs (UNESCO, 2015a; UNESCO, 2005). Like any other subject within the educational curriculum, inclusive PE is a fundamental human right and must offer appropriate opportunities for students with diverse needs (UNESCO, 2015a).

While the provision of inclusive PE in mainstream settings offered physical, social, and psychological benefits for both students with and without disabilities (Pocock and Miyhara, 2018), concerns regarding the placement of students with ID and other disabilities in mainstream inclusive PE grew (Fitzgerald and Kirk, 2009; Goodwin, Watkinson and Fitzpatrick, 2003). Concerns on how best to offer and implement inclusive PE amongst PE teachers and school administrators persist (Pocock and Miyahara, 2018). Unfortunately, the provision of adapted PE teachers is limited (Goodwin, Watkinson and Fitzpatrick, 2003) leaving general PE teachers with the responsibility to plan and deliver adapted PE lesson to reach every student in class (Vickerman and Coates, 2009). Therefore, inclusive PE could be achieved through the implementation of effective pedagogical strategies designed to meet the diverse needs

of all students (Vickerman and Maher, 2019; Lieberman and Houston-Wilson, 2018). To assist in creating an inclusive environment suitable for every student in class, Vickerman and Maher (2019, p.116) propose the “eight P framework” which will be discussed next.

1.4.1.3 Adapting the ‘Eight P Framework’ in inclusive PE

The ‘Eight P Framework’ presents key concepts related to inclusive PE provision (Vickerman and Maher, 2019). These concepts are valuable for supporting PE teachers, policymakers, and other stakeholders in PE, PA, and sport, helping them provide students with ID a positive learning experience. Thus, this framework helps create a positive inclusive environment that fosters development and ensures high-quality participation in PE, PA, and sport, while also tackling the complexities associated with inclusive PE (Vickerman, 2007).

The first aspect within the framework relates to the ‘philosophy’ underpinning inclusion. The philosophy of inclusion is enshrined in human right policies, suggesting that inclusion is a fundamental human right eliminating discrimination and promoting equality (UNESCO, 2015a). Inclusive PE, PA, and sport are guided by a philosophy that advocates for empowering individuals of all abilities by offering them opportunities to take part in decision-making, engage in meaningful activities, and achieve a sense of accomplishment (Kasser and Lytle, 2013). It is essential for PE teachers, and anyone involved in planning and delivering PE, PA, and sport activities to understand the philosophical principles of inclusive education and how human rights are upheld through both “statutory and non-statutory” frameworks (Vickerman and Maher, 2019, p.117). Furthermore, educators working with students with ID must understand how to

empower these students to express their views and share their experiences (Vickerman and Maher, 2019; Vickerman, 2007).

The second aspect within this framework is 'purposeful'. This refers to the reflections done by the PE teacher on how inclusive education will be achieved to fulfil the requirements of students with ID. To achieve this, educators must reflect on their personal philosophical stance to develop a clear understanding of the debates surrounding inclusive PE, PA, and sport. PE teachers and other stakeholders in the field need to adopt a holistic perspective, enabling them to evaluate past and present practices to effectively include students with ID in PE, PA, and sport (Vickerman and Maher, 2019; Vickerman, 2007).

The third aspect within this framework is 'proactive', meaning PE teachers need to be "proactive in the development, implementation, and review of inclusive PE", through open dialogue and consultations with other stakeholders and experienced educators (Vickerman and Maher, 2019, p.117). It is crucial that PE teachers receive the support and assistance they need, along with opportunities to "share good practices" with their colleagues (Stevenson, 2009, p.120). This approach ensures that the perspectives and opinions of all individuals involved in inclusive PE, PA, and sport, including students with ID, are valued and acknowledged. Which takes us to the forth aspect of this framework - 'partnership'. This involves promoting a collaborative approach built on strong partnerships, shifting away from isolated practices. PE teachers must recognize the needs of students with ID by creating opportunities for them to voice their concerns, challenges, and requirements. By doing so, PE teachers can create an inclusive environment that is conducive to students with ID (Vickerman and Maher, 2019; Vickerman, 2007).

The fifth aspect within this framework is 'process'. PE teachers are responsible for analysing and evaluating situations where activities fail to engage every student in the class. This process requires time and patience, as teachers must dedicate themselves to adapting and modifying strategies to ensure that students with ID have full access to the PE curriculum (Vickerman and Maher, 2019; Vickerman, 2007). Recognizing that inclusive PE for students with ID is an evolving process is essential, making regular reviews necessary to achieve the goals and objectives of inclusive PE. It may also involve trial and error; however, a PE teacher must be ready to challenge existing strategies and adopt new ones, engage in discussions and share concerns with colleagues and other stakeholders, learn from past experiences, and refrain from using a one-size-fits-all approach to teaching (Vickerman and Maher, 2019; Vickerman, 2007).

The sixth aspect within this framework is 'policy'. "Inclusion is reflected within policy documentation, as a means of monitoring, reviewing and evaluating delivery" (Vickerman and Maher, 2019, p.118). This focuses on holding individuals accountable for their practices and evaluating whether they are adhering to inclusive practices within their institutions (Vickerman and Maher, 2019).

The seventh aspect within this framework is 'pedagogy'. This refers to the effective pedagogical practices adopted by PE teachers, sport coaches and any other stakeholders within the field (Vickerman and Maher, 2019). Using different pedagogical strategies to reach every student in class is essential in providing students with quality PE lessons (Kiuppis, 2018; Lieberman and Houston-Wilson, 2018). By creating a positive experience, students with ID would be more likely to engage in PA and sport participation outside school (Kiuppis, 2018). One of the strategies that can be used is

the inclusion spectrum, which is a unique tool that assists PE teachers and sport coaches in adapting activities to suit the students' abilities and reach the aim of the students' Individualised Education Plan (IEPs) (Grenier, Miller and Black, 2017).

The inclusion spectrum consists of five pillars (table 2) which complement one another to create an optimal learning environment for every student in class. Using this pedagogical tool, the PE teacher or sport coach can enhance collaborative learning by encouraging students with and students without disability to work together as a unit and they can modify activities to reduce barriers and promote participation.

Table 2: The five pillars that make up the inclusion spectrum

The Five Pillars	Description
1. Open: Everyone Can Play	• This is when every student in class is doing the same activity without the need to offer extra support to students with ID or modify the activity. • Support might also be provided through a buddy system.
2. Modified: Change to Include	• This is when equipment and the activity structure is modified to allow every student in class to participate at their own pace. • Therefore, at this stage a PE teacher or a sports coach might consider changing rules, and implements pedagogical cues to support students with ID reach their lesson objective.
3. Parallel: Ability Groups	• This pillar consists of grouping students according to their abilities, thus, enabling them to participate in an activity which is in line with their ability. • Thus, working on similar skills but practiced in a way suitable to the students' ability (Grenier, Miller and Black, 2017, p. 54).
4. Separate: Alternate	• This refers to instances when a student with ID requires more work on particular skills. • Thus, when the rest of the class is progressing to a more complex task, the student with ID is focusing on mastering a particular skill.

5. Disability Sport: Adapted Physical Activity	• This refers to the exercises or activities which are planned solely for students with ID.
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(Source: Grenier, Miller and Black, 2017)

However, this can only be achieved if PE teachers, sports coaches, and all those working in the field of PE, PA, and sport are provided with the support and resources necessary to continually enhance their pedagogical strategies (Stevenson, 2009).

The final aspect within this framework is 'practice'. PE teachers must reflect on and analyse their practice to assess its effectiveness and determine whether it successfully meets the diverse needs of their students (Vickerman and Maher, 2019; Stevenson, 2009). Such practices should be structured around student-centred approach keeping students in the heart of the planning process and delivery (Vickerman and Maher, 2019).

Therefore, to offer students with ID a positive learning experience, it is essential to recognize that PE teachers, PA providers, and sports coaches, must be provided with support and training relevant to inclusive education (Stevenson, 2009; Vickerman, 2007). Thus, by adhering to the philosophy of inclusive education, which mirrors the principles of an inclusive society, one that acknowledges, respects, and values diversity while ensuring that individuals and minority groups are neither excluded nor marginalized (Westwood, 2018), the provision of inclusive PE should align with the specific needs and requirements of the students (Vickerman and Maher, 2019).

1.4.1.4 International guidelines for establishing inclusive PE, PA, and Sports for children with ID through Inclusive Education acts.

Guidelines and recommendations on inclusive PE, PA and sports are enshrined in an array of global guidance documents (United Nations (UN), 1948; United Nations Educational, Scientific and Cultural Organisation (UNESCO), 1990; United Nations Educational, Scientific and Cultural Organisation (UNESCO), 1994; United Nations (UN), 2006; UNESCO, 2015 and WHO, 2020).

Inclusive PE has its roots in the Universal Declaration of Human Rights (UN, 1948) that mandates that education be provided to every member within the community as a fundamental human right (Pocock and Miyahara, 2018). Following this declaration, the American Association for Health, Physical Education and Recreation (1952) put forward seven recommendations that outlined the changes and actions required to implement adapted physical education (APE) in regular schools. This was done to ensure the fair and successful inclusion of every student in PE without any prejudice.

During the UN Convention on the Rights with Persons with Disabilities (2006), equal education and academic opportunities were highlighted for children with and without disability. The importance of providing children with disability with free education in mainstream academic settings to ensure that they are integrated in the community was emphasised. To do this, schools had to employ and train teachers in inclusive education, adapted and differentiated learning, to facilitate the development of students with disability. No discrimination was allowed in education and students with disability had to be provided with a safe environment which had useful resources to assist their learning process (UN, 2006).

However, guidelines and recommendations related to inclusive education issued by governments and policymakers failed to discuss inclusive PE, PA and sports (Pocock and Miyahara, 2018) and present specific recommendations for PE, PA, and sports for individuals with ID (Kreinbacher-Bekerle et al., 2023). The first guidelines and recommendations related to PA levels for individuals of all ages with ID was published in 2006 by the Government of New South Wales (NSW). Here it was noted that individuals with ID had to practice at least 30 minutes of MVPA daily (Centre for Developmental Disability Studies, 2006). In 2015, another set of guidelines was developed by UNESCO to assist in the creation of opportunities for people with ID (UNESCO, 2015a). This publication comprised twelve major articles (table 3) each putting forward several recommendations.

The only guidelines related to PE, PA, and sports participation specifically for children with ID aged 5 to 17 years was published by the WHO in 2020. These guidelines, which recommend 60 minutes of MVPA daily (WHO, 2020), provided the backbone of the Malta National Sports Policy (2016) which referred to individuals with special educational needs (SEN) and disability.

Table 3: UNESCO’S Recommendations and guidelines

International Charter of Physical Education, Physical Activity and Sport	
Article Title	Description/ Recommendations
Article 1: “The practice of physical education, physical activity and sport is a fundamental right for all” (UNESCO, 2015a, p.2)	The provision of PE, PA and sport is a fundamental human right, where every member of the community should be able to participate in a safe and welcoming environment. Activities should be planned and organised with the intention of providing individuals with enjoyable and challenging exercises, fostering skill development, promoting and facilitating learning, with the

	possibility of achieving a level of improvement aligned with their abilities (UNESCO, 2015a).
Article 2: “Physical Education, physical activity and sport can yield a wide range of benefits to individuals, communities and society at large” (UNESCO, 2015a, p.3)	In Article 2, UNESCO highlighted the benefits of participating in PE, PA, and sports. These benefits help individuals holistically as participation promotes the development of skills which are required for everyday life, enhances social aspects, improves mental health and psychological wellbeing, and reduces the risks of contracting a non-communicable disease (NCD). Furthermore, PE, PA and sports participation could “contribute to prevention” of substance abuse and alcoholism (UNESCO, 2015a, p. 3).
Article 3: “All stakeholders must participate in creating a strategic vision, identifying policy options and priorities” (UNESCO, 2015a, p.4)	In this publication UNESCO suggests that the provision of PE, PA and sport be promoted by government and educational stakeholders together with private entities. UNESCO emphasises the importance of including PE, PA and sports in policies and legislation and creating a sustainable plan to encourage PE, PA and sports participation among every member of the community. Moreover, stakeholders should support PE, PA, and sports initiatives by providing financial assistance, equipment and resources, and knowledgeable professionals (UNESCO, 2015).
Article 4: “Physical Education, physical activity and sport programmes must inspire lifelong participation” (UNESCO, 2015a, p.4)	Article 4 discusses the importance of lifelong participation in PE, PA, and sports. It provides recommendations on how this could be achieved by providing an enjoyable and positive environment. Here the importance and role of PE lessons is highlighted, as it could be the first steppingstone towards sports or leisure participation. Thus, it is suggested that professional PE teachers be engaged in every school to provide students with quality and inclusive PE lessons.
Article 5: “All stakeholders must ensure that their activities are	UNESCO emphasises the importance of safeguarding the environment, especially when building sports complexes or when providing outdoor PE, PA, and sports activities. Moreover,

economically, socially and environmentally sustainable” (UNESCO, 2015a, p. 5)	PE, PA, and sport activities should organise activities which “ensure a sustainable legacy” through cost effectiveness and environmentally friendly activities which will support social interaction (UNESCO, 2015a, p. 5).
Article 6: “Research, evidence and evaluation are indispensable components for the development of physical education, physical activity and sport” (UNESCO, 2015a, p. 6)	It is imperative that before publishing policies and strategies, governmental, educational, and private stakeholders should do a thorough research gathering data from different quality sources to support their decision making and create activities which reflect the needs of the general population within the community. Moreover, stakeholders should promote research in PE, PA, and sports for a better PE, PA, and sports community.
Article 7: “Teaching, coaching and administration of physical education, physical activity and sport must be performed by qualified personnel” (UNESCO, 2015a, p.6)	UNESCO maintains the importance of having qualified professionals working within the field of PE, PA, and sports and the importance of training provision and continuous professional development training courses, seminars, and forums. Emphasis should be made on inclusive and adapted training for professionals working within the field.
Article 8: “Adequate and safe spaces, facilities and equipment are essential to quality physical education, physical activity and sport” (UNESCO, 2015a, p.6)	The recommendations within Article 8 revolve around the infrastructure and resources used to provide quality PE, PA, and sports activities to different participants within the community with diverse needs. Moreover, the importance of having companies providing employees with PE, PA and sports facilities at their workplace is highlighted as a positive effect to enhance and safeguard the employees’ wellbeing (UNESCO, 2015a).
Article 9: “Safety and the management of risk are necessary conditions of quality provision” (UNESCO, 2015a, p.6)	Article 9 emphasises the importance of providing a “safe environment that protects the dignity, rights and health of all participants”. No discrimination or racism should be permitted, such acts should be condemned with immediate effect. (UNESCO, 2015a, p.7)
Article 10: “Protection and promotion of the integrity and ethical values of physical	UNESCO dissociates PE, PA, and sports from any substance abuse, or any unsportsmanlike behaviour and condemns any form of misconduct.

education, physical activity and sport must be a constant concern for all” (UNESCO, 2015a, p.7)	Fairness and “good governance” should be promoted and should be at the heart of PE, PA, and sports participation (UNESCO, 2015a, p.8).
Article 11: “Physical education, physical activity and sport can play an important role in the realization of development, peace and post-conflict and post-disaster objectives” (UNESCO, 2015a, p.9)	Article 11 suggests that sport should be used as a weapon to combat discrimination, violence and conflict. Sport should promote inclusion of all members of the community with a strong support system for all (UNESCO, 2015a).
Article 12: “International co-operation is a prerequisite for enhancing the scope and impact of physical education, physical activity and sport” (UNESCO, 2015a, p.9)	Stakeholders should take responsibility to collaborate to create sustainable PE, PA, and sports activities to improve “social and economic development” at “international, regional and national level” (UNESCO, 2015a, p. 9).

(Source: UNESCO, 2015a)

1.5. The start of policies and legislation of inclusion in Malta

While global legislation and policies exist to address the rights of children with ID and their involvement in PE, PA, and sport, domestic recommendations and guidelines are needed to promote social change and create inclusive communities. When drawing up national guidelines, global policies and legislation should be referred to ensure standardisation (UN, 2007). Table 4 provides the initial policies and legislation of inclusion in Malta.

Table 4: The start of inclusion in Malta

The start of policies and legislation of inclusion in Malta	
1946	The very first ‘education for all’ framework drawn up in Malta which related to children’s right to a primary school education. This framework provided the foundation for improving and building an inclusive education community in Malta across every subject taught, including PE (Spiteri et al., 2005).

1974	The Education Act of 1974 made schooling of all children a legal requirement, including children with ID and PD (Spiteri et al., 2005). This meant that children with ID and PD were given the right to education either in specialised schools or in mainstream settings (Bartolo, 2001). However, this legislation created two major concerns for teachers and other professionals working within the field; first, that the introduction of special education created the risk of segregation of children with ID and PD; and, the second brought up the question of whether children with ID and PD would fit into mainstream schooling.
1989	The Ministry of Education stipulated that children with ID and PD had the right to attend primary government schools and be given the opportunity to learn and develop alongside peers without disabilities (Spiteri et al., 2005).
1990s	Malta started shifting schools towards an inclusive educational environment by registering more students with ID and PD in mainstream schools (Bartolo, 2001).
1994	Malta joined other countries in signing the Salamanca Statement and Framework for Action on Special Needs Education. This was one of the milestones of the education for all policy and inclusive education in Malta (Spiteri et al., 2005).
1995	To be able to support students with ID and PD and reach the requirements suggested during the Salamanca Congress, Malta developed a new academic role, that of the Learning Support Educators (LSEs), previously known as Facilitators (Bartolo et al., 2002). Their main duty was to support students of diverse needs in mainstream schools; thus, their training had to focus on adaptation and differentiation. This was one of the actions taken in schools to help shift them towards a more inclusive environment.
2002	The National Minimum Curriculum (NMC) issued in 2002 stated that students should be provided with alternative equipment during PE lessons to enable them to be successful according to their competencies (Bartolo et al., 2002).

1.5.1 The evolution of inclusive PE, PA, and sports in Malta

In 2002, the Minister of Education passed a Sports Law ACT XXVI Sports Act in parliament which was unanimously approved. This meant that the national sports entity was given full responsibility to devise and implement sports policies, promote health

and PA, condemn misconduct and discrimination in sports, and provide PE, PA, and sports opportunities to every member in the community (Kunsill Malta għall-iSport (KMS), no date). The law made no reference to children with ID.

To provide PA and sports opportunities for children and older generations with ID, Malta joined forces with a global movement and, in 2000, launched the Special Olympics Malta (SOM) which were fully accredited under Special Olympics International in 2006 (Special Olympics Malta, 2021). The aim of SOM is to offer a holistic development through sport and a healthy lifestyle, organise competitions and instil courage, determination and joy in children and adults with ID (UN, 2015).

Another milestone for children with ID and PD was reached in 2014 when the Parliamentary Secretary for Rights of Persons with Disability (PSDAA) launched the Committee for Sport of Persons with Disability (UN, 2015, p.34). In 2016, the Parliamentary Secretariat for Research, Innovation, Youth and Sport brought together different stakeholders in the fields of sports, health, and education to design a 10-year National Sports Policy Framework that would assist sports clubs and schools develop and improve PE, PA, and sport participation. This policy, which is the first to acknowledge children with ID, supported inclusion through sports by encouraging sports clubs to invite individuals with a disability to participate in activities, take up significant roles in clubs or federations and use sport venues alongside typically developing individuals without discrimination (Ministry for Education and Employment, 2016).

1.6 The Educational and Academic school settings in Malta

Compulsory education in Malta starts for 5 year olds, where parents are obliged to send their children to primary schooling (European Commission 2023). However, for

the purpose of this study, attention will be turned to the middle and secondary school settings.

Middle schools in Malta refer to any teaching and learning provided to children between the ages of 11 to 13 years. Whereas secondary school refers to students who are between the ages of 13 to 15 years. For the purpose of this study, I will be referring to middle and secondary schools as secondary schools. Both middle and secondary schools can be provided to students by three separate educational institutions, all providing mainstream inclusive environments. These are the government/ state schools, church school and private/ independent schools (gov.mt, no date). The main difference between the three settings, lies in financial aspect, students' population, and school ethos. Education and learning at government or church schools are free of charge, with church schools requesting a yearly donation from every student attending the school. However, students attending independent schools, pay for their education, and any other resources, such as stationery, books, uniforms, and extracurricular activities (gov.mt, no date). With this respect, independent schools are more equipped with better facilities, resources such as sports equipment and better infrastructure.

Church schools on the other hand finds its educational roots in catholic church faith. The school ethos embraces diversity, however students can only enrol in these schools if they are chosen from the Diocese draw, if one of the parents work in one of the church schools and if a sibling is already enrolled in one of the church schools. With this respect for the scholastic year 2023/2024, there were only 138 vacant places for year 7s which is the first year for middle to secondary schools (Archdiocese Malta, 2023).

Lastly, Malta offers teaching and learning to students with severe disabilities in special schools known as resources centres. These schools (n=4) are equipped with special resources such as multi-sensory rooms to assist the students' development. Moreover, these schools employ specialists' professionals to support students' holistic needs from speech therapists, to physiotherapists and occupational therapists (EduServices, 2017). It is thus, essential to place the child with ID in the ideal school setting which would support the child's development. To do so the government of Malta can use the "continuum of alternative instructional placement in physical education" as identified by Winnick 2017.

1.7 Research aims and objectives

The need for further studies within the field of inclusive PE, PA, and sport is well documented in the literature. Studies tend to focus on barriers of inclusion in PE from the teachers' perspective or on one particular disability. There is insufficient evidence on inclusive PE, PA, and sports from the viewpoint of students with ID. Moreover, there is limited evidence on the various pedagogical tools and strategies used by PE teachers, LSEs, and sport coaches to facilitate learning and development. Thus, the aim of this community-based research is to provide students with ID with the opportunity to discuss their barriers, challenges and requirements to be in mainstream PE, PA, and sports activities; to investigate the PE teachers and LSEs views on inclusive PE, PA, and sports and lastly how academic, educational and government stakeholders could improve and enhance the provision of inconclusive PE, PA, and sports both in mainstream secondary schools and in the wider Maltese community.

1.8 The three main research questions

The three main research questions (table 5) were formulated following a thorough review of the literature within the field of inclusive PE, PA, and sports. I immediately noticed that there were gaps in the literature when it came to the inclusion of students with ID in PE, PA, and sports. Thus, I wanted to explore this phenomenon and investigate how mainstream schools and sports clubs could provide better services for students with ID.

Table 5: Main research questions

Main research questions for this PhD study	
Research Question 1 related to Phase 1	What are the barriers to and facilitators of physical activity and sports for students with ID?
Research Question 2 related to Phase 2	What are the views of inclusive PE, PA, and sport from the PE teachers and LSEs perspectives?
Research Question 3 related to Phase 3	How could local stakeholders improve and promote inclusive PE, PA, and sport provision for students with ID?

1.9 Structure of PhD study

This PhD study is composed by seven chapters described below in table 6.

Table 6: Structure of Thesis

Structure of PhD	
Chapter 1: Introduction	This chapter provides an overview of the research area under investigation. It presents the motivation behind the research and its aims and objectives. It also presents the global and local context and policies that are relevant to the area under study. Moreover, it outlines the pedagogical tool that could be used to enhance inclusive PE, PA, and sports participation. The main research

	questions for every theme of this research study are outlined. Lastly, the structure of this thesis is provided.
Chapter 2: Integrative Review	The integrative review presents the literature related to the perception and experiences of PE teachers and LSEs working with children with ID in mainstream secondary schools. The literature focuses on secondary inclusive PE, highlighting a) barriers and challenges of inclusive PE; b) the benefits of inclusion; c) the internal psychological processes of PE teachers in relation to inclusion; d) the school environment with particular focus on the class and how this effects inclusion; e) and, the pedagogical aspects through adaptation and differentiated learning to enhance inclusive PE, PA, and sports participation in school.
Chapter 3: Methodology	The methodology chapter provides a detailed account of the philosophical underpinnings of this research study. This chapter outlines the methodological framework used in this qualitative study and provides an in-depth rationale for the pragmatic paradigm adopted and the choice of the inductive research approach based on community based participatory research (CBPR). The participant selection process and the sampling technique used in all three phases of this research study are also presented, followed by a detailed account of the thematic analysis process used to analyse the data. Lastly, all ethical considerations arising from this study are identified and discussed in detail.
Chapter 4: Results and Discussion Phase 1	This PhD study is split into three phases. Chapter 4 presents the findings of the first phase. The first phase investigates the students with ID's experiences of inclusive PE in mainstream schools and the PA and sports opportunities available for students with ID. In this phase of the study, students with ID were given the opportunity to voice their opinion about inclusive PE, PA, and sport and identify what they consider to be the barriers and facilitators to their participation in PE, PA, and sport. The findings presented in this chapter are based on the data collected through semi-structured interviews conducted with students with ID who attend mainstream secondary schools and their parents / guardians. The key findings are discussed in light of the

	findings of the literature. Lastly implications of findings related to this phase were highlighted.
Chapter 5: Results and Discussion Phase 2	Chapter 5 presents the findings of the second phase of this study based on data elicited through semi-structured interviews conducted with PE teachers and LSEs working in mainstream government, church, and independent secondary schools in Malta. This phase of the study investigated the pedagogical tools and strategies used by PE teachers and LSEs to include every student in class and provide students with quality PE lessons. The findings of Phase 2 are discussed in light of relevant key concepts in the literature. Implications of findings discussed.
Chapter 6: Results and Discussion Phase 3	Chapter 6 presents the findings related to the third and final phase of this study which explored the responsibilities of different stakeholders coming from the educational, governmental and sport fields to improve the inclusion of PE, PA, and sports provision among children with ID. The findings discussed in this chapter were based on data obtained through semi-structured interviews conducted with academic, educational and governmental stakeholders in Malta. The findings were discussed within the context of the findings of the literature review. Lastly this chapter presents the implications of the findings of this phase and its contribution to the field of education and inclusion.
Chapter 7: Discussion and Conclusion	Chapter 7 brings together the key findings of the three phases of this research study and compares them to the findings of previous research within the field. This chapter also presents the downfall of inclusion in Malta, limitations, and strengths of this study. It also outlines recommendations for further studies within the field of inclusive PE, PA, and sports. Lastly, it presents issues related to covid-19 pandemic and disruption caused by the pandemic and concluding remarks.

Chapter 2: The Perception and Experiences of Physical Education Teachers and Learning Support Educators when teaching Physical Activity and Sports to Students with Intellectual Disability; An Integrative Review³

2.1 Introduction

2.1.1 Defining intellectual disability (ID) and its prevalence.

Individuals with Intellectual Disabilities (ID) have cognitive limitations and thus suffer from learning difficulties (Peterson, Janz and Lowe, 2008). Such difficulties may include problems associated with thought processes and communication difficulties that present them with academic challenges (American Psychiatric Association [APA], 2013). The American Association of Intellectual and Developmental Disabilities states that, for an individual to be classified as intellectually disabled, several criteria have to be met, including: (a) the IQ score of the individual should be below 70; (b) the individual requires assistance in everyday tasks such as social interaction; and (c) the onset of the intellectual disability had to have occurred before adulthood (18 years) (Boat and Wu, 2015).

The Malta Commission for the Rights of Persons with Disability (CRPD) (2017) stated that, in Malta, the prevalence of individuals with ID aged between 10 and 14 years is 229 (7.17%) and those between the ages of 15 and 19 years is 226 (7.08%) out of a total of 3192 individuals diagnosed with ID.

³ This chapter will be published in The Palgrave Encyclopedia of Disability

A person who is diagnosed with ID will require assistance in every aspect of their life (Thompson et al., 2009). Assistance is vital, as without it individuals with ID would not be able to function and integrate in mainstream settings. Failing to provide such ongoing support would segregate such individuals from the rest of the community (Thompson et al., 2009, pg. 137). School age children diagnosed with ID have a fundamental right to assistance at school (Peter, 2007). Schools provide individuals with beneficial tools, knowledge, and skills to engage in communities and have a fruitful life (Lidor and Hutzler, 2019). Thus, it is essential that students with ID are given the required cognitive and physical support to function successfully in the school setting from a young age (Thompson et al., 2009).

The Dakar Framework (2000) emphasised the importance of providing a safe environment for the education of children from a young age regardless of ability and the need to provide the appropriate facilities and equipment to meet every student's needs. Inclusion should imbue individuals with a 'sense of belonging' and each member of the community should feel esteemed, supported, and appreciated (Katz and Miller, 2012, p.17).

It is expected that students with ID be given a range of assistance according to the severity of their disability. Throughout the years, schools have worked hard to create a positive educational platform for every student that will allow them to develop in a shared environment with members of the whole community (Theoharis and Causton, 2014). Support should be provided in line with the school subject demands as not every subject requires the same level of support (Morley et al., 2005). Physical education (PE) presents students with ID with different challenges than other subjects as it involves different types of interactions, both social and physical. For students with

ID to be fully included in PE and have access to quality physical education (QPE), teachers must give students space to be autonomous, assist them in gaining psychological and physiological benefits as well as promote social interaction through different teaching styles and pedagogies (Bertills, Granlund and Augustine, 2019).

2.1.2 Inclusion in Physical Education (IPE)

Inclusive physical education (IPE) gained importance within the educational field when policymakers and educational stakeholders around the globe identified a requirement to provide every student with the opportunity to participate in general PE (GPE) with no discrimination (DePauw and Doll-Tepper, 2000). This meant a shift away from segregated education for students with ID (the traditional special schools) to an inclusive setting (mainstream schooling) (Theoharis and Causton, 2014; Lieberman and Block, 2019). This shift was supported by the United Nations (UN) (2006) in the Convention on the Rights for Persons with Disabilities that called for an inclusive setting at every academic level. To date, the convention has been adopted by 163 countries around the world (United Nations (UN), 2023). In the UK, the requirement to provide inclusive education is reflected in the Equality Act, 2010 (Great Britain, 2010). This shift in the education provision for individuals with disability changed government philosophies and community beliefs to a more accepting one, reducing discrimination and including every individual in the community irrespective of their ability (Lieberman and Block, 2019). This transition has, unfortunately, not been as smooth in developing countries that are still struggling to implement the policies issued by the UN (Hayes and Bulat, 2017).

The UNESCO (2015a) states that students without disability as well as students with disability gain cognitive, physical, and social benefits when PE is carried out in an

inclusive setting. IPE provides students with the possibility of collaborative learning where students with and without disability learn from each other and support each other in GPE lessons (Morrison and Gleddie, 2019). Moreover, it gives students with and without disability the opportunity to interact and form friendships (Seymour, Reid and Bloom, 2009). As stated by UNESCO (2015b), PE is a fundamental human right that provides everyone with the possibility to learn new skills, acquire values and achieve a level of fitness irrespective of their abilities. Moreover, individuals with disability should be given the opportunity to participate in activities that are adapted, inclusive, and safe for every student in class (UNESCO, 2015b).

2.2 Background

While the importance of IPE has been widely acknowledged (UNESCO, 2015A; Lieberman et al., 2017; Morrison and Gleddie, 2019), research continues to identify the challenges related to integrating students with ID into mainstream PE lessons (Ammah and Hodge, 2005; Qi, Wang and Ha, 2017). Research concludes that students with ID continue to feel isolated (Lieberman and Block, 2019) primarily because activities are often not adapted to meet their specific motor skills and cognitive needs (Hodge et al., 2004). Moreover, mainstream school setting creates higher risks of bullying and other anti-social behaviours (Rose and Gage, 2017). Rose and Espelage (2012) found that, out of 163 students in middle schools in the US, 20.3% of students with ID who have emotional and behavioural disorders (EBD), cognitive disability and autism experience bullying and name calling. Bullying leads to unwanted behaviour in class as students with ID, specifically those having EBD, are more likely to disturb lessons and act as bullies themselves as a protective mechanism (Rose and Espelage, 2012). Such incidents occur mainly as a result of a hostile environment,

where students without disability judge their peers with ID on their lack of cognitive and physical abilities (Glumbić and Žunić-Pavlović, 2010). This hostile environment could be easily improved or eliminated with the help of PE teachers who are willing to encourage collaborative learning and create a positive environment by educating students without disabilities to accept difference and promote fair play and positive behaviour in class (Healy, 2014).

However, to provide students with and without ID with QPE, PE teachers should be equipped with the right understanding, skills, and expertise to prepare and implement “learning opportunities” in a positive inclusive setting (Vickerman and Maher, 2019, p.53). In general, PE teachers are in favour of IPE as such a setting provides students with ID with psychological benefits by improving their self-esteem and confidence (Haycock and Smith, 2011) and gives the opportunity to TDPs to help students with ID develop better social skills that would help them in society (Martins, 2014). However, PE teachers do not feel adequately prepared to tackle differentiated learning (Block and Obrusnikova, 2007) as they lack knowledge in this area and are not trained to teach mixed ability classes (Lieberman and Block, 2019; Rekaa, Hanisch and Ytterhus, 2019). This results in lack of self-confidence and self-efficacy (Rekaa, Hanisch and Ytterhus, 2019) which affects the teachers’ motivation and attitude when teaching students with ID (Braksiek et al., 2019). Ryan and Deci’s (2000) Self-Determination Theory (SDT) states that, for a person to be motivated they should have autonomy, feel competent in what they are doing and feel part of a community. Thus, a teacher’s motivation to learn about IPE is a psychological attitude which affects the teacher’s choices, effort, and persistence (Carson and Chase, 2009). Although past reviews have considered the benefits of IPE, little is known about the teachers’ motivation to

teach students with ID (Ammah and Hodge, 2005; Neville, Makopoulou and Hopkins, 2019).

Moreover, although schooling is essential for students with ID, inclusion could be hindered if schools do not foster an inclusive setting that includes all that is required for students with ID (Maher, 2016). This progress is jeopardised as academics, stakeholders, policy makers and education practitioners are still trying to understand and come to an agreement about what inclusion entails (Maher, 2016, p.263). If schools are not equipped with the necessary equipment and staff (Maturana, Mendes and Capellini, 2019) PE teachers will struggle with inclusion. PE teachers believe that one important aspect of inclusion is the assistance and support provided by the LSEs (Haycock and Smith, 2011). Without their help, teachers would not be able to give every student the attention they need. Inclusion should be a collaboration between PE teachers and LSEs, in lesson planning and grading criteria, so that students with ID are taught on equal academic grounds as their TDPs (Maher, 2016). However, schools are not always willing to invest in human resources for PE lessons, believing that LSEs are only needed for academic subjects (Hodge et al., 2004; Morley et al., 2005; Maher, 2016). Maher (2016) found that only 6% of 154 LSEs surveyed valued PE lessons as an important subject requiring their assistance with students with ID. Thus, it is essential to explore the relationship between LSEs and PE teachers, the benefits of the educators working together and the pedagogical approaches and teaching styles that should be used in such settings as such insights are limited in the literature (Haycock and Smith, 2011). LSEs and PE teachers need to be equipped with knowledge on the different practices to use when working together for the common good of students with ID.

PE teachers and LSEs need to give voice to their experiences, opinions, and concerns about IPE to their respective school senior management team (SMT). Only through such communication could there be better lesson planning (Martins, 2014) and a more efficient allocation of students in class (Qi, Wang and Ha, 2017). Involving PE teachers in IEP sessions to discuss the students' progress and device a plan specifically for PE (Morely et al., 2005) could be one of the measures taken to improve the education of students with ID. While there is a great deal of literature devoted to main subject areas, there are few, if any, studies on IPE, specifically studies that look at the teachers' and LSEs' perspectives on inclusive PE in primary and secondary schools (Petrie, Devicich and Fitzgerald, 2018; Haycock and Smith, 2011; Qi and Ha, 2012; Bryan, McCubbin and Van Der Mars, 2013).

This integrative review of evidence that explores the views of PE teachers and LSEs working together in inclusive PE with students with ID will contribute to this gap of knowledge in this area and provide the context of this study.

2.3 Aim

To consider the views of PE teachers and LSEs on working with children who have ID and identify the factors which influence this experience.

2.4 Methodology

An integrative review was adopted for this review as it allows different methodologies to be integrated for a more comprehensive and in-depth understanding of the phenomenon being investigated (Whittemore and Knafl, 2005). This review follows the framework identified by Souza, Silva and Carvalho (2010) which consists of a 6-stage approach: (a) outlining the purpose of the study and eligibility, (b) sampling of literature (c) data extraction (d) critical appraisal (e) interpretation of results and (f) presentation

of results. The ENTREQ (Tong et al., 2012) was used to aid the presentation of information document items, whereas the PRISMA (Moher et al., 2009) flow diagram was used to document the search processes. For the purposes of this review there is a focus on the most common findings across studies.

2.4.1 Purpose of the study and eligibility

The purpose of this review is to evaluate and elicit secondary PE teachers' and LSEs' perceptions on IPE. Therefore, the criteria for articles to be included in this review included a focus on secondary IPE and articles reporting the findings of research that had PE teachers and/or LSEs as participants. This was done to facilitate the process of extracting applicable data from current literature and reduce the possibility of selecting irrelevant information (Whittemore and Knafl, 2005).

The eligibility criteria were based on the SPIDER criteria (Cooke, Smith and Booth, 2012). The SPIDER search tool which stands for Sample, Phenomenon of Interest, Design, Evaluation and Research type was used as it provides the researcher the opportunity to be more specific in the literature search (table 7) (Methley et al., 2014).

Table 7: The eligibility criteria using SPIDER criteria and exclusion criteria.

Eligibility Criteria using SPIDER search tool	
Sample	The articles had to involve PE teachers and LSEs who worked with students with ID in inclusive secondary schools in various countries around the world. To be included, studies had to have participants who were fully qualified PE teachers and LSEs, from novice teachers / LSEs to ones with 35 years of experience. Another criterion kept in mind during the selection of articles for review was that only research based on PE teachers / LSEs working in secondary schools, thus teaching students between the ages of 10 to 16 years, were included. The PE teachers / LSEs could be either male or female. Since this review has a specific focus on inclusion in secondary school PE of students

	with ID, studies focusing on physical disability, primary PE, student PE teachers or any class-based teachers' perception were not included. Also, studies focusing on the perception of parents of students with ID or students' views of PE experiences were excluded. An exception was made to studies who discussed disability in general due to the lack of literature in the field.
Phenomena of Interest	This review was designed to focus on the experiences and perceptions of PE teachers and LSEs. The articles considered for this review focused on critical concepts tied to the understanding of students with ID by PE teachers and LSEs, the integration of their knowledge in practice and influencing factors. The studies making up this review were all carried out in developed countries which have signed the Salamanca Statement and Framework for Action on Special Needs Education published by UNESCO (1994) which bound them to practice inclusive PE.
Design	This review follows past integrative publication (Soundy and Reid, 2019) with regard to the inclusion criteria of journal articles. Journal articles were included if they represented a form of qualitative, quantitative, or mixed methodology that provided evidence based on a cohort of individuals. This included phenomenological based studies such as Interpretivist Phenomenological Analyses (IPAs) and hermeneutic phenomenological research. Other acceptable methodologies included social constructionist grounded theory, naturalistic inquiry, ethnography, and teacher's action research. No case studies were included within this study, reason being to focus on common experiences and studies that provide common realities expressed across groups of people (Mays and Pope, 2000). Fiction based qualitative studies were also excluded as the information sought needed to be based on actual experiences.
Evaluation	Qualitative and quantitative based outcome measures that focused on understanding people's views and experiences of ID were considered. Any research studies using methods that are used to examine views and experiences, including surveys, interviews, focus groups, observational techniques, and reflective diaries were included. Quantitative studies had to include measurement of attitudes on a scale, for example, the Teachers' Attitudes towards Children with Intellectual Disability Scale.

Research design	Any qualitative or mixed methods studies with a design that allows separate reporting of qualitative findings was considered.
Exclusion Criteria	
Articles were excluded if they were:	(1) not written in English
	(2) not published between 2000-2019
	(3) focused on physical disability
	(4) included Special Olympics athletes
	(5) focused on classroom-based subjects
	(6) focused on primary PE
	(7) did not specify the school setting (primary or secondary PE)
	(8) included different school settings but did not specify setting in results

2.4.2 Sampling of literature

A search strategy was planned according to the PRESS statement (McGowan et al., 2015) and established according to the principles of searching for qualitative (Booth, 2016) and quantitative literature (Higgins et al., 2019). An electronic search of databases was conducted from inception of database until January 2020. The following databases were used for the search: PsychInfo and SportsDiscus. The following keyword strings were used in the search to identify journal articles to be included in this review: (1) students with Intellectual Disability; AND (2) Physical Education teacher; OR (3) Secondary Physical Education Teacher; OR perception of inclusion; OR (4) Inclusion in PE; (5) Learning Support Assistant; and (6) PE lessons. The Boolean operators AND, OR were included. Further electronic databases were consulted within the University of Birmingham online Library and Google Scholar

database. Both sites were considered for the first 20 pages of hits. Following this, the reference list of all included articles was searched and the social profiles of first authors were examined for related research.

2.4.3 Data extraction

A standardised data extraction table was used to identify information including age, gender, years teaching, type of study undertaken, and focus of outcome measures used⁴. Furthermore, it was decided to consider article findings anything listed under the headings “‘results’ or ‘findings’” in line with Thomas and Harden’s (2008, p.4) framework. Thus, all results and findings were extracted from the article onto a WORD document in the form of a table to facilitate synthesis.

2.4.3.1 Critical appraisal – qualitative articles

Qualitative articles were appraised using the consolidated criteria for reporting qualitative research (COREQ) adapted from Tong, Sainsbury and Craig (2007). This tool was used to assess articles on three different domains. For this review, a version with 13 questions was selected as past research has identified only specific questions being sensitive in the evaluation of qualitative studies (Soundy et al., 2016). The three domains were: (a) reflexivity and data collection processes (5 questions); (b) the research design (5 questions); and (c) data analysis and findings (3 questions).

The five questions making up the first domain consisted of information related to the research team, their involvement in the study, the researcher’s experience within the field, the relationship of the research team with the participants, information given to

⁴ Refer to appendix 1

participants prior to data collection and, lastly, information related to bias, vested interest and assumptions.

The second domain also consisted of five questions, this time related to the research design. Thus, this domain focused on the chosen methodology, the theoretical framework encompassing the research, participation dropout list, the data collection procedure, and whether the researchers listed any information on data saturation.

Lastly, the third domain, consisting of three questions, focused on the data analysis procedure. The questions related to the coding tree, theme building and development of themes and, lastly, theme and sub-theme description.

A further analysis was conducted using a form to complement the COREQ. The form, taken from Kitto and Grbich (2008), had 7 areas of interest with 15 questions in total. These questions focused on sampling and participant recruitment methods, ethical considerations, research design, data collection tool and data analysis. Each article provided insight into the field and evidence on common themes making each article that was selected essential. This was done to detect any fatal flaws that might occur within the qualitative studies as different qualitative styles require different criteria (Dixon-Woods et al., 2004). A fatal flaw is when an article has comprehensive issues related to the “ethical, paradigmatic, theoretical, or methodology” which cannot be fixed (Glenn Richey and Sramek, 2021, p.195).

2.4.3.2 Critical appraisal – quantitative articles and mixed methods

Quantitative articles and articles using a mixed method approach were appraised using Hong et al.'s (2018) Mixed Methods Appraisal Tool (MMAT). This tool was used by Pace et al. (2012) who examined the reliability of the original version (MMAT 2011) that was later revised by Hong et al. (2018). The MMAT 2018 version consists of 5 study

designs, namely: (1) qualitative; (2) quantitative randomised controlled trials; (3) quantitative non- randomised; (4) quantitative descriptive; and (5) mixed methods. Each design has five different questions related to the methodology used throughout the study. The four studies appraised with MMAT in this review were assessed on the statements presented in the tool on the corresponding methodology used, as recommended by Tobiano et al. (2015).

2.4.4 Synthesis

The last two stages in an integrative review are the interpretation of results and the presentation of results. Interpretation of results consists of coding and categorising the findings from the selected articles. As suggested by Whittermore and Knafl (2005), this stage comprises four phases: (a) data reduction; (b) data display; (c) data comparison; and, lastly (d) conclusion drawing and verification⁵.

2.5 Results

In total, 428 articles were retrieved but only 12 articles met the eligibility criteria determined previously. Figure 1 illustrates the PRISMA diagram highlighting the breakdown of information.

2.5.1 Search output and demographics

Out of a total of 431 articles, 279 articles were duplicates, 101 articles were excluded, 43 articles did not meet the inclusive criteria, and 12 articles made the cut for this review (see figure 1 for a PRISMA (Moher et al., 2009) diagram of this search result). Included in this review are 8 qualitative studies, 3 quantitative studies and 1 mixed methods study that included an analysis of the views and attitudes of PE teachers

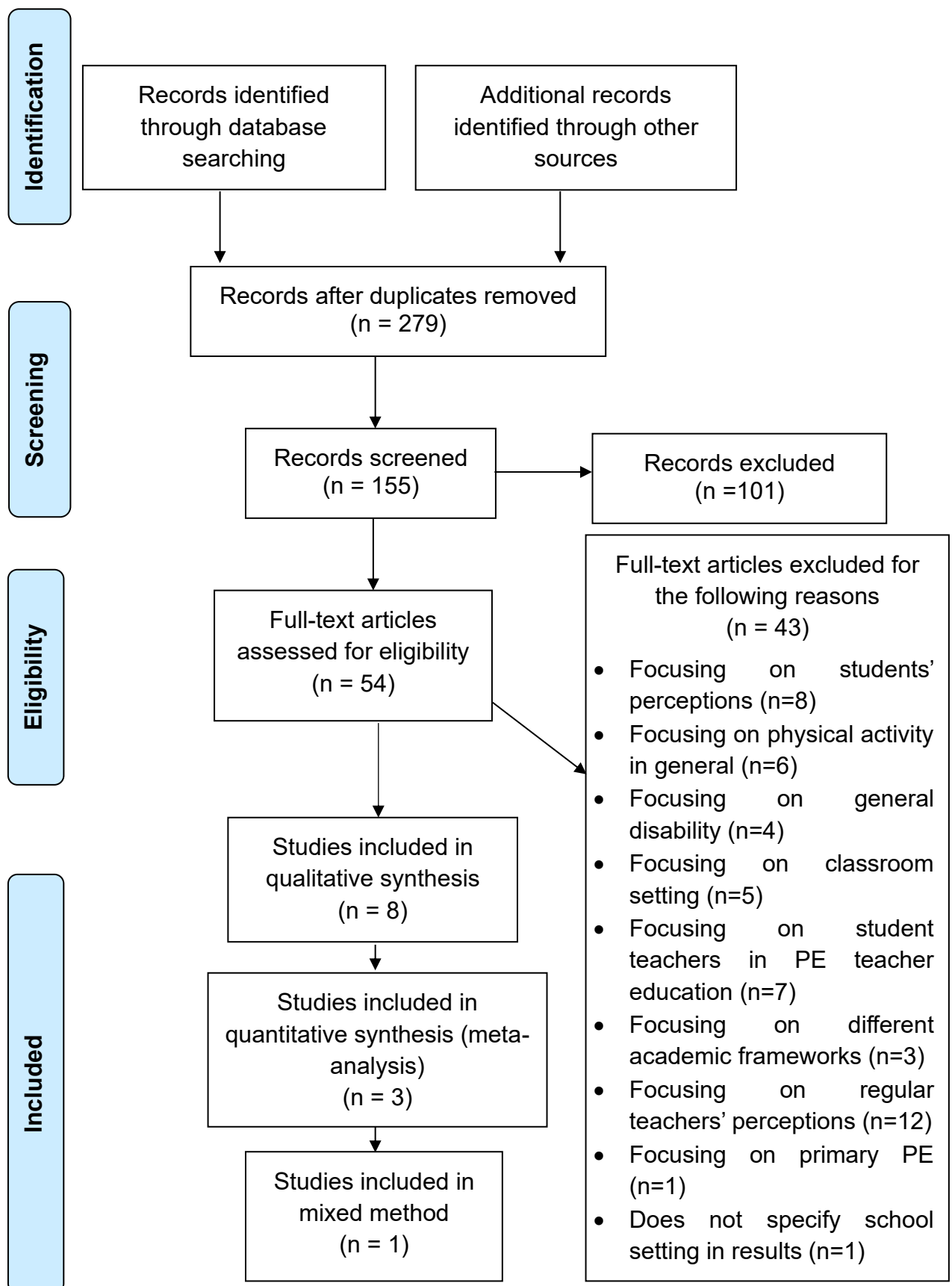
⁵ For a full detail of the synthesis refer to appendix 2 followed by appendix 3 which presents an audit trail

and/or LSEs when teaching students with ID in an inclusive setting. Only two of the articles included the LSEs' perceptions, which means that reporting on the LSEs' experiences are limited within the results. Furthermore, 8 out of the 13 codes that were identified will not discuss the LSEs' perceptions due to limited resources (table 8).

Table 8: Participant demographic information.

Study	Number of Male PE Teachers	Number of Female PE Teachers	Number of Male LSEs	Number of Female LSEs	Country of Study
1	22	21	0	0	UK
2	3	5	0	0	Hong Kong
3	2	0	0	0	USA
4	5	7	0	0	UK
5	47	121	0	0	USA
6	7	2	0	0	USA
7	1	3	5	6	USA
8	518	382	0	0	Germany
9	515	214	0	0	Turkey
10	5	2	0	0	UK
11	3	2	0	0	Tokyo
12	0	0	34	309	North-West England

Figure 1: PRISMA 2009 flow Diagram



2.5.2 Summary of appraisal

Weaker studies were chosen for discussion if: (a) they scored less than 7/13 on the COREQ evaluation tool. A scoring of less than 50% has been used in past reviews (Soundy et al., 2014); and (b) they were identified by the primary author through the Kitto and Grbich (2008) and MMAT (2018) appraisal tool as having a fundamental methodological weakness or contained results which were not believable for a particular reason. Thus, 5 studies (namely Hodge et al., 2004; Smith, 2004; Morley et al., 2005) that scored low were discussed with my supervisor to ensure that the results would not compromise the synthesis process or that they had a fatal flaw which made their results questionable. No studies were excluded as a result of this process⁶.

2.5.3 Synthesis of results

The one major theme that was identified across all studies was 'factors that influenced PE teachers' attitudes and understanding of working with students diagnosed with ID'. This theme had five sub-themes. Each sub-theme was further expanded into codes (ref Table 9 below)⁷.

⁶ For a full analysis of the between and within study appraisal refer to appendix 4

⁷ A reduced version of the results is presented due to word limits, a full version can be found in appendix 5

Table 9: Sub-themes and codes emerging from the studies

Sub-theme	Codes	Direct Quotes	Negative Cases
1. PE teacher's internal processes	Self-confidence and self-belief ^{*8}	<i>"I do not have any confidence at all. I have attended workshops, which deal with disability but who knows the best way to teach? It depends on the disability. When I thought that this is the best solution, he [student with disabilities] may feel my solution is completely off base" - Sato and Hodge (2009, pg. 168)</i> <i>"...when you first do it [teach SwSD] you are a little worried about whether or not you can handle it" - Ammah and Hodge's (2005, pg. 48)</i> <i>"I have weak confidence in teaching students with disabilities in a huge class size" – Qi, Wang and Ha (2017, p.94)</i>	
	Understanding the need for inclusion from the PE teacher's perspective *	<i>"As a teacher, I have a responsibility to receive all of the students, whether they are students with good sports abilities or students with disabilities. This is my duty." – Qi, Wang and Ha (2017, pg.95).</i>	<i>"I am saying they can be included, I am not saying it is always in their best interests to include all" – Morley et al. (2005, pg. 93).</i>

⁸ * indicates codes that reflect of PE teachers' perception and experiences only

2. Psycho-social factors	PE teachers' relationship with LSEs, TAs and APE **⁹	<i>"They're generally really helpful" – Haycock and Smith (2011, pg. 844)</i> <i>"One of the strengths of the TAs [teaching assistants] is the fact that they do liaise with the staff well and we do talk about what we are going to do and we do plan for them and incorporate them into the lesson" – Haycock and Smith (2011, pg. 844)</i> <i>"Because we usually spend more time with specific students we sometimes have a better insight into them than some teachers" – Maher (2016, pg. 274).</i> <i>"The female physical education teacher talked to the special education students and the paraeducator [LSE] and had an overall more positive learning environment in contrast to the male physical education class" – Bryan, McCubbin and van der Mars (2013, pg. 173).</i>	<i>"anxiety in physical education class" – Sato and Hodge (2009, pg. 169)</i> <i>"Some of them are sort of reluctant to ... come out and if it's cold it's like 'I think she [a pupil] will be alright today, do you?' Or they just sort of turn up when you're just about to start your lesson." – Haycock and Smith (2011, pg. 845)</i>
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⁹ ** indicates codes that reflect on both PE teachers' and LSEs' perceptions and experiences

	Effects of inclusion on typically developing students *	<i>"I have kids going out of their way to be helpful and kind to them [SwSD]" (Ammah and Hodge, 2005, pg. 48)</i>	<i>"Children get quite frustrated with a child that they can't participate as well as them and it might put them off participating" – Morely et al. (2005, pg. 92)</i> <i>"Students nowadays are often self-centred and tend to exclude their peers with disabilities. When their peers with disabilities cannot fulfil some skills, they often laugh at them or bully them" – Qi, Wang and Ha 2017, pg. 94).</i>
	Effects of inclusion on students with ID **	<i>"there are some students with disabilities who really have a tough time" – Hodge et al. (2004, pg. 407)</i> <i>"Tommy's lack of independence, due to the severity of his disabilities, hindered his full participation in activities" – Hodge et al. (2004, pg. 407)</i>	
	Turning to other colleagues for support *	<i>"When students with disabilities are in my PE classes, I generally find my peers who joined the disabilities courses to seek some suggestions, or to determine if we can</i>	

		<i>cooperate to adequately meet their learning needs” – Qi, Wang and Ha (2017, pg.96)</i>	
3. The environment	Number of students in class *	<i>“They [SwSD] need that extra help from you and you really don't have the time because you have 25 or 30 students and ...can't devote all your time to that one person”. – Ammah and Hodge (2005, pg. 49)</i> <i>“It's [inclusion] more taxing on me to plan a lesson ...I have real concerns about integrating a pupil with a disability fully and ensuring it isn't to the detriment of others” – Smith (2004, pg. 45).</i>	
	LSEs' knowledge on PE and PA **	<i>“I have never been offered this. I would most certainly love the chance to have PE-specific training in my role as LSA” – Maher (2016 pg.271)</i> <i>“He is a coach in lots of different sports and he actually trained to work with these students ... So we want to utilise him as much as we can, rather than just try and do it ourselves all of the time” - Haycock and Smith (2011, pg. 843)</i>	

4. Politics	School support, IEP and decision making *	<i>“In other curriculum areas they get maybe 3 LSAs in a class for their reading and writing skills. If we request them in PE we do get them but it is pretty much that we are not high priority” – Morley et al (2005, pg. 94)</i> <i>“PE is like the dumping ground, the bottom of the pile ... Some kids do have like a learning support assistant with them, but we rarely do in PE.” – Haycock and Smith (2011, pg. 845)</i> <i>“[the] school did not provide us with documents relevant to students with disabilities. Thus, I did not know about the presence of students with disabilities. I felt frustrated when I could not teach them. If the school can earlier convey in advance the precise message about the students with disabilities to me, then I can make adequate preparation” – Qi, Wang and Ha, (2017, pg. 97).</i> <i>“Like their IEPs (Individual Education Plans) ... they are sort of saying ‘They [pupils] should do this. They should sit at the front’. And we’re like, ‘Well, we don’t work ... like</i>	
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		<i>that. We don't have people sitting at the front'. We don't have like one-to-one discussions about it ... You're just given it [information about pupils' needs] ... the first day back ... I just keep it in my drawer."</i> – Haycock and Smith (2011, pg. 841) <i>"Lack of such effective communication was viewed as adversely impacting their efficacy in teaching students with disabilities" – Hodge et al. (2004, pg. 409)</i>	
	Curriculum *	<i>"We have a lad who, because of his disability, cannot do a lot of PE. He (can) do table tennis so we integrate him by getting the table tennis stuff set up next to where others in the group are playing (a different activity) ...and get him to play with a friend ...but that isn't inclusion" – Smith (2004, pg. 47)</i>	<i>"This aspect does not mean that they never try to learn, but their motor performance is far from the ordinary curriculum standards. I worry that this bad grade will have a negative feedback on them." – Qi Wang and Ha (2017, pg.96)</i>
	Training and teachers' preparation *	<i>"What I want to learn is away to eliminate the [learning] gap [between students with and without disabilities] and put the learning environment together, then social interaction, motor performance, etc. That is what I want to learn" – Sato and Hodge (2009, pg. 169)</i>	

		<i>“workshops could enhance their ability to implement inclusive PE programmes” – Qi, Wang and Ha (2017, pg. 95).</i>	
5. The lesson	Possibilities of APE **	<i>“The team situations, the game situations, okay with the skills that’s fine but when they’re actually put into a game situation if their level of learning isn’t, if that’s the inability they get lost, they get confused, it’s frustrating for them then because they don’t know where they’re supposed to be within the spatial awareness of things” – Morley et al. (2005, pg. 97-98)</i> <i>“inclusion would mean planning your lesson to include everybody” – Smith (2009, pg. 46).</i> <i>“The best way in overcoming barriers is being creative” – Hodge et al. (2004, pg. 409)</i>	
	Mixed ability classes **	<i>“I usually just have her [Julie, a student with Prader Willi Syndrome] go for a walk and that seems to be the best activity she can get.” – Hodge et al. (2004, pg. 410)</i> <i>“hard because sometimes you forget what their limitations are and you want to be able to show them more than they can really take</i>	

		on.” – Bryan, McCubbin and Van Der Mars (2013, pg. 174) <i>“Sometimes I have some frustrations with regular teachers not being open and willing to kind of have their kids welcome my kids in their classroom”</i> – Bryan, McCubbin and Van Der Mars (2013, pg. 175):	
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2.5.4 PE teacher's internal processes

This theme represents the thoughts and perceptions of PE teachers. It was represented by two codes; namely (a) self- confidence and self-belief; and (b) understanding the need for inclusion.

2.5.4.1 Self-confidence and self-belief

The results of this review have shown that PE teachers weigh their pedagogical success against their confidence level and years of experience. Eight studies supported this code and presented content in relation to teachers' self-confidence about delivering inclusive PE lessons.

PE teachers relate their self-confidence to various factors including uncertainty, lack of knowledge related to disability and type of disability. Teachers' confidence level was also linked to their years of teaching students with disability (3/12, 25%). It was noted that, as the years go by, teachers would equip themselves with more courage and confidence. Furthermore, teachers across the studies noted that the more severe the disability, the less confident they feel as they would not know how to adapt lessons to suit their students' needs, especially if the class size does not allow for individual attention. Teachers also related their lack of self-confidence to the lack of support provided by the school and to the lack of resources available in schools (2/12, 16.6%). Lastly, two studies stated that practical experience with a positive lesson outcome resulted in improved confidence and an improvement in the teacher's perception of inclusive PA.

2.5.4.2 Understanding the need for inclusion from the PE teacher's perspective

This code identified the importance of inclusion as perceived by PE teachers. The focus of this code was to understand whether PE teachers believe that inclusion is the best learning environment for every student with ID. PE teachers identify certain changes that need to be done to their working conditions. Eleven of the studies within this review discussed content related to this code.

Most PE teachers believe that inclusion is part of their duty. As a result, to enable inclusion, PE teachers make particular requests. Six studies identified the need for better working conditions, such as more time to plan for lessons (4/12), more support by the school (4/12) and better resources (3/12). Further to this, three studies (3/12) highlighted PE teachers' concern that inclusion might not benefit every student in class. Thus, further investigation should be carried out on this issue.

2.5.5 Psycho-social factors

This theme concerns the interpersonal and intrapersonal processes and support mechanisms adopted by PE teachers, LSEs, and students with and without ID. It was represented by four codes, including; (a) PE teachers' relationship with LSEs, teachers' assistants (TAs) and adapted physical education teachers (APEs); (b) effects of inclusion on typically developing students; (c) effects of inclusion on students with ID; and (d) turning to other colleagues for support.

2.5.5.1 PE teachers' relationship with LSEs, TAs and APEs

This code illustrated that PE teachers still have mixed feelings about having LSEs and TAs in class. Studies identified that both PE teachers and assistants wanted to work together as a team; however, PE teachers have some reservations and concerns when

asked to work with LSEs. Eight of the studies within this review discussed content related to this code.

PE teachers interviewed in Morley et al. (2005) stated that LSEs should assist in academic subjects rather than in PE lessons. A PE teacher in Haycock and Smith's (2011) study, however, stated that working with LSEs is a blessing as they give a good helping hand. A PE teacher in Sato and Hodge's (2009) study stated that an LSE is mostly needed if the student's disability is severe. Six studies listed the benefits of having LSEs in PE classes. To have a good working relationship with the LSE, it was stated that the LSE should be motivated (Haycock and Smith, 2011, pg. 844), should be prepared to share class responsibilities and supervise students with ID (Qi, Wang and Ha, 2017, pg. 94) and should fall in line with the PE teacher's pedagogical style. LSEs in Maher's (2016) study stated that they would like to be more involved in the planning phase of the lesson as they know the students better than the PE teachers and would be able to provide them with useful suggestions and ideas.

On a negative note, a PE teacher interviewed in Haycock and Smith (2011) stated that, at times, LSEs are not really motivated to assist students in PE. Bryan, McCubbin and van der Mars (2013) stated that female PE teachers were more welcoming and worked better with the LSE provided by the school.

2.5.5.2 Effects of inclusion on typically developing students (TDS)

The results of this review show that, according to PE teachers, inclusive PE presents both positive and negative experiences for students without disability. These experiences were tackled by six articles.

Three studies state that inclusion has a positive impact on students without disability. Some support students with ID out of their own initiative (Ammah and Hodge, 2005),

others organise sports days and activities specifically for their peers with disability (Sato and Hodge, 2009). Moreover, to assist students with disability and challenge students without disability two articles discussed the use of the buddy system, where students with and without disability pair up and work together during the PE lesson.

However, three articles stated that students without disability might get frustrated in an inclusive PE lesson as they would want to compete, and they believe that their peers with disability might hinder or weaken the level of competition due to their lack of ability. Another concern highlighted in one of the studies was that students without disability tend to lower their ability level to match the ability of their peers with disability to help them feel included. Behavioural issues was another negative aspect of inclusion highlighted in this code. Two studies pointed out that TDSs would bully students with ID and belittle them due to their lack of ability to perform certain tasks.

2.5.5.3 Effects of inclusion on students with ID

This code concerns the impact of inclusive PE on students with ID. It highlights the beneficial aspects as well as the negative impact that such a setting presents to students with ID from the PE teachers' and LSEs' perspective. Nine studies within this review supported this code.

Teachers and LSEs teaching general PE classes believe that an inclusive setting presents students with ID with several benefits, from improving self-esteem and confidence (Haycock and Smith, 2011) to feeling accepted in society (Qi, Wang and Ha, 2017). However, for inclusion to be beneficial, teachers should be willing to adapt lessons and build a positive relationship with the students so that the latter would feel comfortable asking teachers for assistance. Two articles suggest that inclusion is not always beneficial as the benefits depend on the students' conditions and severity of

their disability. LSEs in Maher (2016) emphasised the importance of differentiated learning as only this could create a positive learning environment for their students. However, as noted by a teacher in Sato and Hodge (2009), it is important to keep in mind that students with ID might not want to participate in PE. Thus, it is important to further examine the students' desire for inclusion as forcing this setting could backfire and result in unwanted behaviour.

2.5.5.4 Turning to colleagues for support

This code illustrates the importance of working in a team environment. Thus, the importance of having schools equipped with a positive support mechanism for PE teachers. Five studies within this review supported this code.

Five studies stated the importance of having collaborative colleagues who are willing to assist PE teachers when they struggle to include everyone in a lesson. Such colleagues would present PE teachers with useful knowledge, gained through their own experience and resources, to make inclusion more positive and feasible. It would be interesting to investigate the support mechanism in schools. As noted in Sato and Hodge (2009) other colleagues are valuable resources that should be available in schools.

2.5.6 The environment

This theme concerns PE teachers' lesson conditions. It was represented by two codes, namely: (a) number of students in class; and (b) LSEs knowledge on PE and PA.

2.5.6.1 Number of students in class

The results of this review have shown that PE teachers often struggle to deliver an inclusive PE lesson as teachers are forced to teach overcrowded classes, making it

difficult to support every student in class individually. This concern was presented in seven articles.

Teachers frequently complain about class-size, as it presents them with several barriers. One of main barriers, mentioned by a PE teacher in Ammah and Hodge (2005), is that such an environment does not allow them to give students individual attention. As stated in one of the studies, this could create a negative experience for both teachers and students as it makes it difficult for the teacher to deliver differentiated learning and propose adaptations. This resulting downtime could lead to misbehaviour and students becoming demotivated. Another concern mentioned in the study was that, since classes are overpopulated and teachers find it difficult to adapt their lessons, they would start questioning their pedagogical style, whether they are doing a decent job and, ultimately, whether they are reaching every students' needs without neglecting the TDSs. However, one study stated that these barriers and concerns could be tackled if schools presented students and PE teachers with support from LSEs.

2.5.6.2 LSEs' knowledge on PE and PA

This code emphasises the importance of having LSEs assisting the PE teacher who are knowledgeable in the subject and motivated. The results show that such knowledge would build more trust between PE teachers and LSEs, which would result in a healthier inclusive environment. Only four studies within this review supported this code.

The LSEs' knowledge of PE is as important as the teachers' knowledge of disability studies and adapted PE techniques. PE Teachers are not willing to work with LSEs who lack knowledge of PE especially if the LSE is not willing to acquire such knowledge. A PE teacher stated that its useless having LSEs in class if they are not

aware of how to assist students in PE (Haycock and Smith, 2011). This was further discussed in Maher (2016) who noted that 71% of the LSEs within the study did not feel comfortable assisting students in a PE setting as their training was inadequate. This does not mean that LSEs are not willing to learn and acquire skills, but they are not always given the opportunity. One study noted that when PE teachers recognise that the LSEs have positive attributes and the motivation to really assist in class, they are not averse to sharing class responsibility. Assistance from LSEs has several benefits ranging from good behavioural management in class to the possibility of having one-to-one support for students with ID. It also allows teachers to group students and have the LSE support one of the groups. One study stated that some LSEs voiced concern about supporting PE teachers because they would be learning by doing, thus gaining knowledge through experience, which might hinder the students' experience rather than assist them.

2.5.7 Politics

This theme concerns all the decision making related to the students' educational life, PE structure and teacher preparation. It was represented by three codes, namely: (a) the Individualised Educational Program (IEP) and decision making; (b) the curriculum; and (c) training and teacher preparation.

2.5.7.1 School support, IEP, and decision making

This code illustrates the need for schools to provide PE teachers with relevant and necessary support to enable inclusion in PE. It highlights the school support system provided to PE teachers, suggesting that the value of the subject within the school system against other academic subjects is weak and less importance and support is given to PE than any other academic subject. Moreover, it emphasises the importance

of including PE teachers in decision making and IEP sessions to provide teachers with all the necessary information related to the students with ID prior to teaching them. Nine studies within this review supported this code.

Three studies found that school representatives believe there is no need to have LSEs supporting PE teachers during lessons. As noted in Maher (2016), schools tend to prioritise assistance and financial support for core subjects over secondary subjects such as PE. One study noted that LSEs are immediately assigned to assist subject teachers and students in subjects other than PE. Schools tend to prioritise core subjects as these subjects lead them to academic achievements and this lessens complaints by the parents regarding exam grades (Maher, 2016, pg. 268).

Four studies listed the need for PE teachers to be given prior information about students so that they will be able to plan for the lesson accordingly. The lack of information provided by the school and the Special Education Need (SEN) departments creates anger and frustration among teachers as they would not be prepared for and would not be able to include students with ID during the lesson. Two studies discussed the importance of having the possibility of purchasing special equipment if needed as not having specialised equipment could result in an unsafe environment. Another study discussed the importance of involving PE teachers in meetings with the SEN department as this would assist teachers differentiate and reach every student in class (Morley et al., 2005, pg.100).

Three articles highlighted the importance of involving PE teachers in IEP sessions and decision making. During IEP sessions, PE is rarely considered as decisions are mostly related the class-based subjects (Morley et al., 2005, pg. 95), and may not be relevant or specific to PE as, in PE, students are faced with different scenarios that incorporate

different social, physical, and relational interactions, as stated in one study. Thus, as noted by one of the teachers interviewed in Haycock and Smith (2011, pg. 841), the IEP team should dedicate some time to devise a plan for the PE setting not focus solely on the classroom environment. Furthermore, as noted in Hodge et al. (2004), PE teachers believe that the link between the IEP team, school administration and themselves should be improved to provide teachers with tools that would help them to be more efficient when teaching students with ID in an inclusive setting. Having the right information would provide teachers with tools to be more efficient and effective when planning and teaching students with ID.

2.5.7.2 Curriculum

The results of the review show the importance of having a flexible curriculum to allow teachers room for adaptation. The curriculum should not be designed only for high achievers as this would defeat the purpose of inclusion. This concern was presented in four articles.

Unfortunately, PE teachers believe that they are not practicing inclusion successfully in PE as the curriculum lacks flexibility. The curriculum in many schools does not always allow room for modification and differentiated learning and this often results in integration not inclusion. Two studies presented a concern related to assessment. Teachers are bound to assess students; however, the assessment criteria are difficult for students with ID to meet and, thus, grading these students according to these criteria is unjust. A teacher in Sato and Hodge (2009) expressed her concern about which skills students with ID should be graded on. This concern demands further investigation if students with ID are to be successfully included in the PE educational system.

2.5.7.3 Teachers' training and preparation

The results of this review highlight the importance of having PE teachers specifically trained in inclusive PE and providing PE teachers with hands-on experience in their university years as students. This concern was presented in nine articles.

The teachers who participated in the studies reviewed stated that, at times, they struggle to adapt lessons (3/12), as they lack preparation and knowledge (4/12) and experience (2/12) in the field of adapted PE. One of the participants in Sato and Hodge (2009) stated that their training had not been adequate. Moreover, two studies stated that, what training PE teachers did receive in this area was not sufficient to help them in the real world of teaching inclusive PE. One study also stated that teachers are unaware of how to use special equipment provided for adapted physical education activities. Thus, it is essential that schools provide teachers with continuing professional development (Qi, Wang and Ha, 2017). Even LSEs believe that PE teachers should reinforce their knowledge and follow specific training in APE to implement inclusion in PE through differentiation (Maher, 2016).

2.5.8 The lesson

This theme concerns pedagogical aspects and the value given to PE as opposed to other subjects. It was represented by two codes, namely: (a) possibility of APE (b) mixed ability classes.

2.5.8.1 Possibilities of APE

This code highlights PE teachers' and LSEs' perception and concerns regarding the possibility to adapt lessons to include every student in class. Seven of the studies within this review supported this code.

The first barrier to inclusive PE was shared by four studies. These studies suggested that PE teachers prefer teaching individual sports in an inclusive setting rather than team sports. This is because team games present students with more challenges (Morley et al., 2005). In fact, one study noted that, in such situations, PE teachers prefer splitting the class into smaller groups and having students with ID practice the same skills as their TDPs with their LSE. However, as a teacher in Smith (2009) notes for inclusion to happen lessons should be planned with adaptations and differentiation for every student to participate. Segregating or giving students with ID different activities than their peers would result in “*integration*” (Smith, 2009, pg. 46). This interpretation was also given by an LSE in Maher (2016). The LSE stated that teachers should plan and run the lesson in an inclusive manner through variation. This could be easily handled with the help of the LSE. However, as noted in one study, time constraints and timetable load do not allow teachers and LSEs to get together to discuss and plan accordingly. Other reasons hindering adapted lessons could be lack of equipment, lack of knowledge and lack of support.

Teachers showing empathy and who are tolerant are more inclined to have a positive attitude to adapting their lessons. Furthermore, inclusion can occur across the curriculum as long as the teacher is motivated to adapt the lessons (Hodge et al., 2004).

2.5.8.2 Mixed ability classes

The results of this review highlight the different concerns related to mixed ability classes, from discrimination, lack of equality in class and assessment problems. They also point out the importance of informing PE teachers and LSEs about the students' conditions as lessons should not have a one-size-fits-all structure but should be

adapted to reach every student in class, irrespective of their ability. This code also points out the importance of having a motivated PE teacher when it comes to teaching in an inclusive setting. This concern was presented in five articles.

Four studies suggested that not every condition could be included in an inclusive setting as not every student can perform every skill in the curriculum. Thus, inclusion depends on the level of the student's disability and condition. One teacher in Hodge et al. (2004, pg. 410) spoke about the frustration he felt when one of his students with ID could not be fully integrated due to her condition.

One study stated that motivated teachers look forward to teaching mixed ability classes as they like the challenge and are willing to repeat instructions and tasks when requested and keep students active during class. Six teachers in Hodge et al. (2004, pg. 403) underlined the importance of having students on task as an effective behaviour management strategy. Three studies discussed the assessment procedure in mixed ability classes. PE teachers find it difficult to assess all of the students in class against the criteria set and many only grade mainstream students. Teachers create a positive inclusive environment by matching students with disability with students without disability to promote peer learning and peer assistance.

Lastly, LSEs feel that their students are being discriminated against by both the PE teachers and the students in class as the environment is unwelcoming and hostile. Furthermore, LSEs noted that, although students with ID are included in class, they still work alone. This implies that inclusion is not occurring.

2.6 Discussion

This chapter offers the first integrative review of literature focusing on PE teachers' and LSEs' perceptions of inclusive PE. The results show that most PE teachers and LSEs

are in favour of inclusive PE. However, due to their lack of knowledge and experience, some PE teachers and LSEs are still resistant to this setting. It was noted that there is still some question on whether inclusive PE is beneficial and whether it offers the right setting for students with ID. PE teachers' motivation to include students with ID in general PE classes boils down to their attitude towards teaching inclusive PE and their perceived knowledge of how to do this, which is one of the major factors influencing acceptance. Students with ID in IPE present PE teachers and LSEs with different challenges, from challenging and disruptive behaviour to bullying, name calling by other students, segregation, and mobility difficulties. One of the main concerns highlighted in this review was teachers' self-perception, that is, whether they feel that they are capable of teaching mixed ability classes and whether they have the tools and knowledge to conduct differentiated learning in their PE lessons.

The discussion now focuses on the following major findings: (1) the importance of self-confidence for PE teachers to support students with ID; (2) PE specific curriculum; IEP and PE specific decision making; (3) establishing the LSEs' role; and, lastly (4) the strategies that enhance inclusive PE.

2.6.1 The importance of self-confidence for PE teachers to support students with ID

This study identified that self-confidence and teachers' attitudes are likely to be directly associated. Past research has shown that the success of IPE is related to the PE teachers' perceived ability and confidence to teach inclusive PE (Hodge and Elliott, 2013; Koh, 2018). As competence increases, positive experiences are enhanced (Ammah and Hodge, 2005; Hutzler et al., 2019), thus students with ID will be more likely to experience positive quality inclusive PE (Block and Obrusnikova, 2007) and

be more eager to participate during the lessons as they feel an integral part of the lesson (Rekaa, Hanisch and Ytterhus, 2019).

Low self-confidence could result in lack of motivation as the individual would not believe in their capabilities. Teachers' self-confidence could be improved through continuous learning and experience teaching mixed ability classes. Some PE teachers struggle to adapt lessons as they lack preparation, knowledge, and experience within the field, which affects their self-efficacy and self-confidence (Sato and Hodge, 2009). Thus, it is essential that schools provide teachers with ongoing support from the SEN department and IEP teams. This would enhance the teachers' self-confidence leading to successful practices. It is vital that PE teachers are adequately trained in inclusive PE (Neville, Makopoulou and Hopkins, 2019) to be able to give students with ID the opportunity to develop and grow together with their TDPs. Such training should be continuous (Hersman and Hodge, 2010; Qi, Wang and Ha, 2017) and focused on APE, differentiated learning and different disabilities to enable the teachers to adapt to every student's needs. Moreover, training should mimic real life situations and not just be given through textbooks; thus, hands-on experience is vital (Koh, 2018) as self-confidence grows through positive teaching experiences (Ammah and Hodge, 2005; Rekaa, Hanisch and Ytterhus, 2019). Policy makers within the educational field and schools need to keep in mind that inclusion is about providing equal opportunities, highlighting abilities rather than disabilities (Smith, 2004). Hence, equipping PE teachers with such knowledge would improve lesson planning, adaptation, and modification of activities, which would ensure equality in class.

2.6.2 PE specific curriculum, IEP and PE specific decision making

Inclusive PE goes beyond the actual lesson. The findings of this review reveal that the curriculum should be flexible to allow PE teachers and LSEs room to adapt according to the students' disabilities (Martins, 2014; San Martin et al., 2021). Thus, the curriculum should not be designed solely for high achievers as this would defeat the purpose of inclusion. In the UK, the national curriculum for Special Education Needs and Disability (SEND) is designed in a way that allows teachers to be flexible and assess students using challenging but attainable activities (Vickerman and Maher, 2019). However, this review highlighted how curriculum and educational policies are not entirely in line with the inclusive idea. PE teachers believe that clear guidelines and principles should be linked to the general PE curriculum to achieve quality inclusive PE (Qi, Wang, and Ha, 2017). Perhaps this could be achieved if PE teachers are included in the IEP sessions and if schools gave PE the same weight as they do to other academic subjects.

This review suggests that, apart from schools not providing LSEs in PE lessons as they believe that LSEs are needed mostly in class based subjects (Morley et al., 2005; Maher, 2016), there is a missing link between the inclusive policy makers in schools and the needs of PE teachers. Information provided by school administrators to PE teachers are not subject specific and are, thus, irrelevant for the PE environment (Haycock and Smith, 2011). The "whole-school framework" approach does not necessarily fit the PE setting as the PE syllabi incorporates activities in a different environment (Morley et al., 2005, pg. 95). Thus, it is important that PE teachers are given the opportunity to voice their opinion during decision-making sessions about students with ID for the benefit of the student's holistic growth. Moreover, teachers are

bound to assess students with ID against the same grading criteria as students without ID as stated in the curriculum (Sato and Hodge, 2009). This may not be just and correct for students with ID who have lower abilities than their TDPs (Qi, Lijuan and Ha, 2016). Therefore, assessments should be challenging but attainable so as not to discourage students and to support participation.

2.6.3 Establishing the LSEs Role

Apart from the aforementioned concerns, PE teachers believe that class size creates one of the biggest barriers to inclusion (Ammah and Hodge, 2005; Sato and Hodge, 2009). The larger the class, the more difficulties the teacher will have with class management and, if students are not kept on task, they are more likely to disrupt the lesson. Moreover, such setting does not allow the PE teacher to give individualised attention, risking neglect, and exclusion. To overcome this barrier, schools should provide PE teachers with LSEs who are willing to assist students in a sports environment. As noted in this review, LSEs are not always geared to support students during PE lessons, as they do not feel prepared (Maher, 2016) or motivated to work in such an environment (Haycock and Smith, 2011). LSEs who are knowledgeable about PE are more likely to promote positive inclusive PE and more likely to assist students with ID (Block and Obrusnikova, 2007; Vickerman and Blundell, 2012). This, in turn, would reduce the risk of disruption by the student with ID and enhance learning for both students with and without disabilities. Furthermore, as noted in this review, although there are still mixed feelings about the benefits of having PE teachers and LSEs working together, Bryan, McCubbin and Van Der Mars (2013) suggest that having an LSE in class would also create more positive communication between students with ID and the PE teachers as the LSE would act as a liaison person.

2.6.4 Strategies that enhance inclusive PE

Vickerman and Maher (2019) suggest that lessons should be prepared with every student in mind to eliminate barriers and facilitate learning irrespective of the student's ability and cognition level. This could be achieved by using the five pillars (ref to Table 2 in Introduction) of the inclusive spectrum curriculum (Black and Stevenson, 2017), as lessons and activities can be adapted according to the students' needs. However, as noted in this review, to achieve such positive results, teachers and LSEs should be given better working conditions, such as more time to plan (Morley et al., 2005; Heagele et al., 2017). Planning and dedicating time for lesson adaptation prior to the actual lesson delivery is essential as PE teachers should create an environment where students with ID can participate in activities with their TDPs (Bertills et al., 2018; Vickerman and Maher, 2019). Therefore, it is essential that PE teachers are informed ahead of their lesson of any students with ID joining their class to give them time to plan the lesson accordingly.

PE lessons should incorporate both physical and social components, so that students with or without ID develop holistically (Bertills et al., 2018). It is also essential when planning lessons and adaptations that PE teachers and LSE acknowledge the different disabilities in class as different conditions and different disabilities require different adaptations (Sato and Hodge, 2009; Bertills et al., 2018). This was one of the barriers of inclusion listed in this review, as it suggests that inclusion depends on the students' condition and severity. However, one strategy that could be used in schools to overcome this barrier is to provide students with one-to-one support (through an LSE) so that the learning process is facilitated and the student still feels part of the class (Haycock and Smith, 2011). Collaborative learning and the buddy system are also

useful in education and could provide a better way to enhance students' development as they will be learning from their TDPs (Heagele, Zhu and Davis, 2017). This strategy is not only beneficial to the teacher or student with ID, but also gives students without disability an opportunity to grow socially, giving them tools that will serve them in life (Klavina and Rodionova, 2015).

Another useful strategy, which could be used to maintain a positive inclusive environment is teacher peer support. PE teachers should create their own support mechanism, be it the LSE, IEP team or any other colleague. This way, PE teachers would be able to discuss their concerns with other teachers/colleagues which, in turn, would present PE teachers with useful knowledge and resources to make inclusion more positive and feasible (Smith, 2004; Hardin, 2005; Sato and Hodge, 2009).

Lastly, the class environment could make or break students' participation and experience. Thus, it is essential that both PE teachers and LSEs have a positive mind set and attitude when teaching mixed ability classes. As noted in Shields and Synnot (2014), the attitudes of significant others (in this case PE teachers and LSEs) could either create barriers or facilitate physical activity participation. Thus, a negative environment created by PE teachers could affect students' PE experience negatively (Bredahl, 2013) resulting in lack of PA throughout their life.

Further research should be conducted to understand and investigate the benefits of having an LSE in PE lessons and the working relationship of PE teachers and LSEs. Moreover, further studies should investigate the PE teachers' and LSEs' experiences during inclusive PE.

2.7 Recommendations

Table 10: Highlights the key recommendations made in the literature reviewed:

Recommendations	
Recommendation 1	Adopt better communication between Special Education Policy makers and PE teachers to enhance the working environment, resulting in better inclusive PE lessons.
Recommendation 2	Support collaborative working, where PE teachers and LSEs share resources and knowledge to enhance each other's awareness and understanding of PE and PA and disability issues.
Recommendation 3	Provide PE teachers with related training to enhance teachers' confidence so that they can implement inclusive PE with a better attitude.
Recommendation 4	Enhance the LSEs' competences in PE and PA to create a more positive working environment which would facilitate learning for both students with and without ID.
Recommendation 5	Have PE specific LSEs to enhance students' development as class responsibilities could be shared between PE teachers and LSEs.
Recommendation 6	Provide teachers with better working conditions that allow them space for adaptation and modification of activities.
Recommendation 7	Provide teachers with continuous training on inclusive PE and adaptation to provide PE teachers with the knowledge and skills requested to include every student in class.

2.8 Limitations

Table 11: Presents the limitations of this review

Limitations of Review	
Limitation 1	Only 12 studies matched the criteria listed in this integrative review; this could have limited the findings.
Limitation 2	Restriction on language could have left out studies conducted in different cultures.

Limitation 3	Keywords used might have constricted or limited studies that could have been included in this review.
Limitation 4	Not every study included LSEs or TAs, thus findings on the perception of LSEs are limited.
Limitation 5	Studies were conducted in five developing nations, namely UK, USA, Tokyo, Turkey, Germany and Hong Kong. Thus, it is very difficult to give a global overview as these countries have a good standard of living.
Limitation 6	Although different search strategies were used to retrieve articles within the field, there might be the possibility that some papers were missed.

2.9 Conclusion

This integrative review presented an overview of the PE teachers' and LSEs' perception on inclusive PE. The results showed that further studies should be conducted within the field to obtain a clearer picture of inclusive PE, both from the PE teachers' perspective and that of the LSEs. However, this review maintains that, with the right environment and support, PE teachers and LSEs can implement inclusive PE. Furthermore, this review highlights the importance of giving PE teachers and LSEs the opportunity to voice their experiences, opinions, and concerns about IPE to their respective school senior management team.

Chapter 3: Methodology

3.1 Overview

This chapter describes the methodological approach adopted to answer the research questions discussed in Chapter 1. It outlines the qualitative research philosophy underlying the chosen methodology for this thesis. The research philosophy is the pragmatic paradigm using an inductive approach. The methodology used is based on the Community-Based Qualitative Research (CBQR) approach. This chapter will also describe the participant selection and sampling methods used for the three phases of this study as well as the data collection and analysis procedures. Lastly, it will highlight the ethical considerations¹⁰.

3.2 A Pragmatic Paradigm

A pragmatic philosophical paradigm with an inductive research approach was selected. This approach rejects the traditional assumptions about the nature of reality, inquiry and knowledge. The premise of the work is that by testing ideas and theories in practice truth can be verified (Patton, 2014). Morgan (2014a), suggests three characteristics which are shared by pragmatists (table 12).

¹⁰ Rationale for using qualitative research is given in Appendix 6

Table 12: Shared Characteristics of Pragmatists (Morgan, 2014a, pg26-27)

Characteristic	Definition	Implication
“Actions cannot be separated from the situations and context in which they occur”	This reflects on the experiences we live, which are not the truth, but provide us with a “warranted assertion” (Dewey, 1938, pg. 9) that is projected by repeated actions in known territory, resulting in “predicted outcomes” (Morgan, 2014a, pg. 26).	Understanding the lived experiences of the participants making up the three phases is essential to understanding their actions and behaviour towards inclusive PE, PA, and sports.
“Actions are linked to consequences in ways that are open to change”	Since the world is constantly changing, it is difficult to experience something more than once; therefore, our “warranted assertion” (Dewey, 1938, pg. 9) about the predicted outcome is temporary. Thus, our knowledge (beliefs) are constantly changing due to the constant change in experience (Morgan, 2014a).	Students with ID process instructions and information differently. So, understanding the strategies used by PE teachers and LSEs in inclusive PE, PA, and sports is essential to determine different pedagogical tools and styles to use for a positive inclusive learning environment.
“Actions depend on worldviews that are socially shared sets of beliefs”	Everybody is unique; thus, experiences vary from one individual to another. However, as individuals, we can still share similar experiences with others, hence actions will be similar with similar predicated outcomes (Morgan, 2014). Therefore, for actions to be similar in a given situation, our beliefs should be similar as well (Kaushik and Walsh, 2019).	Students with ID will share views and experiences which contain similar elements, as will PE teachers and LSEs, educational and government stakeholders, so understanding these shared set of beliefs is important to determine the action needed to change.

It is evident that these characteristics are not encompassed in other philosophical paradigms as they focus on the human experience rather than the “nature of reality” (Kaushik and Walsh, 2019, pg.3). These are the characteristics which were adopted and used as a reference point for my research study.

For a pragmatist, one of the key elements is to identify “what works”, as this provides the framework to come up with a valid research question and “focus inquiry processes at the onset according to how and what respondents identify as working or not working” (Kelly and Cordeiro, 2020, pg. 3).¹¹

3.2.1 An inductive research approach

The inductive research approach is usually associated with qualitative methodology as it focuses on investigating new or previously studied phenomena to generate new or improved explanations or theories (Gratton and Jones, 2004; Gabriel, 2013). Such theories are generated from emergent themes based on data collected through the research (Thomas, 2006). Thus, using the data collected through the research process, I will be able to produce new findings.

3.3 Community- Based Participatory Research (CBPR)

As the main objective of this thesis was to support and empower vulnerable individuals to get their thoughts and concerns heard, CBPR was considered to be the ideal methodology to use. In CBPR, investigations start from “the ground up, with those whose lives are most impacted by the problem at hand” (Leavy, 2017, pg. 224).

The main goal of CBPR is to work with the population that is going through social issues and challenges “to support positive social change” (Schinke and Blodgett, 2019,

¹¹ For a fuller consideration of pragmatism see Appendix 7

pg. 88). For this reason, CBPR is said to be “problem-driven”, as the starting point of the research process is the identification of a social problem (Leavy, 2017, pg. 224). As defined by The Kellogg Foundation (2009, para. 1), CBPR initiates the research process by identifying a common concern shared among a specific population “with the aim of combining knowledge and action for social change.” Therefore, through collaborative work, CBRP seeks to create awareness on a matter concerning the community and acts as a driver for change (Peralta, 2017). In Malta, the inclusion of students with ID in PE, PA, and sports has been on the educational agenda for many years. However, students with ID are still struggling and were only recently included in the National Sports Policy (2016). No research has to date been conducted in Malta to understand what students with ID require to be positively included in PE, PA, and sports; this means that policies and other educational and sports strategies are being designed without consulting the population in question.

CBPR suggests that to achieve community change and action the community at stake should be included in the process of the research investigation (Schinke, Smith and McGannon, 2013; Jull, Giles and Graham, 2017; Schinke and Blodgett, 2019) as these members of the community are the experts and specialists within the field (Fletcher, 2003). Therefore, for community-based research to work there should be “the participation and influence of non-academic researchers in the process of creating knowledge” (Israel et al. 1998, pg. 177). In “Pedagogy of the Oppressed”, scholar Paulo Freire (1970, pg.11) wrote about the need to give more power to those who are marginalised and oppressed by the dominant population to enable them to fight for social justice and equality. This is what this thesis is about: Bringing the marginalised

(students with ID) to the forefront and working together for a better inclusive community.

3.3.1 The underpinning concepts of CBPR

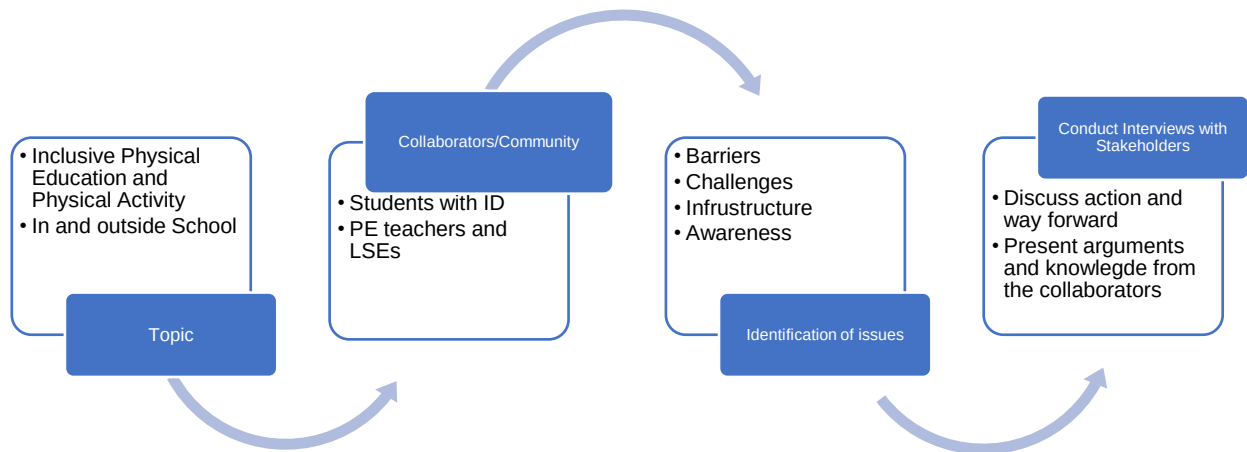
As described by Johnson (2017), CBPR has three main underpinning concepts as show in table 13.

Table 13: CBPR underpinning concepts

CBPR underpinning concepts	
1. Praxis	Praxis describes the way a researcher embarks on a research project, that is, by reflecting on their previous experiences and referring to the knowledge and perceptions of the population making up the community being investigated (Johnson, 2017) with the aim of creating change through action (Freire, 1970). Given that individuals can create change through reflection on past experiences, knowledge, and inquiry (Dewey, 1938), it is important to understand praxis which is one of the key concepts within CBPR (Johnson, 2017; Peralta, 2017). One of the main requirements of praxis is that the researcher is actively involved throughout the “research process and participates in the development of solutions to educational and social problems” (Johnson, 2017, pg. 22).
2. Communities as intellectual spaces	Looking at communities as intellectual spaces means bringing different members of the community under investigation together to elicit knowledge as one unit and not as separate community entities (Johnson, 2017). Thus, members of the community of different social status bring to the table rich information and knowledge (Johnson, 2017). Their aim, as noted by Dewey (1938), is to identify a common concern and devise a plan of action to address it. Therefore, the researcher should acknowledge the importance of community collaboration and embark on a “critical inquiry toward the amelioration of issues and conditions” impacting the lives of the chosen community (Johnson, 2017, pg. 23).

3. Engaged learning	The last concept underpinning CBPR noted by Johnson (2017) is engaged learning. Rooted in the educational theories of writers, such as Vygotsky and Dewey, engaged learning highlights the importance of connecting with people and giving opportunities to the marginalised population to be engaged in knowledge generation and act to create a better community experience. In engaged learning, researchers are actively involved in the research process by gaining knowledge and understanding from different members of the community (Johnson, 2017). With these three underlying concepts, CBPR moves away from the traditional research approaches, where the researcher is the main protagonist, to create an environment that allows collaboration, where knowledge and experiences are shared for the common good of a community (Peralta, 2017). As shown in Figure 2, for my research study, I engaged in deep and meaningful communication with students with ID to understand their concerns and the barriers and challenges they face daily during their PE lessons and other physical activity experiences in and outside the school community (Phase 1). PE teachers and LSEs also collaborated in the conversation to express their concerns, highlighting the challenges of their job (Phase 2). In this research, it is the information gathered from students with ID, PE teachers and LSEs that guides the research process and yields suggestions on ways to improve inclusive PE, PA, and sport. The discussed and reflected thoughts are presented to educational and government stakeholders in the hope that they would take action (Phase 3).
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Figure 2: Research process from the community to relevant stakeholders



3.4 Sampling Technique in relation to the phases of the study ¹²

In this study, I used two different types of non-probability sampling techniques. I used the criterion-based purposive sampling technique for the first two phases as this gave me the opportunity to choose my participants according to common traits and experiences (tables 14-16) (Sparkes and Smith, 2014). The participants chosen by this technique are individuals who represent a community segment that has expertise in the field being investigated (Patton, 2014) and can present the researcher with deep and relevant knowledge (Sparkes and Smith, 2014).

For the third phase I used the purposive sampling technique since I had to target participants who held specific positions within the educational department, the sports field and the disability sector in Malta. As noted in Cohen, Manion and Morrison (2007, pg. 115), this sampling technique allows the researcher to select participants for a “specific purpose” which, in my case, was to discuss the way forward for inclusion PE, PA and sports based on the information given by the participants of Phases 1 and 2.

¹² A detailed rationale regarding sampling technique and participants can be found in Appendix 8

3.4.1 Participants of Phase 1

The primary participants in this phase were students with ID who attend secondary schools in Malta. To facilitate the data collection process, each student had to be accompanied by a parent or a guardian. Therefore, 18 students with ID and 18 parents/guardians participated in phase 1 of the study. It is important to note that the questions were all directed to the students; no direct questions were asked to the parents or guardians, however they were encouraged to comment and elaborate if necessary. The sample size was selected to represent every school setting in Malta covering the full spectrum of the island's demographics. To obtain a homogenous sample, participants were recruited in line with the following criteria:

Table 14: Eligibility Criteria for Participants for Phase 1

Inclusion Criteria	Exclusion Criteria
Aged from 12-16 years	Anyone not falling within the age bracket on the day of data collection was not included in the study.
Every educational setting that follows mainstream educational guidance as set by the Maltese government – i.e., representatives from church schools, independent schools and government schools were selected to achieve a wider spectrum.	Special Education schools or Resource Centres were not included as they do not follow the mainstream educational setting. These schools provide either primary or secondary alternate academic programmes which vary from the curriculum delivered in mainstream schools. Special Education schools and Resource Centres focus mostly on life skills, therapy, and individual educational needs (Government of Malta, 2017).
	Students with physical disability were not considered in this study. Physical disability refers to any physical impairments produced by musculoskeletal and/or neurological

	condition which limits the individual's mobility (UNESCO, 2015c).
Both male and female participants were considered.	
	Only one participant per family was included in the study – no siblings were allowed to take part. This was to ensure that the sample included participants from as many different households and schools as possible, thus widening the reach.
Students had to be able to give verbal consent and had to be able to communicate in either Maltese or English.	

3.4.2 Participants of Phase 2

The participants of phase 2 of the study comprised PE teachers (n=16) and LSEs (n=16) who teach in secondary schools in Malta. For participants to be considered in this study, they had to fit the eligibility criteria highlighted in Table 15 for PE teachers and Table 16 for LSEs.

Table 15: Eligibility Criteria for Participants of Phase 2 – PE Teachers

Teachers Recruitment Criteria	
Inclusion Criteria	Exclusion Criteria
At least 5 years of experience.	
Every educational setting - therefore representatives of church schools, independent schools and government schools were selected to ensure that the different educational settings were captured.	Special Education schools or Resource Centres were not included as they do not follow the mainstream educational setting. These schools provide either primary or secondary alternate academic programmes which vary from the curriculum delivered in mainstream schools. Special Education schools and Resource Centres focus mostly on life skills, therapy, and individual educational needs (Government of Malta, 2017).
Only fully qualified PE teachers	Supply teachers or sport coaches were not included.
Teaching PE only	Teachers teaching PE and another subject were not included.
Teaching PE in secondary school only (middle school or secondary in the case of government schools). Thus, PE teachers teaching students from 10 years up to 16 years of age.	Since this study focused on secondary school, teachers teaching in primary or postsecondary schools were not included.
Both male and female participants were considered.	
Same school as the chosen LSE. This was decided for uniformity and to compare the results obtained from the information given by both the PE teachers and the LSEs.	

Table 16: Eligibility Criteria for Participants of Phase 2 – LSEs

LSEs Recruitment Criteria	
Inclusion Criteria	Exclusion Criteria
At least 5 years of experience.	
Every educational setting - therefore representatives of church schools, independent schools and government schools were selected to ensure that the different educational settings were captured.	Special Education school or resources centres not included for the same reason listed above (see table 15).
LSEs qualification – Diploma	Supply LSEs or LSEs with no qualifications were not included.
Both Shared LSEs and one-to-one LSEs were included.	
Working in secondary school only (middle school or secondary in the case of government schools).	LSEs working in primary or postsecondary were not included for the same reason listed above (see table 15).
Both male and female participants were considered.	
Same school as the chosen PE teacher for the same reason listed above (see table 15).	

Table 17: Number of participants by gender and school setting – Phase 2

	PE Teachers		LSEs	
	Female	Male	Female	Male
Government Schools	2	2	2	2
Church Schools	5	4	6	3
Independent Schools	1	2	2	1

3.4.3 Justification for sample criteria for Phases 1 and 2

Below I provide a detailed justification for the sample criteria used in phases 1 and 2.

Table 18: Justification for sample criteria

Justification criteria for phases 1 and 2	
Different school settings	It was decided to include representatives from all three types of schools in Malta – independent, church and government – because, although all schools are regulated by the Ministry for Education and all are compelled to deliver lessons in accordance with the National Curriculum Framework (Eurydice, 2019), the different types of schools have a different ethos and characteristics. Moreover, government and independent schools have a co-educational setting, whereas church schools adopt a single gender setting at secondary level (Eurydice, 2019). Another important point to mention is that church and independent schools often encompass both a primary and a secondary school (sometimes within the same building), meaning that students remain within the same group throughout their scholastic years from a young age. This is not the case in government schools, where students are grouped under colleges according to their catchment area (there are 11 colleges in Malta) and placed in middle and secondary schools according to their ability (Eurydice, 2019). Thus, students in government schools are likely to have different classmates throughout different phases of their academic lives. Lastly, although classroom sizes in church schools are larger (22-24 students per class), the population in government schools is higher resulting in a large school community (National Statistics Office (NSO), 2018). Data gathered from the NSO for the scholastic year 2016-2017 showed that government schools had 10,910 students enrolled, church schools had 7,419 and private schools had 2,325 (NSO,2018). During the academic year 2020/2021, Malta had 48,731 students attending compulsory education, of which 44.7% attended middle and secondary school (Malta Daily, 2022). Out of the 21,783 students enrolled, 58.8% attended government schools, 27.6% attended church schools and 13.6% attended independent schools.
Both genders considered	It was important to include both genders in this study as this gave me the possibility to compare and contrast the respondents'

	answers and identify whether attitudes and perceptions were determined by gender differences.
Determining the sample size	The aim of having different social groups participating in this study was to obtain a comprehensive overview of the inclusive situation in Malta. Leaving one of these groups out would have severely limited information on action that could be taken to effect change. The participants chosen were all key players in this field of study and could identify what is hindering and facilitating change. The sample size was determined during the data collection phase. Data saturation was reached when no further information was being produced by the participants; as noted in Grady (1998, pg.26), the additional data collected was redundant. Also, as the study had a narrow focus and related to a specific experience and group of individuals a larger sample was not required as “information power” was achieved (Malterud, Siersma and Guassora, 2016, pg. 1755).

3.4.4 Participants Phase 3

Participants making up phase 3 of this study (n=9) consisted of stakeholders holding different positions in the educational and academic field and stakeholders representing government entities. Unlike in the previous phases, where providing the characteristics of the participants did not prejudice their anonymity, in this phase details on the participants had to be restricted to safeguard the participants from being identified as there are only a few people holding certain positions in Malta. To be eligible to partake in this study, participants had to meet the following criteria:

Table 19: Inclusion Criteria for Stakeholders – Phase 3

Role of stakeholder	Inclusive Criteria
Academic and education stakeholders	• Engaged within the Ministry for Education in Malta. • Working primarily in policy making in education and inclusion. • Have previous experience in policy writing. • Represents the 3 different school settings
Government stakeholders	• Engaged within the Ministry for Education or the Ministry for Inclusion, Voluntary Organisations and Consumers Rights in Malta. • Works in policy making.

3.4.5 Procedures followed per phase of study

The table below (table 20) describes the procedures used in every phase:

Table 20: Procedures

Phases of study	Procedure
Phase 1	Procedure Phase 1 Each parent/guardian and student with ID was presented with an information sheet (Appendix 9a/b) to explain the research process and the aims and objectives of my thesis. Together with the information sheet, each participant was sent a consent form (Appendix 10) which had to be signed by the parent or guardian to enable them to participate. Moreover, the participants were informed that they could contact me if they had any queries or concerns about their participation or needed further information. This was an essential aspect of this study, as participants had to feel comfortable taking part in the study. Each participant was provided with a code (ex SF1 indicating Students Female 1) to protect their identity (Refer to Table 23 Results Chapter).

Phase 2	Procedure Phase 2 Each participant was presented with an information sheet (Appendix 11) and a consent form (Appendix 12). The information sheet presented the background, aims and objectives of the study and what participation entailed. The participants were also encouraged to contact the researcher for any clarifications or if they had any concerns regarding their participation. Each participant was allocated a code (ex CTF1 indicating Church School Teacher Female 1) to protect their identity (refer to table 26). The sample included 8 female and 8 male PE teachers and 10 female and 6 male LSEs.
Phase 3	Procedure Phase 3 The same recruitment procedure was conducted in phase 3 as in the other phases, where each participant was provided with an information sheet via email (Appendix 13) with all the relevant information of the study and details on their involvement together with a consent form (Appendix 14) for them to sign and return before data collection could commence. The participants were given the opportunity to ask questions related to the study if further clarification was needed.

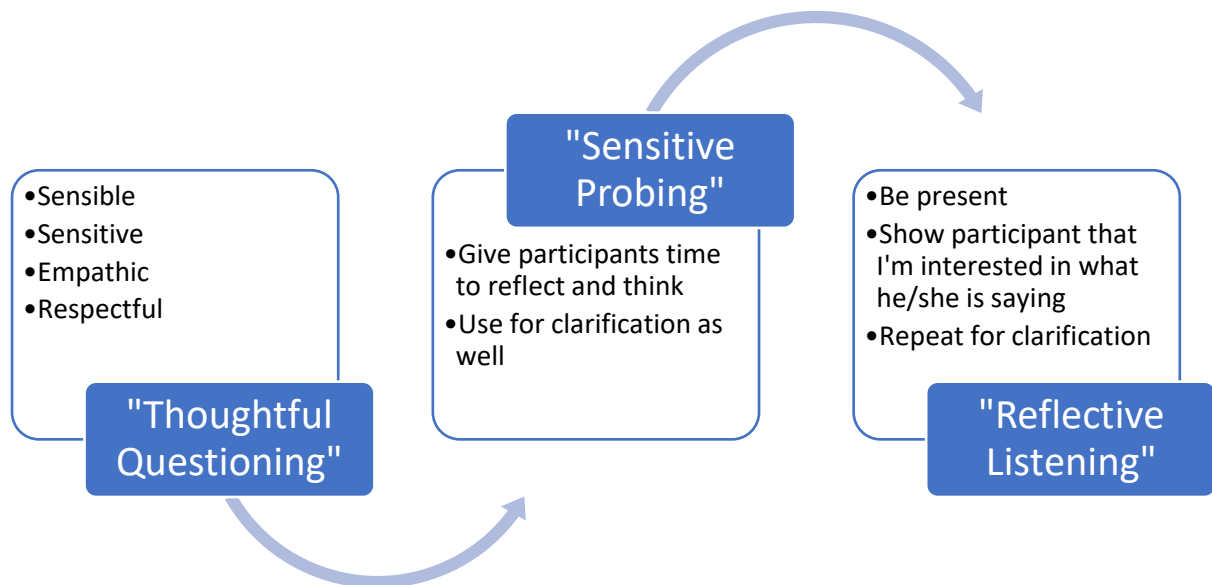
3.5 Data Collection

3.5.1 Primary data collection – Interviews

Interviews were conducted with the participants to gain knowledge and understanding. Interviews allow the researcher to embark on an intensive discussion with the participants (Smith and Caddick, 2012) and provide them with rich full data (Gratton and Jones, 2004). Semi-structured interviews, in particular, allow the researcher to build a relationship with the participants (Smith, 2008) through “empathy and respect” (Salmons, 2015, pg. 29). This was an essential aspect of my study. Building empathy and respect allowed the participants to trust me, making them more open to share their

life experiences. To enable me to conduct good interviews, I had to adopt three important communicative skills (figure 3) as mentioned in Salmons (2015, pg. 29).

Figure 3: Important communicative skills to use in interviews



I chose to conduct semi-structured interviews as this structure allows for flexibility (Gratton and Jones, 2004; Krane and Baird, 2005) and deeper exploration (Smith, 2008; Smith and Caddick, 2012). Semi-structured interviews use the interview guide (pre-planned questions) as a template rather than as a rigid structure that dictates the interview process (Krane and Baird, 2005; Smith, 2008). This guide is used “to ensure that the same basic lines of inquiry are pursued with each person interviewed” (Patton, 2014, pg. 644). Therefore, the pre-determined list of questions is used as a “checklist”, to make sure that every aspect of the topic under investigation is dealt with (Patton, 2014, pg. 644). Moreover, open-ended questions are used to allow the participant to delve into deeper thoughts, exploring different social contexts without departing from the aims of the study (Smith and Caddick, 2012; Patton, 2014). My task during the interviews was to capture the participants’ experiences and social conflicts (this was mostly true in Phase 1) while remaining true to the aim and objectives of the study.

3.5.1.1 Online interviews due to Covid-19 restrictions

Although the original plan was to meet with the participants physically and conduct face-to-face interviews, due to COVID-19 restrictions, I was forced to conduct every interview online using Microsoft Teams. Therefore, I shifted the traditional semi-structured interviews online through “virtual methods” (Rogers, 2009, pg.2) to capture the information and knowledge requested for my research study. Although this had its benefits, such as allowing me to conduct the interview from home reducing travel time and costs, it meant that nonverbals were difficult to observe, which may have limited the interview experience.

3.5.2 Piloting of interview guide

To make sure that my interview questions were clear and easy to comprehend, each interview guide that was compiled was tested with individuals who had the same characteristics as the sampled population but were not part of the selected pool. This was done to gather feedback on whether the questions used provided sufficiently detailed data, whether certain questions had to be removed, restructured, or reworded (Harding, 2013; Janghorban, Latifnejd Roudsari and Taghipour, 2013). The piloting stage revealed that the Phase 1 interview questions had to be simplified; some Phase 2 interview questions need more clarity to elicit deeper knowledge and some Phase 3 interview questions were vague and required a great deal of probing and prompting so they needed to be reworded¹³. The interview guides were amended accordingly to obtain better data and create a better overall experience.

¹³ Refer to Appendix 15 for the interview guides used during piloting - 1 for phase 1, 2 for phase 2 (for teachers and LSEs), 2 for phase 3 (for educational stakeholders and government stakeholders)

3.5.3 Interview structure and duration per phase

The Phase 1 interview consisted of 15 questions¹⁴. It started off with ice breakers to set the scene and make the participant with ID more comfortable. Each interview lasted between 45 to 60 mins, with some breaks for the participant to move around and unwind. Each participant was encouraged to voice their opinion and speak in either Maltese or English. Input from parents/guardians was also encouraged at any given point.

Phase 2 interviews consisted of two similar sets of interview guides¹⁵, one for PE teachers that comprised 16 questions and another for LSEs that comprised 15 questions. Although participants were encouraged to answer in English, most preferred to use their native language as they felt they could express themselves better in Maltese. Each interview lasted approximately 60 mins.

Since the participants making up Phase 3 came from a different working environment, it was decided to split the group into participants coming from the educational field¹⁶ and participants representing the governmental, sport and policy making sector¹⁷. Two similar interview guides were created, each comprising 13 questions. Each interview lasted approximately 60 mins.

3.6 Data Analysis

Since qualitative research looks at generating theories and ideas from the data collected, the analysis methods used are considered to be “radically inductive” (Johnson, 2017, pg. 122). Using the inductive approach, the researcher is able to

¹⁴ Refer to Appendix 16 for interview guide phase 1

¹⁵ Refer to Appendix 17 for interview guide phase 2

¹⁶ Refer to Appendix 18 for interview guide phase 3 Educational stakeholders

¹⁷ Refer to Appendix 19 for interview guide phase 3 Governmental stakeholders

extract themes from the participants' responses to make sense of their knowledge and experiences. This method is especially useful when conducting a community-based study where the end goal is to create change or action (Johnson, 2017). After reflecting on the different analysis methods available, I decided to adopt the Reflexive Thematic Analysis (TA) method as it facilitated the process of pattern identification across the different datasets (Braun, Clarke and Weate, 2019, pg.195).

3.6.1 Reflexive thematic analysis

As described by Braun and Clarke (2006, pg.6), TA “is a method for identifying, analysing, and reporting patterns (themes) within data”. Therefore, it allows the researcher to export rich data from the data collected through a systematic and analytical approach (Bruan and Clarke, 2022). My analysis was guided by the “six-phase model” (Figure 4) designed by Braun and Clarke (2006, 2023) but a degree of flexibility (Patton, 2014) was retained to remain true to the research questions. Braun, Clarke and Weate (2019, pg.196) suggest that TA requires the researcher to implement a “reflexive process” which does not always allow the researcher to move linearly through the stages. Since TA was used to analyse all the datasets from all three phases of this study, I will be providing a detailed report of the process accompanied by some examples below. A more detailed audit trail for every phase will be provided in the respective discussion chapters¹⁸.

¹⁸ For the audit trail and a complete description of process refer to appendix 20

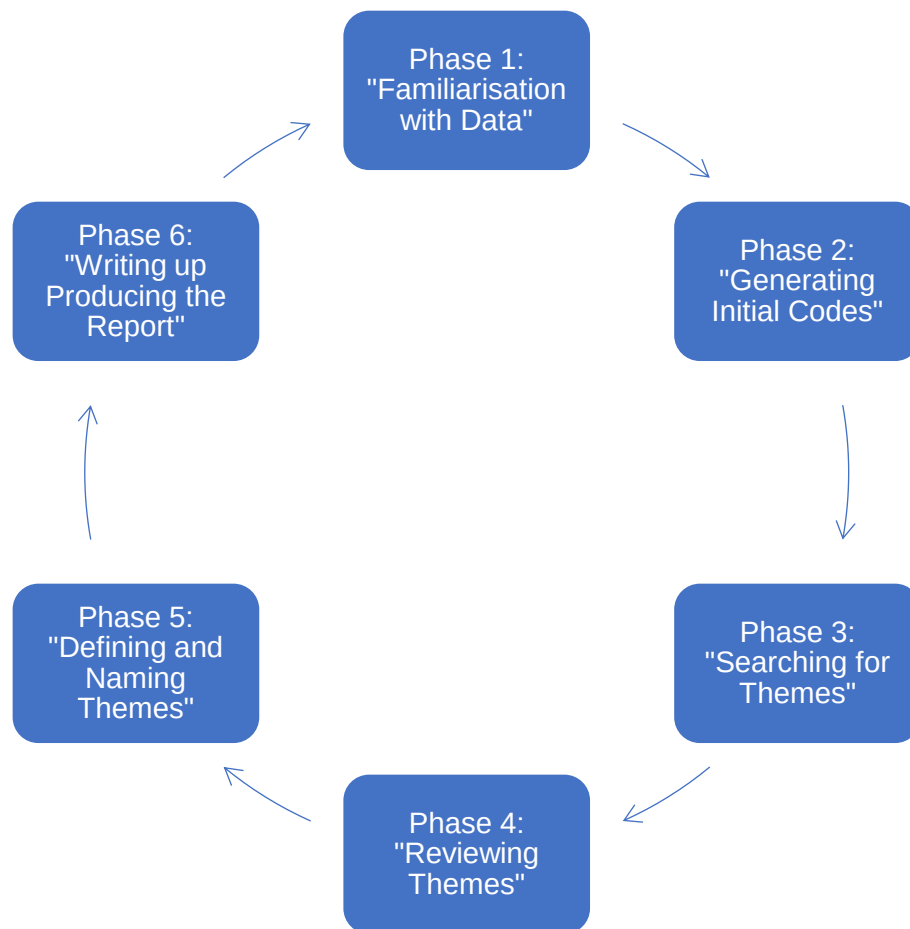


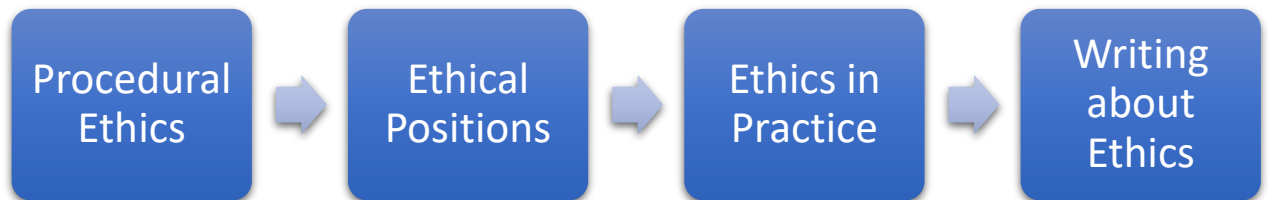
Figure 4: Reflexive Thematic Analysis by Braun et al. (2023)

3.7 Ethical Considerations

Embarking on a research journey entails the careful consideration of all ethical aspects and procedures related to the chosen methodology (Gratton and Jones, 2004; Palmer, 2019). For my research study, I adopted Palmer's "ethical chain" framework (Palmer, 2019, pg. 316), which incorporates Guillemin and Gillam's (2004) two ethical dimensions. These dimensions relate to the initial steps of acquiring institutional clearance known as "procedural ethics" and the "ethics in practice", which relates to the daily ethical aspects that need to be maintained and adhered to, to safeguard the participants of the study (Guillemin and Gillam, 2004, pg.263).

The “ethical chain”, as described by Palmer (2019, pg. 316), consists of four indispensable ethical steps (figure 5)¹⁹.

Figure 5: Ethical Chain (Palmer, 2019, pg.317)



3.8 Maintaining Quality in Qualitative Research

Lincoln and Guba (1985) suggest that qualitative research cannot adopt the same tools used to evaluate the quality of quantitative studies. They propose using trustworthiness as a tool to assess the quality of qualitative studies, comprising four different criteria, namely, credibility, dependability, transferability and confirmability (Lincoln and Guba, 1985). The table below presents an overview of these criteria and how each were addressed in my study.

¹⁹ Refer to Appendix 21 for a full description of the ethical chain

Table 21: Representing the four different criteria for quality for qualitative research – Lincoln and Guba (1985)

Criteria	Overview	Implication
“Credibility”	Staying true to the data collected. Therefore, making sure that the data is accurate and true to the participants’ realities.	To ensure credibility, before every interview, I dedicated time to getting to know the participants to build trust and collaboration, which is one of the essential aspects of CBPR (Jordan, Gust and Scheman, 2011). Additionally, during the interview, I paraphrased what the participants said to make sure that my interpretation was accurate and represented the participants’ realities.
“Dependability”	Dependability refers to “attaining consistency” (Burke, 2019, p. 331). Thus, it is essential that the research process is audited and traceable.	An audit trail was kept throughout the research process.
“Transferability”	This refers to the extent to which data collected is generalisable and can be transferred to other populations (Burke, 2019).	Since in CBPR the researcher empowers the community under investigation (Jordan, Gust and Scheman, 2011), I embarked on a journey to gather in-depth rich knowledge from the community members themselves which, as noted in Jordan, Gust and Scheman (2011, p.179), can “provide insights into the complexities of the phenomena under investigation”.
“Confirmability”	This refers to the findings which “mirror the experiences	An audit trail was kept to outline the research procedure.

	and views of the participants” (Burke, 2019, p.332)	
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Table 22 provides details of how quality was enhanced in line with the pragmatic paradigm:

Table 22: Quality for qualitative research supporting pragmatic paradigm

Quality for qualitative research supporting the pragmatic paradigm as recommended by Ramandahan et al. (2021)	
Ensure transparency around data analysis	I gave a clear rationale on how data was analysed by providing the reader with the Thematic Analysis audit trail and complete description of process.
Triangulate Data	Using different participants to have a more comprehensive data collection

3.8.1 Reflexivity

Being mindful of my role throughout the research process was essential to reduce bias and produce valid and reliable research. This research was not about my perception of and thoughts on inclusive PE and PA; it involved a collaboration between different parties that presented different experiences and knowledge. To ensure that my background knowledge and experiences would not interfere with the research process, I made sure that the spotlight was always on the main protagonists and that the questions were asked in an open fashion to elicit reflection and deeper understanding. Prompting was only used for clarification, and I never suggested answers or responses. I entered this study with the aim to learn from my participants, putting all my experiences within the field aside.

3.9 Conclusion

This chapter presented a detailed overview of the philosophical stance and methodology underpinning my research project. It provided a comprehensive report on the tools used to collect and analyse the data and to select the participants for every phase of the study. Ethical considerations were listed and my stance on reflexivity was presented. In the following chapter I will present the findings obtained in Phase 1 of the study together with a discussion of the key findings

Chapter 4: Results – Phase 1

This chapter presents the findings elicited from 18 one-to-one interviews with students with intellectual disability who attend mainstream middle and secondary schools in Malta and their respective guardians. In total, 14/18 (77.78%) boys and 4/18 (22.22%) girls were interviewed, 8/18 (44%) of whom attended church schools, 7/18 (38.89%) government schools and 2/18 (11.11%) independent schools. Table 23 below presents the key characteristics of the participants.

Table 23: Key characteristics of Phase 1 participants

Code	Age	School Setting	Gender	Type of Intellectual Disability	Parent/ Guardian Gender
SF1	15	Church School	F	ADHD	F
SM1	15	Church School	M	Downs Syndrome	F
SM2	13	Church School	M	Autism	F
SM3	13	Government School	M	Autism	F
SM4	15	Church School	M	Autism	F
SM5	12	Independent School	M	Autism	M
SM6	15	Church School	M	Autism	F
SF2	13	Government School	F	ADHD	F
SM7	12	Church School	M	Autism	F
SM8	15	Independent School	M	Autism	F
SM9	12	Church School	M	Downs Syndrome	F
SM10	13	Government School	M	ADHD	F
SM11	16	Government School	M	ADHD	F
SF3	16	Government School	F	ADHD	F
SM12	12	Church School	M	Autism	M
SM13	14	Government School	M	Autism	M
SF4	12	Church School	F	Downs Syndrome	F
SM14	15	Government School	M	Autism	F

4.1 Overview of themes, sub-themes, and codes

Three major themes emerged from the interviews, namely: (a) barriers and challenges influencing inclusion in PA and participation in sports; (b) mental state of students with ID; and (c) the environment. Each theme has sub-themes and codes (table 24).

Table 24: Themes, sub-themes and codes emerging from the individual interviews

<i>Theme</i>	<i>Sub-themes</i>	<i>Codes</i>	<i>Student</i>	<i>Guardian</i>
4.2 Barriers and challenges influencing inclusion in PA and sports participation	4.2.1 Students' conditions	4.2.1.1: Psychological Aspects – Perceived ability to follow instructions effectively	SM1 SM13 (2/18)	SM1P SM2P SM6P SF2P SM7P SM9P SM10P SM14P (8/18)
		4.2.1.2: Psychological Aspects – Perceived lack of competitive spirit		
		4.2.1.3: Lack of physical attributes		
	4.2.2: Beliefs and attitude of students with ID	4.2.2.1: The desire to be autonomous in PE and sports to achieve a sense of “normality”	SM2 SM3 SM4 SF2 SM7 SM11 SF3 (7/18)	SM4P SM5P SM9P (3/18)
		4.2.2.2: Reluctance to participate due to perceived lack of physical ability		

4.2.3: Beliefs and attitude of students without ID	4.2.3.1: Being included but not integrated	SF1 SM5 SM6 SM7 SM11 SF3 SM13 (7/18)	SM1P SM3P SM4P SM9P SF3P (5/18)
	4.2.3.2: Attitudes and behaviour of students without ID		
4.2.4: Number of students/athletes in class/session	4.2.4.1: The number of students in class and people density	SM1 SM10 SM11 (3/18)	SM7P SM9P SM12P (3/18)
	4.2.4.2: The environment of sports facilities		
4.2.5: Lack of awareness	4.2.5.1: Experience within mainstream sports clubs	SM6 SM11 SF3 (3/18)	SM2P SM5P SM6P SM9P SM12P (5/18)
	4.2.5.2: Experience of PE teachers		
4.2.6: Opportunities or lack of	4.2.6.1: Lack of opportunities	SF1 SM1 SM4 SM3 SM5 SM6 SM8 SM9 SM11 SF2 SM12 SM13 SF3 (9/18)	SM1P SM2P SM4P SM5P SM7P SM9P SM10P SF3P SM12P
	4.2.6.2: Lack of opportunities due to lack of resources		
	4.2.6.3: Perceived benefits should		

		opportunities be provided		SM13P SM14P (11/18)
		4.2.6.4: Current opportunities		
	4.2.7: Parental concerns	4.2.7.1: Rigidity within the educational system in Malta	0/18	SM1P SM7P SM9P SM10P SM13P SM14P (6/18)
		4.2.7.2: Segregation in mainstream clubs		
	4.2.8: Facilities	4.2.8.1: Facilities in the community	SM5 SM6 SM11 (3/18)	SM3P SM12P SM14P (3/18)
4.3: Mental state of students with ID	4.3.1: Emotions	4.3.1.1: Fear of failure	SF1 SM2 SM3 SM4 SM11 SF3 (6/18)	SM7P SM9P SF3P SM14P (4/18)
		4.3.1.2: Experiencing shame		
	4.3.2: Sense of belonging	4.3.2.1: The school community - different scenarios in different schools	SF1 SM1 SM7 SM9 SM10 SM11 SF3 SM14 SF4 (9/18)	SF1P SM1P SM9P SM10P SM13P SM14P (6/18)
		4.3.2.2: Outside school sports community		
	4.3.3: Psycho-social aspects	4.3.3.1: Benefits of an inclusive society	SM11 SF3 (2/18)	SF1P SM1P SM2P SM9P SF3P (5/18)
	4.4.1: School policy	4.4.1.1: Lack of human resources		SM2P SM5P

4.4: Social assistance within schools		4.4.1.2: Tailormade/segregated learning	SM10 SM11 (2/18)	SM7P SM9P SM10P SM14P (6/18)
		4.4.1.3: Schools' responsibility		
	4.4.2: Role of the LSE	4.4.2.1: The role of the LSE during PE	SM2 SM3 SM4 SM9	SM1P SM12P (2/18)
		4.4.2.2: LSEs' involvement and characteristics during the PE lesson	SM10 SM11 SF3 SM13 SM14 (9/18)	
	4.4.3: PE teachers' characteristics	4.4.3.1: Virtue and traits of the PE teacher	SM5 SF2 SM8 SM10	SF3P SM12P (2/18)
		4.4.3.2: Positive attributes of the PE teacher	SM11 SM13 (6/18)	

4.2 Barriers and challenges influencing inclusion in PA and sports participation

This theme encompasses the factors impacting inclusion in PA, PE, and sports from both the students' and their guardians' perspective. It has eight sub-themes: (a) students' condition; (b) beliefs and attitude of students with ID; (c) beliefs and attitudes of students without ID; (d) number of students / athletes in class/session; (e) lack of awareness; (f) opportunities or lack of; (g) parental concerns; and (h) facilities. Each sub-theme is further divided into codes which are discussed below.

4.2.1 Students' conditions and characteristics of the disability

This sub-theme concerns how students' conditions and disabilities influence their inclusion in sports and PA. These factors include psychological aspects, e.g., lack of

focus, lack of comprehension and lack of motivation to compete as well as physical attributes, e.g., lack of coordination. It encompasses three codes, namely: (a) perceived ability to follow instructions effectively; (b) perceived lack of competitiveness; and (c) lack of physical attributes.

4.2.1.1 Psychological Aspects – *perceived ability to follow instructions effectively*

Three guardians stated that the main barrier to their child's inclusion in PA was the lack of cognitive ability to comprehend the rules and inability to focus on the teacher/coach's instructions. SM2P's son, for example, "*lacks attention ... apart from not following instructions*" while SM6P's son finds it "*too hard*" to understand instructions. Apart from lack of understanding and short attention span, the language being used by the PE teacher could also present students with ID with a barrier. SM10P said that his son finds it hard to follow instructions: "*It could be because he is not understanding him [the coach] not because he is ignoring him ...[as] my son is English speaking*".

4.2.1.2: Psychological Aspects - *Perceived lack of competitive spirit*

Four of the guardians highlighted the fact that students with ID tend to lack a competitive spirit and generally participate in sports and PA just for fun. They lack aggressiveness (SM1P) and do not have a thirst for competition. "*As long as he does the activity, he is happy*", SM7P said about his son. SM10P said that, because his son is not competitive, "*he would not try to steal the ball*" and nor would others try to pass the ball to him, thus minimising his chances of being selected to play in a football match. "*He can attend the football nursery... however, to train only*" (SM1P). SM9P noted that the older the children got, the more competitive the environment became, making it harder for her son to participate. In fact, according to SM9P parents of TDP

complain about having children with ID join their clubs as they are not *“hungry for competition”* and will, therefore, not put in the effort required to win at all costs.

4.2.1.3: Lack of physical attributes

Another barrier highlighted by both students and guardians was the lack of physical strength. Although SM1 likes to participate in sports activities, the other students do not include him in games because he is *“not strong enough”*. SM7P stated that *“if you are weak, you will struggle [to make the team]”* or be included by TDP as their main goal is to win. Thus, weaker students are automatically segregated and left out. SM13 is aware that his football abilities do not compare with the abilities of the other students in class: *“So I don’t get the chance to get the ball and play”*. His classmates deliberately decide not to pass the ball to him as he is a weak player, and this will affect the team’s performance. SF2P noted that the level of inclusion depends on the severity of the student’s condition; if the student with ID is high functioning and athletic, they will be accepted more easily: *“My daughter is quite athletic, and her condition is mild, so we don’t get a lot of issues”*. This sentiment was echoed by SM10P who said that the *“more ability you have the more support you will get”*, thus her son is constantly being excluded as *“he lacks abilities”*. SM14P also related this difference in ability in psychological effects as it *“induces some stress on him [her son]”* leading to lack of enjoyment and refusal to participate.

4.2.2: Beliefs and attitudes of students with ID

This sub-theme concerns the students’ beliefs and psychological processes regarding participation in sports. The students highlighted their desire to be autonomous and independent during PE lessons and not have to rely on their LSE to assist them. They also highlighted their coping mechanisms when faced with the fear of failure which

would result in a lowering of self-esteem and self-confidence. This sub-theme included two codes, namely: (a) the desire to be autonomous in PE to achieve a sense of “normality”; and (b) reluctance to participate due to boredom.

4.2.2.1 The desire to be autonomous in PE and sports to achieve a sense of “normality”

Six students with ID stated that PE and participation in sports represents a space for freedom and independence. Students expressed a desire to not be accompanied by their LSE during their PE lesson, so they could “*feel normal*” (SM2). They did not want anyone to “*interfere*” (SM3) and would rather experiment and play with their friends without having anyone dictate how things should be done in PE (SF2). Furthermore, the students believe that they do not need additional support during the PE lesson (SF3) as they feel they can fend for themselves (SM4) and “*follow the PE teacher without [the LSE] assisting*” (SF3). SM3 suggested that the LSE can be present in class “*but just to watch me*”, a sentiment that was also expressed by SM4. SM11 feels that “*with determination and proper coaching*” everyone can practice sport successfully.

4.2.2.2 Reluctance to participate due to perceived lack of physical ability

Another challenge related to participation in PE and sport was linked to perceived lack of physical ability. SM7 declared that if there is anything he feels he cannot do or does not like to do, he would rather sit down and not participate: “*I didn’t want to do it... so I stopped*”. This stance was echoed by SM9P who said that, if students see that they are not being included and valued by their TDP, they would “*rather sit [it out]*” and not participate. SM5P’s son, for example, out of fear of failure as “*he hates losing*”, he would prefer not to participate if he felt that his classmates were better than him.

4.2.3 Beliefs and attitudes of students without ID

This sub-theme highlights the team selection process during PE lessons and the TDP's willingness, or lack of, to assist and help students with ID. It also concerns TDP's attitudes to their classmates with ID as perceived by the students with ID. This sub-theme included two codes, namely: (a) being integrated but not included; and (b) attitudes and behaviour of students without ID.

4.2.3.1 Being integrated but not included

Another obstacle faced by students with ID relates to their lack of involvement when participating in group activities. At times, children with ID are just integrated in the game, as TDPs do not "*pass the ball*" (SM1P) to them, excluding them completely from the games (SM3P and SM4P). SM6 stated that his classmates "*prefer playing alone and leave [him] out*" of the games. Although they do welcome him and choose him for the team, SM7 does not feel valued, as his classmates deliberately do not include him in games due to his disability. Thus, SM7 does not feel "*appreciated*", by his TDPs. TDPs might be excluding them because they "*feel that they are better*" (SM13) than students with ID and because they "*want to win*" (SM1P). SM13 stated that he prefers it when he is appointed goalkeeper as he has more opportunities to handle the ball: "*When I play as a player, I barely have the ball ... the keeper is better I have more chance to grab the ball and play*". This lack of inclusion is also evident in mainstream clubs where children with ID are "*left on the bench*" (SM1P). Only SM5 stated that his classmates were welcoming and accepting.

4.2.3.2 Attitudes and behaviour of students without ID

Five students with ID stated that some of their classmates have an attitude or behave badly towards them. SF3 identified "*jealousy*" as being a problem and stated that even

though there are some TDP who are *caring and understanding*", her classmates are envious and did not support her positive performance in PE. With this respect SF3P stated that her daughter's classmates "*hate it*" when her daughter is successful in sports because she "*has a disability and can actually catch up with them with no problem*". SM6 believes that his classmates would not want to play with him "*just to be cool and tease*" him. SM7 finds the environment hostile and stated that it made him feel unwanted and unaccepted. SM13 referred to bullying episodes where TDPs "*bully other children because they have ADHD*" and other conditions. SM11 feels that his disability is a stigma, and his classmates look at him as though he were "*some kind of dinosaur... someone completely different*", which he believes is "*not right and normal*". SF3 stated that, because of her disability, students without ID "*wouldn't want to stay*" with her. This behaviour increases the risk of isolation and solitude.

4.2.4 Large numbers and the environment of sports facilities within the community

This sub-theme highlights the positive and negative effects of large classes when teaching students with ID and identifies the struggle PE teachers face to assist and include every student in class. It also looks at the psychological effort to maintain focus and concentration in a large class for students with ID. This sub-theme includes two codes, namely: (a) the number of students in class and people density and (d) the environment.

4.2.4.1 The number of students in class and people density

A barrier identified by the guardian contributing to this code relates to the population density in class. Students with ID struggle when they are surrounded by a large number of people as they tend to be easily distracted (SM7P). In Malta, class size varies from

20 to 25 students in inclusive mainstream schools. This number is an issue for students with ID.

On the other hand, students with ID had mixed feelings about the class size. SM10 stated that he would love to have more peers in class as it would create a better learning experience and PE would be more fun. SM10 feels that having only a few classmates in class creates barriers as *“we are limited to what activity we can do”*. SM11 stated that, although he would like to have more students in class, he is aware that it would increase his *“struggle to be included”* and this would create more challenges for the PE teacher.

4.2.4.2 The environment of sports facilities

Another barrier highlighted by a student and two guardians relates to the environment and the high people density at sports facilities found in the community, specifically community gyms. Crowded community gyms create issues for children on the autistic spectrum as they struggle with noise and find it difficult to focus when there is a great deal of movement happening around them (SM12P). SM1 and SM12P feel that there should be more and better resources to avoid overcrowding and safeguard children with ID, as packed facilities *“will only cause tantrums”* (SM12P). According to SM9P, Malta should invest in *“more facilities to reach out”* to more students with ID and encourage them to participate in PA within the community. This would help promote *“better inclusion”* (SM12P). *“Better scheduling”* and *“better support”* in community sports facilities would help safeguard students with ID (SM12P).

4.2.5 Lack of awareness

This sub-theme discusses the difficulties faced by teachers and coaches when teaching students with ID, as perceived by the students themselves and their

guardians. Participants contributing to this sub-theme feel that teachers / coaches lack the skills to deal with challenging behaviour and are not well trained in differentiated learning and inclusion. This sub-theme included two codes, namely: (a) experiences within mainstream sports clubs; and (b) experiences of PE teachers.

4.2.5.1 Experiences within mainstream sports clubs

One of the barriers discussed by the participants contributing to this code, was the lack of awareness coaches in mainstream clubs have when it comes to coaching kids with ID and inclusion. SM6P said that her attempts to send her son to a mainstream club backfired and had “*negative effects*” on him as “*he was kept on the bench*”. SM5P also commented that his son’s mainstream coach was inexperienced and “*didn’t know how to handle*” children with ID. SM6 feels that coaches would benefit from educational training sessions to “*learn skills and techniques of how best to deal*” with children with ID so that inclusion in mainstream sport would be more easily attainable. Lack of awareness is also demonstrated by parents of TDP who, as stated by SM12P, look upon their children “*as though they are monsters*”. Although the wider society is learning about inclusion and how to treat students with ID, “*not everyone gets it... not everyone understands what it means to be a parent of a special needs child*” and such children are still being segregated and not made to feel welcome in sports activities (SM2P). Unfortunately, “*not every mainstream coach will be willing to coach*” children with ID as “*not everyone is fit to coach in such an environment*”, leading to the creation of hostile environments and a lack of inclusion by teachers and coaches who are not “*aware of how to handle such conditions*” (SM6P). SM9P stated that this will “*result in a negative inclusive environment.*”

4.2.5.2 Experiences of PE teachers

Issues related to differentiated learning were also brought up by the three participants contributing to this code. SM6 stated that PE teachers need to know how to adapt their lessons to accommodate everyone in class: *"We are not different than others... we just learn differently, that's all"*. SM11 commented that his mistakes are always amplified by his PE teacher who would often yell or shout rather than explain or calmly repeat what needs to be done. This, unfortunately, makes SM11 nervous and leaves him frustrated: *"Everyone makes mistakes and by yelling you are not going to make [one] a better player"*. SM11 also referred to the meta-perception of the qualities or attributes of such students, including that they do not work hard or are not committed. *"It doesn't mean cause I have a disability I will not work as hard"* (SM11) because the PE teacher deliberately does not include him or refuses to present him with challenging activities in the lessons. As noted by SF3, the PE teachers' responsibility is to create an environment where everyone is welcomed and to teach students how to accept one another, irrespective of their abilities: *"Everyone is equal... everyone needs to accept the rest with their positives and negatives"*.

4.2.6 Lack of opportunity for sports and PE

This sub-theme discusses the issues related to the lack of opportunities to participate in sports in the local community provided to students with ID; the current opportunities available for students with ID and the perceived benefits of participation in sports for students with ID. This sub-theme encompassed four codes, namely: (a) lack of opportunities; (b) lack of opportunities due to lack of resources; (c) perceived benefits should opportunities be provided; and (d) current opportunities.

4.2.6.1 Lack of opportunities

One of the main struggles brought up by both students with ID and guardians was the lack of opportunities provided by mainstream sports clubs. The clubs' objective, according to the guardians, is to win (SM1P, SM2P, SM5P, SM9P, SM10P). Therefore, although a club might accept kids with ID, since *"abilities are different and clubs want to win not develop kids"* (SM2P), they will still be *"segregated during the session or games"* (SM1P). Therefore *"if you do not meet the clubs' standards, you will be left on the bench"* (SM1P). SM10P recounted how, although her son trained with a mainstream club, as soon as the club entered competitive leagues, he was *"chuck[ed] out"*, even from the training sessions. SM9P calls this behaviour unethical and unjust as *"training and not playing is not fair"*. Clubs and coaches tend to favour and support the most gifted athletes (SM14P) who could help the clubs reach their objectives. This means that SM14P's son was never included as the coach used to *"focus mostly on ability and push the ones with a lot of talent"*. SM11 said that he would never join a mainstream club even though he would love to have the opportunity since he is *"not given the [same] opportunities as mainstream athletes"*. He continued by stating that he should not be labelled by his disability and that he should be valued as much as a TDP. SM10P said that her goal was to see her son train with mainstream athletes and perhaps be given the opportunity to play in *"friendly matches"*. SM9P's son is sometimes given the opportunity to play in friendlies *"which is better than nothing"*. SF3 said that, although she did have the opportunity to train with a gymnastics club and she was deemed to be capable (SF3P) and talented, she was never given the opportunity to compete since she has a disability. So, although individual sport is *"easier to access"*, the opportunities afforded to children with ID are still limited (SM3).

As SF3P and SM14P stated, that inclusion is not really happening in the competitive field and “*we need to practice proper inclusion*” (SM14P) and not just talk about it without materialising it (SF3P).

Although students would like to train with a club (SF1, SM3, SM6, SM8, SM9, SM11, SF3, SM12) experience has shown them that they “*will not be accepted*” (SF1) and that they will find it difficult to be included (SF1, SM6) as the clubs do not offer individual attention (SM8). Furthermore, coaches do not see their potential and do not “*encourage*” them or push them to succeed (SM3P).

4.2.6.2 Lack of opportunities due to lack of resources

Another issue relating to opportunities to join a club, as perceived by the participants, is the issue of human resources. SM7P stated that, as soon as the club is informed about the student’s condition, “*they will ask for an LSE*” to accompany them. Thus, if the family cannot afford to pay an LSE to join the training sessions, the child will not be allowed to join the club (SM7P). According to SM9P, having an LSE or a private coach would still not guarantee that the student would be included. SM5 recounted how he was once accepted as a member in a sports club, until the club was informed about his condition and cut all contact with him. SM12P said that, although he never had any issues signing his son with mainstream cycling and athletics clubs, he always had issues signing him up for summer sports clubs as “*they will not accept kids with disabilities without LSEs*”. Unfortunately, the clubs do not offer service, so children like his son are automatically excluded. SM12P said that the government should provide LSEs to summer sports clubs as is done with other entities as during the summer children have more time to dedicate to PA.

4.2.6.3 Perceived benefits should opportunities be provided

A beneficial outcome of inclusive mainstream sport communities and opportunities as perceived by the participants is peer learning. According to SM11, training and competing with TDP would be beneficial as *“it would make me push [myself] and keep up with them”*. Not being included limits their chances for improvement. As noted by SM8, training with TDPs could also serve as a *“motivation for them to continue [practicing the] sport... instead of quitting”* as they would be learning from others and striving to get better. SM1P echoed this sentiment when he stated that having children with ID train in a mainstream environment would assist them in becoming more competitive and would encourage them to *“make more effort”* to improve and succeed in sports. SM10P believes that having children with and without disability train and play together from a young age help them both develop socially and holistically. It would help create a more inclusive society and offer them the opportunity to learn from one another.

4.2.6.4 Current opportunities

The main opportunity sports hub for children with ID is Special Olympics Malta (SOM). When training with SOM, students feel welcome, accepted, and valued (SF1, SM1, SM4, SM6, SF2, SM8, SM9P). SM4 stated that he feels he is better off with Special Olympics (SO) as he has *“more opportunities”* and they *“help”* him more than mainstream clubs. SM2P highlighted the fact that SOM coaches are trained to *“boost [their] full potential”*. They organise mini competitions between their athletes to give them the opportunity to compete. However, SM4P feels that competing with SOM is still different and not sufficiently challenging. SM13 compared his experience in a mainstream club to his experience with SOM and noted that *“SO is different because*

they are all the time giving us feedback and pushing us to improve". He stated that SOM coaches are very dedicated and are "constantly monitoring [my] progress and telling [me] what needs to be done to improve".

4.2.7 Parental concerns

This sub-theme highlights parental concerns related to participation in sports, their perception of the educational school setting in Malta, their willingness to see their child integrate with TDPs and why their children struggle to integrate within the sports community outside schools. This sub-theme included two codes namely: (a) rigidity within the educational system in Malta; and (b) segregation in mainstream clubs.

4.2.7.1 Rigidity within the educational system in Malta.

One of the main concerns discussed by the guardians was the rigidity of the educational system in Malta. SM1P said that at a young age PA should allow room for experimentation and freedom; locally, however, PA is very rigid and all about "*rules, positions*" which creates barriers for students with ID. Also, SM7P feels that the way students are graded is unfair and demoralises students rather than motivates them to work hard and improve. SM7P stated that students like his son should be given a "*holistic grade... [based on] his ability, his behaviour, his persistence and the fact that he tries and doesn't give up... it shouldn't be just one grade on skills only*".

4.2.7.2 Segregation in mainstream clubs

Another barrier discussed by the guardians relates to PA outside school. The guardians spoke of their fears when their children join mainstream clubs. SM10P admitted that she was hesitant to try and register her son with a mainstream club following a bad experience as her priority was her son's wellbeing. She wanted to protect him from

bullies or a hostile environment. SM14P said that if her son found himself failing in a competitive environment the experience would “*haunt him*” as “*he hates losing and he always wants to win*”. SOM was mentioned as an option but, while it is doing an excellent job, it has limitations: “*They have a lot of people in the waiting list... training sessions decreased to make space for other athletes*” (SM9P). This means that the only PA opportunity these students have is tempered due to lack of facilities and human resources (SM9P).

4.2.8 Facilities

This sub-theme concerns existing facilities in Malta, their accessibility and difficulty in finding public open spaces to exercise in. This sub-theme includes one code namely: (a) facilities within the community.

4.2.8.1 Facilities in the community

With PA demand in Malta increasing, sports facilities in Malta are becoming increasingly sought after (SM12P). As noted by SM12P, “*facilities are overpopulated*”, creating issues for children with ID wishing to practice PA/sports. Considering this issue, SM3P suggested that facilities should not have any “*time restrictions... so that they will be more accessible for the general public*”. Malta should also have more open spaces that lend themselves to PA (SM5) and abandoned sports facilities should be refurbished (SM6) so they could be used.

4.3 Mental state of students with ID

This theme considers the factors that influence the psychological state of students with ID when it comes to PE, PA, and sports from both the students’ and the guardians’ perspective. It comprises three sub-themes, namely: (a) emotions; (b) a sense of

belonging; and (c) psycho-social aspects. Each sub-theme is further divided into codes which will be discussed below.

4.3.1 Emotions

This sub-theme highlights the feelings and emotions felt and experienced by students with ID when it comes to participation in sports both in school and in the community. It also discusses psychological issues caused by exclusion and segregation. This sub-theme includes two codes namely: (a) fear of failure; and (b) experiencing shame.

4.3.1.1 Fear of failure

A strong emotion that came up in the interviews was fear of failure. SM2 stated that although he enjoys playing with his friends, he hates it when he loses so he prefers to stay at the sidelines. SM3 prefers to play with his friends with ID at SOM than with TPDs against whom he is constantly losing. SM14P stated that competition in sports creates a great deal of anxiety in her son who always wants to excel and win. However, SM9P's son, on the other hand, enjoys participating in the PE lesson even if he does not participate in all the activities as by doing so, he is participating with the rest of the class, and this makes him feel "*important and included*".

4.3.1.2 Experiencing shame

Another emotion expressed by the participants is shame. SM11 stated how he hates being in the spotlight because in his mind "*I will think that people will start to laugh at me*". Because of this SM11 disliked PE and sports until he joined SOM where he felt safe and protected. SM11 believes that if the teacher is aware of his condition and his difficulties, they should never put him in a position where other students could belittle and make fun of him. It is not the first time that he skipped school to avoid feeling sad

and embarrassed (SM11). SM7P said that her son, too, would rather sit and not participate in PE than be humiliated. SF3 wants others to accept her as she is, in spite of her disability, “*cause I am not different than others*”. SF3’s emotions were also highlighted by her mother who stated that her daughter used to go home from school in tears (SF3P).

4.3.2 A sense of belonging

This sub-theme focuses on how students feel around other people when participating in PA both within the school community and outside school. It considers the different school environments in Malta, assesses whether these environments are welcoming and discusses whether students with ID feel safe and included in outside school sport communities. This sub-theme included two codes namely: (a) the school community – different scenarios in different schools; and (b) outside the school sports community.

4.3.2.1 The school community - different scenarios in different schools

According to the student and guardians, a welcoming environment is a safe environment with friends. SM1P’s son feels good with his friends. They have been together since primary school, and he feels accepted. SF1 said she felt accepted by her old classmates, but less so by her new ones. She had to repeat the scholastic year and ended up in a class where she was overlooked and left alone. In her old class, her classmates knew about her condition as they had been together from a young age and the “*environment [was] more welcoming*” (SF1). SM1 said that his classmates always asked him to join them at football. In SM9’s school there is no distinction made between students with and without a disability, the students all play together during break. SM7 feels that he has “*a good bond*” with the TDPs at his school; they are friendly, and they make him feel good. SM7, SF4 and SM14 attributed these characteristics to their

teachers who they describe as supportive and caring. SF4 stated that at their school everyone was encouraged to play with others, irrespective of their condition and ability. SM9P said that, unfortunately, this was not the case with his son, as his son was always ignored and excluded, even for social activities: *“none of his school friends ever asked him to play with my son... even recreational things... they never invite him to the cinema”*.

SM10P stated that the reality is that if the other students do not accept you, then there is no way you will become part of the group. SM11 describes his experience in school as one which is not always constant: *“during break, to be honest, I am not really included that much, but when I am we either talk or we get a ball and play”*. According to SM11, if the environment is hostile and you are not part of a particular group, you will not be able to play with them, but you can play against them. SF3 believes that the reason that she is not picked to join the team by her classmates is not because they do not believe that she is capable of playing, but because they would want their closest friends on their team. Although she has friends in her class *“they stay with this group of kids that don’t like [me]”*. She ends up spending her breaks with a younger student who thankfully accepts her and cares for her (SF3).

4.3.2.2 Outside school sports community

SOM is recognised by the participants as an organisation that offers students with ID a sense of belonging. SF1P’s daughter immediately felt part of the team in her first session: *“She told me ‘ma, here is my group’... the first day she went for athletics with SOM”*. SM1 enthusiastically stated that he has a lot of friends at SOM, and he would not change the organisation for anything in the world as within it he feels safe and valued. Unfortunately, this is not so in mainstream clubs where students with ID are

often placed with a younger group. When this happened with SM10P's son, he did not *"feel comfortable, because he is older and bigger"*. At SOM, on the other hand, SM10 was provided with both an appropriate training programme and a group of friends, which resulted in a feel-good factor. SM11 struggled with the idea of joining SOM at first, as he was afraid of it being a negative experience. However, he said that *"with the help of the coach ... I felt included and respected and supported"*. SM13P and SM14P stated that SOM provided a friendly environment, which is difficult to find elsewhere, where love is given unconditionally.

4.3.3 Psycho-social aspects

This sub-theme addresses the benefits of inclusive communities, how students with ID interact with others, how they are perceived by society, and their feelings when they are surrounded by others both in the school environment and outside the school community. This sub-theme included one code, namely: (a) benefits of an inclusive society.

4.3.3.1 Benefits of an inclusive society

Society is made up of different people, coming from different scenarios with different ideals and viewpoints. However, when it comes to acceptance, SF1P believes that *"Maltese people are afraid"* of children with ID as they perceive them as being *"different"*, since they are energetic and might exhibit challenging behaviour. Thus, SM1P feels that it is important to encourage interaction between children without disability and children with disability to create a healthier and more inclusive society. Inclusion benefits all as *"mainstream kids learn to accept others in an inclusive setting"* which is highly important for their future (SM9P). Reinforcing the concept of inclusion with young children would also enhance *"friendship building"* as children would learn

how to accept one another as the norm (SM9P). SM11 believes that, when a TDP supports you in your sport development you will each be contributing to each other's success, highlighting ability and not dis-ability. He is grateful that his SOM coach sees him as an "*athlete and not an athlete with a disability*". SM2P feels that, although the general public believes that it is accepting of children with ID, "*in reality*" it is not. This is evident not only in PA and the sport field, but across the board.

4.4 Social assistance within schools

This theme concerns the factors influencing the assistance provided to students with ID when it comes to PE, PA, and sports from both the students' and the guardians' perspective. It encompasses three sub-themes, namely: (a) school policy; (b) role of the LSE; and (c) PE teacher's characteristics. Each sub-theme was further divided into codes which will be discussed below.

4.4.1 School policy

This sub-theme school policies in relation to students' development and the curriculum. It concerns the challenges faced by schools due to lack of human resources, whether schools are sufficiently flexible to cater for students with diverse needs and to embrace the students' holistic development and whether schools are creating a positive environment within which each student can succeed. This sub-theme includes three codes, namely: (a) lack of human resources (LSEs) in schools; (b) tailormade / segregated learning; and (c) schools' responsibility.

4.4.1.1 Lack of human resources (LSEs) in schools

One of the most discussed challenges by the participants contributing to this code was the issues related to LSEs and the low number of LSEs present in schools. Schools

are struggling to place LSEs with students throughout the day, making them skip non-academic subjects to have a “*break*” (SM2P; SM9P). This means that students like SM2P’s son are “*not getting the support requested*”. SM5P’s son stopped receiving support in PE when he moved on to a higher school level, partially because “*more LSEs where needed and more kept leaving*”. LSEs, as noted by SM5P and SM11, often have to assist more than one student at a time, which is not ideal for either the students or the LSEs.

4.4.1.2 Tailormade / segregated learning

According to the participants, some schools are adopting a system where students with ID are removed from the main classroom and a different curriculum is designed specifically for their abilities (SM10P, SM14P). Students following this system have “*tailormade exams*” which, according to SM14P, provides a challenging but attainable assessment, thus reducing stress on both students and parents / guardians. SM14P felt that this system benefited her son as “*before when he was with others, the level was so high that he used to be almost wasting time... Now at least he is learning something, and he is enjoying himself... he feels good*”. Students who are not given this opportunity are placed with high achievers which is causing issues also with parents. Parents of TDP complain that students with ID “*might slow down the pace*” and, consequently, they do not want their children to be in the same class as students with ID.

4.4.1.3 Schools’ responsibility

Another school related aspect discussed by the participants was the fact that the school has a responsibility to create a positive environment for every student, irrespective of the student’s ability. SM10 believes that schools should inform teachers

about any condition of any student in their class so that they are able to prepare lessons accordingly and promote differentiated learning. Schools need to be more “flexible to reach everyone” (SM7P) without making distinctions. However, as noted by SM7P, the “curriculum is rigid” and does not allow teachers to be flexible and adapt lessons as required, thus limiting the student with ID’s learning experience.

4.4.2 Role of the LSE

This sub-theme relates to the role of the LSE, how students perceive it and whether it has a positive or negative impact on the development of the child. It includes two codes, namely: (a) the role of the LSE during PE; and (b) the LSEs’ involvement during the PE lessons.

4.4.2.1 The role of the LSE during PE

Both the students and guardians view LSEs as a support link within the school system. LSEs provide a direct link between the teachers and the students. However, there were mixed feelings about the involvement of the LSE during the PE lessons. Five students stated that the LSE is not required during the PE lesson, as they feel that they could participate in the lesson without their support (SM2, SM3, SM4, SM10, SM13). Furthermore, SM2 stated that, without the LSE during the PE lesson, he “*feels normal*”. SM13 believes that the role of the LSE during the PE lesson should be to sit and watch and not interfere during the lesson. SM1P, SM9, SM12P and SM14, however, all stated that they preferred having the LSE present even during the PE lesson for various reasons. SM1P said that his son feels protected having someone there to support him, while SM12P stated that his son needs prompting otherwise he would drift away. Both SM9 and SM14 maintained that having the LSE present during PE helps them learn better and improve.

4.4.2.2 LSEs involvement during the PE lesson

One of the main concerns discussed by the students was related to the LSEs attitude and behaviour during the PE lesson. SF3 stated that, although the LSE was always “*physically there, she was absent*” as she did nothing to support the student during the lesson. SM11 described what he believes are the necessary characteristics of the LSE. He maintained that an LSE should be strict, but at the same time more of a friend, willing to discuss things with the student cause “*with a person with a disability you need to talk*” (SM11). According to SM13, the LSE is there to support one individual and not the entire class.

4.4.3 PE teacher’s characteristics

This sub-theme discusses the PE teacher’s traits and desired attitudes for a positive PE experience. It will also shed light on the students’ and guardians’ perception of the teacher’s role in the holistic development of the student. This sub-theme included two codes, namely: (a) virtue and traits of the PE teacher; and (b) positive attributes of the PE teacher.

4.4.3.1 Virtue and traits of the PE teacher

The students set out what they perceive to be a teacher’s positive and negative characteristics. SM10, SM11 and SM13 stated that they did not like the fact that their PE teacher was too strict. SM10’s PE teacher used to get angry at him and punish him when he was unable to do an exercise or acquire a skill. A vital characteristic of a PE teacher, according to the participants, is patience. SM10 voiced his disappointment with his teacher who used to give up on him when he did not manage to follow the lesson instead of “*helping*” him to do his best. SM7P stated that her son’s PE teacher “*never really tried to teach him or assist him... he used to just give him low marks...*

which is not fair". A PE teacher, according to SM10, should be there *"to assist everyone"* in class, not just the talented and skilful students. Furthermore, the PE teacher should be *"creative"* and vary the PE lesson, to keep students engaged and make the lesson fun (SM11). SM11 said that his PE teacher was not bothered to deliver the lesson; he used to just give the students a ball and *"stay on the phone"*. This left a negative impact on the students' experience of sports. The students would be looking forward to some exercise, but the PE teacher was not motivated to deliver quality PE (QPE) lessons (SM13). SF3P stated that her daughter's PE teacher used to ignore the fact that her ability was at par with that of a TDP, and he never encouraged her to push herself further. Thus, her daughter's experience of PE was a negative one.

4.4.3.2 Positive attributes of a PE teacher

On a positive note, four of the participants had only words of praise for their PE teacher. SM5 stated that his PE teacher was very helpful and always eager to assist him. SF2 highlighted the fact that her PE teacher was very patient and went out of her way to include everyone in class. SM8 talked about how his PE teacher maintains peace in class when he created groups: *"the teacher tries as much as possible to choose different people as captain"*. This PE teacher did an excellent job including everyone in class irrespective of their abilities. SM12P's son's PE teacher is also *"quite proactive so he includes everyone in class"*.

4.5 Discussion

The aim of the first phase of this study was to investigate and understand the perceived barriers and facilitators of PE, PA, and participation in sports in secondary school students with ID, both in school and within the outside school sports community. The information gathered through this phase provides an insight into what holds students

with ID back from participating in PE, PA, and sport and forms the basis for recommendations and strategies to improve inclusive PE, PA, and sports, as perceived by the students with ID and their guardians.

The results of Phase 1 show that, although the students with ID and their guardians who participated in this study are in favour of inclusive PE, PA, and sports, they are aware of the physiological and psychological barriers that this presents. These barriers present struggles which are difficult for them to overcome unless they are supported by teachers, LSEs, classmates / teammates, and sport coaches. One of the main concerns presented by the guardians is that society is not willing to accept students with ID as they are unaware of how to handle challenging behaviour. Thus, to protect their children, guardians avoid sending their children to mainstream sports clubs and opt to send them to SOM, where the environment is safer and more welcoming. Students with ID do not tend to be competitive and participate in sports for fun. This often goes against the grain in mainstream clubs. Thus, their level of participation boils down to level of social acceptance, lesson structure /school policy and the clubs' objectives. Only four participants stated that they disliked losing. This created a different obstacle as they preferred to isolate themselves and not participate to protect themselves from failing.

The major findings relating to: (a) factors influencing inclusive PE, PA, and participation in sports for students with ID; (b) sports in the community – outside school sports opportunities; and (c) PE, PA, and sports provision in schools are discussed next.

4.5.1 Factors influencing inclusive PE, PA, and participation in sports for students with ID.

This chapter identified students' physiological and psychological barriers to be among the main reasons why there is a lack of inclusion in PE, PA, and participation in sports. Research has shown that children with ID are generally not physically fit (Golubovic et al., 2011) and lack skills such as balance and coordination (McDermott et al., 2022) and this can be directly linked to their lack of participation in sports (Barr and Shields, 2011). Moreover, as they grow older, the challenges become harder to overcome as their physical and cognitive abilities remain inferior to those of their peers (Barr and Shields, 2011), making it harder for students with ID to integrate and participate alongside TDPs (Bossink, Van der Putten and Vlaskamp, 2017). Additionally, the students who participated in this study confirmed that, for them, participation in PA is purely for fun and that they are not driven to compete. This is in stark contrast with what happens with students without disability, who get more competitive as they grow older. Thus, if the students without disability feel that the ability level of the children with ID is going to impede their success, they will automatically push them aside. The children with ID's lack of a competitive spirit hinders inclusion as their classmate's objective and mainstream club's goals are to win and not to simply participate. As a consequence of their lack of participation in sports and PA, apart from not meeting the WHO (2020) recommendation for PA, students with ID are at a higher risk of health issues such as obesity (Blick et al., 2014; Einarsson et al., 2016), decreased physical development resulting in lack of motivation and confidence to partake in PE, PA, and sports (McDermott et al. 2022). They also experience societal stigma (McGarty, Westrop and Melville, 2020) resulting in isolation due to lack of friendship bonds

(Melbøe and Ytterhus, 2016). Students who are equipped with good social skills and have good communication skills find it easier to participate in inclusive PE, PA, and sports alongside their classmates without disabilities (Bossink, Van der Putten and Vlaskamp, 2017) as they do not tend to shy away from interaction. Such students with ID tend to opt for team sport activities rather than individual sports as they like to have the company of teammates.

The findings also show that students with ID struggle to remain focused, comprehend instructions and follow rules. This hinders their participation in both school sports activities and outside school sports activities, resulting in frustration, lack of motivation and low self-confidence (Stevens et al. 2017; McDermott et al., 2022). For this reason, it is essential that PE teachers and coaches alike understand their role and responsibility when teaching/coaching students with ID. They should be able to strengthen students' abilities and motivate them to challenge themselves even when a task might be difficult to achieve. It is, thus, important that students be given professional support, either from the PE teacher, sport coaches, or LSEs (Melbøe and Ytterhus, 2016). This was also recommended by McDermott et al. (2022) who noted that PE teachers would appreciate having other professionals working with them during the PE lesson to assist them in creating a fun and inclusive environment which, as noted in this chapter, is essential for students with ID. This would not only help students with ID increase their confidence, it would also motivate them to participate in PE, PA, and sports, resulting in improved cognitive ability. Also, to help students maintain focus and not get bored easily, it would be ideal to have PE lessons planned to keep them on task with fewer instructions. This strategy was also indicated in the literature as

being beneficial for students with ID and helped minimise challenging behavioural issues (McDermott et al., 2022).

4.5.2 Sports in the Community – outside school sports opportunities

Provision to participate in mainstream sports is a right for every student; however, access is limited due to (a) students' ability; (b) lack of support provided by an LSE or an adult; and (c) sport coaches' knowledge about ID. The students in this study highlighted their desire to be included in mainstream sports clubs and to be given the opportunity to compete and play with children without ID. However, they also noted that the environment at such clubs might be hostile. In fact, from the results presented in this chapter and in the literature, it is evident that mainstream clubs do not offer a friendly and welcoming environment and students with ID are often left with a negative experience (McGarty, Westrop and Melville, 2020) as they are not integrated in games and are kept on the sidelines. Some sport clubs end up tasking these students with taking care of equipment or score keeping, which the guardians and students themselves find unfair. To protect their children from such experience, the guardians who took part in this study stated that they did not encourage their child to attend mainstream sports activities. However, knowing that PA is important for their development, they pushed them towards SOM, where the environment is perceived by the participants to be safer and more welcoming. This lack of social interaction is a concern as it hinders the children's social development (McGarty, Westrop and Melville, 2020). Integration in mainstream sports clubs helps students improve their communication and social skills, improve physical ability levels and give them a sense of belonging (Steven et al., 2017). These benefits are also beneficial for students without ID.

Therefore, given how scarce sports opportunities outside the school community are, it becomes more essential to ensure that schools are well equipped as they may be providing the only opportunity for students with ID to participate in inclusive PA (Stevens et al., 2017). Thus, it is essential that students with ID are given the opportunity to be physically active at school to enhance their fitness (Vickerman and Maher, 2019) and improve their psychological well-being (Blick et al., 2014).

4.5.3 PE, PA, and Sports provision in Schools

According to the students who took part in this study, provision of inclusive PE in schools is lacking as PE teachers struggle to include everyone in class due to their lack of knowledge and experience. This finding is supported in the literature (Njelesani et al., 2015; McDermott et al., 2022). PE teachers are unaware of how best to adapt their lessons to accommodate every student in class. The students also noted that PE teachers tended to be repetitive and uncreative, delivering boring lessons which do not motivate the students to take part. This finding supports research that states that students with ID are not exposed to appropriate physical activities, which hinders their participation (van Schijndel-Speet et al., 2014). Unfortunately, as perceived by the participants and noted in the literature, teachers are demotivated by the lack of resources and overcrowded classes (Njelesani et al., 2015; Stevens et al., 2017; McDermott et al. 2022). Also, the school's infrastructure does not promote positive PE, PA and sport participation as there is lack of sports facilities (Njelesani et al., 2015). This hinders free play and participation in PA even during breaktime as space is limited and TDPs take over the little space that there is available.

4.6 Implications

Table 25 presents the implications brought forward from phase 1:

Table 25: Implications phase 1

Implications phase 1	
Implication 1	The need to create an inclusive environment in which every student can learn and develop, irrespective of their ability, was a key element that emerged in the first phase of this study. Children with and without ID should be encouraged to work together from a young age to instill a positive attitude and acceptance. From a young age, students will learn how to learn from each other and support each other and this is a skill that they will carry with them when they leave school to face the outside world. There should be no prejudice and negative judgement; every student should be given the right to learn and be successful in line with their abilities.
Implication 2	It is essential that PE teachers, LSEs and sport coaches are provided with hands-on training opportunities and educational courses. These professionals are still struggling to include every student in class due to their lack of knowledge, resulting in lack of PE, PA and sports opportunities for students with ID. Moreover, schools should provide PE teachers and LSEs with relevant and useful information about the students' conditions to enable them to plan differentiated and adapted lesson plans.
Implication 3	PE teachers' and LSEs' working conditions should also be improved. One of the findings highlighted in this chapter is that classes are overcrowded, and PE teachers and LSEs are struggling to include everyone in the class. Therefore, it is paramount that schools have fewer students in class. This could be done by increasing the number of classes per level to have fewer students in class, enabling better classroom management and better inclusion. However, this presents a challenge as schools are already lacking human resources, specifically LSEs. Thus, schools should be given the opportunity to engage more LSEs to be able to provide students with more support. This recommendation is not limited to schools. Sports clubs are also lacking in human resources.
Implication 4	The Government of Malta should provide sports clubs with assistant coaches or sport LSEs. This would enable sport clubs to open their doors to children with ID and provide them with an alternative sport opportunity to SOM.
Implication 5	Lastly, every sport facility on the island should be exploited to create more opportunities. School sports facilities should be made available after school hours to sport entities and the public. The

	Government of Malta should build new indoor and outdoor facilities and refurbish some of the abandoned sport facilities found on the island to be able to offer more PE, PA and sport opportunities.
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4.7 Conclusion

This chapter presented an overview of the barriers to inclusive PE, PA, and sports for students with ID. The results show that students with ID struggle to integrate within the sports community, be it at school or outside school. The reason behind this lack of inclusion is related to both cognitive and physiological limitations, such as lack of focus and coordination, lack of perceived ability and lack of a competitive spirit.

Another key finding was the lack of knowledge provided to PE teachers, LSEs and sport coaches. This results in lack of PE, PA, and sports provision to students with ID. The need for more provision of inclusive sport opportunities in general was highlighted as was the importance of having PE teachers/LSEs and sport coaches assist students holistically in an inclusive environment was discussed.

Chapter 5: Results – Phase 2

This chapter presents the findings based on data gathered through 32 individual interviews with 16 Physical Education (PE) teachers and 16 Learning Support Educators (LSEs) who work in mainstream middle and secondary schools in Malta. In total, 8/16 (50.0%) male PE teachers and 8/16 (50%) female PE teachers participated; 4/16 (25%) of whom work in government schools, 9/16 (56.3%) in church schools and 3/16 (18.8%) in independent schools. Also interviewed were 6/16 (37.5%) male LSEs and 10/16 (62.5%) female LSEs; 4/16 (25.0%) of whom work in government schools, 9/16 (56.3%) in church schools and 3/16 (18.75%) in independent schools. Table 26 below presents the key characteristics of the participants who were interviewed for phase 2 of this study.

Table 26: Key characteristics of the participants of Phase 2

Code	Years of Experience	School Setting	Gender	Role
CTM1	5	Church School	M	PE Teacher
CTF2	6	Church School	F	PE Teacher
CTF5	8	Church School	F	PE Teacher
CTF3	7	Church School	F	PE Teacher
CTM3	6	Church School	M	PE Teacher
CTM2	20	Church School	M	PE Teacher
CTM4	10	Church School	M	PE Teacher
CTF4	8	Church School	F	PE Teacher
CTF1	7	Church School	F	PE Teacher
GTM1	11	Government School	M	PE Teacher
GTF2	11	Government School	F	PE Teacher
GTM2	16	Government School	M	PE Teacher
GTF1	6	Government School	F	PE Teacher
ITM2	24	Independent School	M	PE Teacher

ITM1	28	Independent School	M	PE Teacher
ITF1	23	Independent School	F	PE Teacher
LSEcF2	12	Church School	F	Learning Support Educator
LSEcF1	13	Church School	F	Learning Support Educator
LSEcF6	6	Church School	F	Learning Support Educator
LSEcM1	8	Church School	M	Learning Support Educator
LSEcF4	30	Church School	F	Learning Support Educator
LSEcM2	11	Church School	M	Learning Support Educator
LSEcM3	10	Church School	M	Learning Support Educator
LSEcF3	9	Church School	F	Learning Support Educator
LSEcF5	21	Church School	F	Learning Support Educator
LSEgM1	20	Government School	M	Learning Support Educator
LSEgM2	5	Government School	M	Learning Support Educator
LSEgF1	24	Government School	F	Learning Support Educator
LSEgF2	9	Government School	F	Learning Support Educator
LSEiM1	6	Independent School	M	Learning Support Educator
LSEiF2	5	Independent School	F	Learning Support Educator
LSEiF1	5	Independent School	F	Learning Support Educator

5.1 Overview of Themes, Sub-themes, and Codes

Three major themes emerged from the data, all of which comprised sub-themes which were further expanded into codes (table 27). The themes were: (a) the learning environment; (b) the educational system in Malta; and (c) the way forward.

Table 27: Sub-themes and codes emerging from the individual interviews

Theme	Sub-themes	Codes	PE Teacher	LSE
5.2: The learning environment	5.2.1: The lesson	5.2.1.1: Fun but challenging	CTM1, CTF3, GTF2, CTF1, ITF1, CTF5, CTM4, GTM1 (7/16)	LSEgf1 (1/16)
		5.2.1.2: Not a one size fits all pedagogy	GTM1, CTM2, GTM2, ITF1, GTF1, CTF3, CTF2, CTM3 (8/16)	LSEcf2, LSEcf6, LSEgm1, LSEcm2, LSEcm3, LSEcf3, LSEcf5 (7/16)
		5.2.1.3: Lesson planning and delivery	CTF2, CTM3, CTF3, GTM1, CTM2, GTF2, CTM4, ITM2, CTF4, ITM1, GTM2, CTF1, ITF1, GTF1 (14/16)	LSEgf1, LSEcf5 (2/16)
		5.2.1.4: Strategies used by PE teachers and LSEs	CTF2, CTF5, GTM1, CTM2, GTF2, CTM4, ITM2, CTF4, CTM3, GTM2, CTF1, ITF1, GTF1, GTF1 (14/16)	LSEim1, LSEcf6, LSEcf2, LSEcm1, LSEcf4, LSEcm2, LSEgf1, LSEcm3, LSEcf3, LSEgf2 (10/16)
		5.2.1.5: Giving students space and autonomy in class	CTF5, CTM4, CTF4, CTF1, ITF1 (5/16)	LSEcm1, LSEgm2, LSEcm3 (3/16)

		5.2.1.6: Grouping students for group activities and team selection	CTM1, CTF2, CTF5, CTF3, CTM3, GTM1, CTM2, GTF2, CTM4, ITM2, CTF4, ITM1, GTM2, CTF1, ITF1, GTF1 (16/16)	LSEim1, LSEcf6, LSEgm2, LSEcf4, LSEcm2, LSEgf1, LSEif2, LSEcf5, LSEgf2, LSEif1 (10/16)
		5.2.1.7: The importance of having the LSE in class	CTF5, CTF3, CTM3, GTM1, CTM2, GTF2, ITM2, ITM2, CTF4, ITM1, GTM2, CTF1, ITF1, GTF1 (14/16)	
	5.2.2: Tools for inclusion	5.2.2.1: Resources used by PE teacher	CTM1, CTF2, CTF5, CTM2, GTF2, CTM4, ITM2, CTF4, CTF1, GTF1, ITF1, CTM3 (12/16)	
		5.2.2.2: Resources used by LSE		LSEcf2, LSEcf1, LSEim1, LSEcf6, LSEcm1, LSEgm1, LSEgm2, LSEcf4, LSEcm2, LSEcm3, LSEcf3, LSEcf5, LSEgf2 (13/16)

		5.2.2.3: Adaptation for better inclusion	CTF3, CTM4 (2/16)	LSEcf2, LSEcf4, LSEif2 (3/16)
		5.2.2.4: Adaptations according to students' needs	GTM2, ITF1, GTF1, CTF2, CTF1 (5/16)	LSEcf6, LSEgm1, LSEcf4, LSEcm2, LSEgf1, LSEcf3, LSEcf5, LSEgf2, LSEif1 (9/16)
		5.2.2.5: Buddy system – Peer support and peer learning	CTM2, ITM2, ITM1, CTF5, CTF1 (5/16)	LSEcm1, LSEgm1, LSEcf4, (3/16)
		5.2.2.8: Creating rules and conditions during games for better inclusion	CTM3, CTF1, ITM2 (3/16)	LSEcm1 (1/16)
		5.2.2.7: Reward system	GTF2, CTF4 (2/16)	LSEgm1, LSEcf3, LSEcf6 (3/16)
	5.2.3: Roles and responsibilities	5.2.3.1: PE teachers and LSEs working in synergy for better inclusion and quality PE lessons	CTF4, CTF3, GTM2, CTF1, ITF1, GTF1, CTM4 (7/16)	LSEcf2, LSEcf1, LSEim1, LSEcf6, LSEgm1, LSEcf4, LSEgf1, LSEcf3, LSEcf5, LSEgf2, LSEif1,

				LSEcm1, LSEgm2, LSEif2, LSEcm3, LSEcf3 (16/16)
		5.2.3.2: PE teachers' willingness to work with LSEs as perceived by LSEs.		LSEcf2, LSEcf1, LSEgm1, LSEcf4 (4/16)
		5.2.3.3: The perception of PE teachers on the LSEs' roles/duties	CTM1, CTF2, CTF5, CTF3, CTM3, GTM1, CTM2, GTF2, CTM4, ITM2, CTF4, ITM1, GTM2, ITF1,GTF1 (15/16)	
		5.2.3.4: The perception of LSEs of PE teachers' roles/duties		LSEgm1, LSEgf1, LSEif2, LSEcf5, LSEcf1 (5/16)
		5.2.3.5: LSEs' involvement during the PE lesson depending on students' conditions	ITM2, CTF4, ITM1, CTF1, ITF1, GTF1 (6/16)	

		5.2.3.6: The importance of involving parents in decision making and the PE/PA journey		LSEcf4, LSEgf1, LSEcf5, LSEcf3, LSEcf2 (5/16)
	5.2.4: The PE teacher	5.2.4.1: PE teacher's personality traits and characteristics when dealing with students with ID	GTM1, GTF2, CTM4, GTM2, CTF1, ITF1, GTF1 (7/16)	
		5.2.4.2: The PE teachers' responsibilities and duties	CTM1, CTF3, CTM3, GTM1, CTM2, GTF2, CTM4, ITM2, CTF4, ITM1, GTM2, CTF1, ITF1 (13/16)	
	5.2.5: The LSE	5.2.5.1: LSEs personality traits and characteristics when dealing with students with ID	GTM1, GTF2, CTM4, GTM2 (4/16)	LSEim1, LSEgm1, LSEcf4, LSEgf1, LSEif2, LSEcm3, LSEcf3, LSEcf5, LSEgf2, LSEif1 (10/16)
		5.2.5.2: The LSEs' responsibilities		LSEcf2, LSEcf1, LSEim1, LSEcf6, LSEcm1, LSEgm1, LSEgm2, LSEcf4,

				LSEcm2, LSEgf1, LSEif2, LSEcm3, LSEcf3, LSEgf2, LSEif1 (15/16)
		5.2.5.3: One-to-one vs shared LSE	CTF5, CTF3, CTM3, CTM2, CTF4, ITF1 (6/16)	LSEcf2, LSEim1, LSEgf2 (3/16)
	5.2.6: The challenges faced during the PE lesson	5.2.6.1: Students' conditions as perceived by PE teachers and LSEs	CTM1, CTF5, CTF2, CTF4, GTM2, CTF1 (6/16)	LSEcf2, LSEf1, LSEcf6, LSEcm1, LSEgm1, LSEgm2, LSEcf4, LSEif2, LSEcm3, LSEcf3, LSEcf5, LSEif1 (12/16)
		5.2.6.2: Different abilities	CTM1, CTF2, CTF5, CTM4, ITM2, CTF3, GTM2, GTF1 (8/16)	LSEcf6, LSEcf4, LSEcm3, LSEif1 (4/16)
		5.2.6.3: Facilities and resources provided	CTM1, CTF3, CTM3, CTM2, GTF2, CTF4, GTM2, CTF1, ITF1, GTF1 (10/16)	
		5.2.6.4: Class size	CTM1, CTF2, CTM3, GTM1, CTM2,GTF2,	

			CTM4, ITM1, GTM2, CTF1, GTF1 (11/16)	
5.3: The educational system in Malta	5.3.1: Structure of secondary schools in Malta	5.3.1.1: School culture	ITM1, GTM1, GTM2, CTF1, ITF1, GTF1 (6/16)	LSEcf6, LSEcm1, LSEgf1, LSEcf3, LSEif1 (5/16)
		5.3.1.2: Different school settings – government, church and independent schools	ITM2, ITM1, CTF1, ITF1, CTF4, GTM2, (6/16)	LSEcf1, LSEim1, LSEgm1, LSEcf4, LSEcm2, LSEcf6 (6/16)
		5.3.1.3: Resource Centres vs mainstream schools	CTF3, GTF2, CTM4, ITM2, CTF1 (5/16)	LSEcf1, LSEim1, LSEcf6, LSEgm2, LSEgf1, LSEcf3 (6/16)
	5.3.2: School protocols	5.3.2.1: School procedures	CTM2, CTM4, ITM2, CTF4, ITM1, GTM2, CTF1, ITF1, GTF1 (9/16)	LSEcm1, LSEcf4, LSEgf2, (3/16)
		5.3.2.2: PE status in schools		LSEcf1, LSEcf4, LSEcm2, LSEgf1, LSEcf5, LSEgf2, LSEif1 (7/16)
		5.3.2.3: Support and information provided	GTF2, CTM4, CTF3, CTM3,	LSEcm2, LSEcf1, LSEgm1,

			ITM2,CTF4, GTM2, CTF1, ITF1, GTF1, GTM1 (11/16)	LSEcf4, LSEif2, LSEcm3, LSEcf3, LSEgf2, LSEif1 (9/16)
	5.3.3: The curriculum	5.3.3.1: The current curriculum	CTM1, CTF2, CTF5, CTF3, CTM3, GTM1, GTF2, CTM4, ITM2, CTF4, ITM1, GTM2,CTF1, ITF1, GTF1 (15/16)	LSEcf1, LSEim1, LSEcf6, LSEcm1, LSEgm1, LSEgm2, LSEcm3, LSEcf3, LSEcf5, LSEgf2 (10/16)
		5.3.3.2: Previous curriculum vs current curriculum	CTF2, CTM3, CTM2, GTF2,CTF1 (5/16)	LSEgm1, LSEcm2 (2/16)
		5.3.3.3: Perception of having a dedicated curriculum for students with ID	CTF5, GTM1, GTF2, ITM2 (4/16)	
		5.3.3.4: Strategies for better curriculum	CTF5, GTF2, CTM4, CTF1, (4/16)	
		5.3.3.5: Stakeholders and Policymakers	CTM1, CTF5, GTM1, CTF1 (4/16)	LSEgf2 (1/16)
	5.3.4: The world of inclusion	5.3.4.1: Defining Inclusion	CTF5, GTM2, CTF1 (3/16)	LSEim1, LSEcm1, LSEgf1 (3/16)

		5.3.4.2: Is inclusion really happening?	CTF5, CTF3, CTM4, CTF1 (4/16)	LSEcf2, LSEcf1, LSEcm1, LSEcf3, LSEgf2 (5/16)
		5.3.4.3: Forcing the system... failing our students	CTF5, CTF3, CTM2, GTF2, CTM4, GTM2, CTF1 (7/16)	LSEcf2, LSEim1, LSEcm1, LSEgm2, LSEcf4, LSEif1 (6/16)
		5.3.4.4: Inclusion depends on students' abilities	GTF2, CTM4, ITM2, ITM1, GTM2, CTF1, ITF1, GTF1 (8/16)	LSEcf2, LSEcf1, LSEim1, LSEcf6, LSEcm1, LSEgm1, LSEgm2, LSEcm2, LSEgf1, LSEif2, LSEcf3, LSEgf2, LSEif1 (13/16)
		5.3.4.5: Inclusion depends on students' age.	CTF1 (1/16)	LSEcf4, LSEgf1, LSEcf2, LSEcf1, LSEcf6, LSEgf1, LSEcf5 (7/16)

		5.3.4.6: Psychological aspects brought about by inclusion	CTF5, CTF2, CTF3, CTM2, GTF2, CTM4, CTM3, ITM2, CTF4, ITM1, GTM2, CTF1, ITF1, GTF1 (14/16)	LSEcf4 (1/16)
5.4: Way forward	5.4.1: Requests and requirements	5.4.1.1: Having smaller classes	CTF3, CTM3, GTM1, GTF2, CTM4, ITM2, CTF4, GTM2, CTF1, ITF1, GTF1 (11/16)	LSEgm1 (1/16)
		5.4.1.2: Teaching about inclusion – building a community for inclusion	CTF5, CTM2, GTF2, ITM2, GTM2 (5/16)	LSEcf2, LSEcf1, LSEim1, LSEcf6, LSEcm1, LSEif2, LSEcf3, LSEif1 (8/16)
		5.4.1.4: Teaching students with ID how to be autonomous		LSEcm1, LSEgm1, LSEgf2, LSEif2 (4/16)

5.2 The learning environment

This theme concerns the factors affecting the PE lesson, PA, and sports participation in secondary schools in Malta from the PE teachers' and LSEs' perspective. It was represented by six sub-themes, namely: (a) the lesson; (b) tools for inclusion; (c) roles and responsibilities; (d) the PE teacher; (e) the LSE; (f) the challenges faced during

the PE lesson. Each sub-theme is further divided into codes which will be discussed below.

5.2.1 The lesson

This sub-theme concerns how PE teachers and LSEs work to create fun, quality and inclusive PE lessons for students with ID in a mainstream school setting. It encompasses the planning, pedagogy and strategies used by both the PE teachers and LSEs. This sub-theme includes seven codes, namely: (a) fun but challenging; (b) not a one size fits all pedagogy; (c) lesson planning and delivery; (d) strategies used by PE teachers and LSEs; (e) giving students room to be autonomous in class; (f) grouping students in teams; and (g) the importance of having the LSE during the lesson.

5.2.1.1 Fun but challenging lesson

According to the interviewees, the main objective of the PE lesson is for students with and without ID to have fun and enjoy being physically active. If they have fun, stated ITF1, the students would “*never hate ... exercise*” and would want to participate during the lesson. Moreover, although most students “*enjoy a sense of competition*” (CTM1) during the lesson, it is essential that teachers plan a mix of both competitive and fun activities in the PE lesson (CTM1). In fact, CTF5 said that after challenging students through fun games throughout the lesson, she always tries to finish it off with a small competition. CTF3 declared that the lesson should be student-centred; thus, it is essential to know the students and understand what they like. As noted by CTF3, incorporating equipment that the students enjoy using in the lesson makes it more enjoyable, resulting in better participation and engagement. Furthermore, working closely with students and organising activities they like helps create a positive

environment and “*win[s] them over*” (ITF1). In this context, GTM1 refers to the “emergent curriculum” and how he incorporates it in his lessons. He recounted how the tantrums that one of his students used to have during the PE lesson, which disrupted the lesson, subsided when he introduced cut outs of horses, as this student loved horses. Two of the PE teachers spoke about the importance of challenging students during the PE lesson. CTF3 incorporates equipment her student with ID likes, such as the trampoline, and gives her different challenges to perform on it.

5.2.1.2 Not a one size fits all pedagogy

All the PE teachers and LSEs who were interviewed agreed that flexibility and differentiated learning is essential to reach every student in class. There is no one proper method to use with students as “*what is good for one [is not] necessarily good for the others*” (CTM2). The pedagogy used must suit the student’s characteristics (CTM3) and the student’s way of processing instructions (LSEcF5). Thus, to include every student in class, it is essential to “*learn every individual separately*” (CTF2), to be able to accommodate students and “*structure the lesson*” (CTM3) according to their needs. LSEcF6 and LSEgM1 emphasised the uniqueness of every student and every student’s condition. As noted by LSEcF3, “*we cannot just put everyone under the same umbrella*”; the teacher and LSE should be able to adapt the lesson accordingly (LSEcF5). ITF1 and LSEcF2 believe that teaching students with ID in a mainstream setting is done by “*trial and error*” as “*books will not tell you certain tricks or things you can do*” (LSEcF3). Carrying out research on the different types of conditions and their severity is always useful (LSEcM3) but cannot replace hands-on experience (LSEcF2). As stated by GTF1, “*you need to be flexible*” and capable of altering the lesson or

adapting it to increase participation in class as students might either be “*reluctant to participate*” or find “*it difficult to follow the lesson*” with the rest of the class (LSEgM1).

5.2.1.3 Lesson planning and delivery

Another aspect discussed by both PE teachers and LSEs related to the lesson was the importance of planning and lesson delivery, mainly the importance of time on task, to give a good introduction to the lesson and give clear instructions given, teaching games for understanding (TGFU), the use of individual and team activities and, lastly, the inclusion spectrum. CTM3 maintained that, if lessons are not planned according to the students in class, it “*is most likely to fail*”. On the other hand, if the lesson is planned properly, the students will remain on task and engaged throughout the lesson; thus, even if the students are energetic and have behavioural challenges, the lesson would still flow (CTM4). CTF2 extolled the importance of keeping explanations short, as long instructions and demonstrations affect the students’ attention span. Furthermore, ITM2 pointed out, that time on task is essential as students should be given the opportunity to spend an adequate amount of time on tasks, thus getting the “*most out of the lesson*”.

The importance of preparing a good introduction to the lesson was also emphasised. If students are given a goal and a direction, they will find it easier to focus and reach the lesson objective (CTM3). In addition, rather than giving students a physical objective, CTM4 prefers to ask students to focus on their behaviour and on their “*effort*” during the lesson. ITM2 involves students in the explanation by asking questions relating to tasks undertaken in previous lessons.

TGFU is another effective teaching style used by some of the PE teachers who were interviewed. GTF1 stated that, by using TGFU, the learning process becomes more

effective as students learn through games and through observation. CTM3 uses both individual tasks and group work to teach students how to “*cooperate ... and work autonomously*”. LSEcF5 emphasised the importance of breaking down complex skills into simpler tasks to make it easier for all students, not just students with ID (CTM4). GTM1 highlighted the importance of assigning students without ID the responsibility of assisting classmates with ID to keep them from getting bored and “*misbehav[ing] during the lesson*” while the teacher is breaking down complex skills. To safeguard students who get easily embarrassed or intimidated, CTM3 organises individual tasks. Some students feel “*more comfortable expressing themselves*” when working on their own. Ultimately the PE teacher is there to “*engineer a lesson, where everyone can feel comfortable*” (CTM4).

CTM4 uses the parallel activity method from the inclusion spectrum to reach all students in the class. This involves setting the same lesson objective for all the students but setting tasks at different levels to reach the different abilities in class. ITM2 uses this method when he adapts the equipment being used for the student with ID in his class to help him navigate it successfully. In basketball, for example, LSEcF5 lowers the ring for the student with ID and challenges her by putting it “*higher and higher ... if possible reach[ing] the original height of the basket*”.

5.2.1.4 Strategies used by the PE teachers and LSEs

The PE teachers and LSEs discussed the different strategies they adopt to provide students with inclusive quality PE lessons. GTM1 explains how he uses his lesson to teach students how to accept one another and collaborate by organising group activities so that “*every student will be given the opportunity to actually do the activities*” irrespective of their abilities. CTF2, CTF5 and GTF1 agree that using group activities

improves interaction and communication among peers. Having said this, GTM1 said that he also sometimes “*dedicate[s] some lessons to assist highly skilled students*” by grouping students according to their abilities. ITM2 stated that he does not discriminate among students; if a student with ID “*can manage in class, [he is] not going to treat him any different[ly]... they just move on and work with the groups like anyone else*”.

In fact, CTF4 believes that no special treatment should be given to any of the students, irrespective of their abilities or conditions, as “*during [her] PE lesson everyone is equal*”. LSEcF6 also commented her interaction with students with ID is no different from her interaction with typically developing students; she treats students with ID “*as though they have no condition*”. Although in theory LSEcF4 also believes that all students should be treated equally, in practice she feels that this depends on the students’ condition. Prior to sports day, for example, she rehearses every activity individually with students with ID. LSEcF3 and LSEcF6 also stated that students with autism, for example, require further assistance and more repetition. LSEcF6 has created a routine for her student with ID so that he “*would feel comfortable, resulting in better behaviour*”.

GTM2 emphasised the importance of building trust with the students as only this will reduce tantrums. For GTF1, it is imperative to have positive communication and create a healthy environment for every student in class. LSEcM2 stated that students with ID understand instructions better if they are communicated slower using fewer teaching cues, while “*break[ing] down the skill further*”. Lastly, CTM3 stated that, although he believes that students are equal, he tends to give more responsibilities to students with ADHD to keep them active and occupied, thus reducing the risk of behavioural issues.

5.2.1.5: Giving students room to be autonomous in class

Another issue that was brought up by the interviewees was the extent to which to give students with ID freedom and autonomy in class. CTM4 believes that “*education should be about autonomy*” and should not be a “*dictatorship*”. Thus, if a student is reluctant to participate, neither the PE teacher nor the LSE can force them to join the lesson (CTF5). When this happens, LSEcM3 gives his student the option to either continue working with the rest of the class or he lets the student be and let him try the activity later. This approach gives students a sense of “*empowerment*” which in turn “*helps them become responsible for their actions*” (CTF1). ITF1 provides students with free time and experimentation time, so that students will be able to challenge themselves in their own way.

5.2.1.6 Grouping students for group activities and team selection

Another aspect that was discussed was the way students are grouped for group activities and team selection. Teachers use different methods to group students, from choosing the teams themselves, choosing the leaders, assigning students with random numbers (CTF3, ITM2, ITM1, LSEiF2), using house colours (CTM1) to allowing students to choose their teams themselves. CTF5 likes to group weaker students with stronger ones to balance out the teams (LSEcF6, LSEgM2). CTM3 supports this method (LSEgF2) which ensures that all the students are included, and which makes the games fairer (CTM2). Furthermore, GTM1 believes that mixed ability groups challenge the weaker students to improve their skill level (GTF2). Also, having the teacher choose the teams will automatically reduce the risk of bullying (CTM3, GTF2), segregation (GTM1) and labelling (ITM2) while creating “*a better inclusive*

environment" (CTM2) and teaching students that everyone should work collectively and that no one is superior (ITM2).

GTF2 prefers choosing the teams herself as students tend to opt for the same classmates and the best students get chosen first (ITM2) leaving the weaker students or "*students with LSEs*" as a last resort (LSEgM2, LSEgF1, LSEiF2, LSEgF2, LSEiF1, CTF1). GTM2 only chooses the teams himself at middle school level (lower forms); at the higher levels he gives the students the opportunity to choose their teams themselves. This places the responsibility of choice on the students (CTF1) as older students are usually mindful of and fair with classmates with ID (GTM2). When he chooses the teams, CTM2 makes sure that "*in every group there is a responsible student that could assist the weaker student*". GTF2 groups the students herself when it is assessment time so that students are grouped according to ability. If pair work is required, ITF1 tries to pair students either with friends, to put them more at ease, or with a student who is more "*patient*".

CTF5 sometimes decides to select leaders to choose their own teams. CTM4 always allows students to choose, as students tend to "*make friends with the people who have similar physical abilities*" which makes them "*feel comfortable*" (CTF4) and encourages them not to give up. However, if she sees that the teams are unbalanced and the game is unfair, CTF4 would stop the game and "*shuffle teams around accordingly*". Since the school environment is fair and the school ethos promotes inclusion, ITF1 allows students to choose their teams themselves without choosing leaders to prevent students with ID from being chosen "*last*". LSEiM1 has noted that students with ID who have a one-to-one LSE struggle to be chosen; to safeguard such students, he would ask the student to "*pick a group himself*" first. LSEgM1 said that, when a student's

condition is severe, having them play in a game with his classmates could be dangerous. Thus, with the teacher's permission, he would gather a few other students and creates a mini game with them. LSEcF4 feels that having leaders choose their teammates is unfair as, given that their aim is to win and not to give equal opportunities to students with ID, they would always go for the strongest students. This affects the students' with ID's "*self-esteem*" and could lead to tantrums and frustration resulting in lack of PE or PA participation (LSEcF5).

5.2.1.7 The importance of having the LSE in class

The majority of the PE teachers who were interviewed highlighted the importance of involving the LSE in the PE lesson. CTF3 said that, if the LSE is "*motivated and really want[s] to help and comes for the lesson in proper attire to do PA*", the student under her guidance would benefit and improve. Moreover, the LSEs involvement during the PE lesson provides the PE teacher with a level of comfort (CTM3, CTM2, CTF1) and an extra set of hands to manage and control the class (CTF5) allowing the lesson to go "*smoother*" (GTM1). GTM1 stated that the LSEs help is needed "*to reach the student... and enhance [the] learning*" experience of both students with and without ID. CTM2 finds that having the LSE in class allows for better classroom management as splitting the class during the lesson is easier with two adults. CTF4 referred to the LSE as a "*teacher's assistant*" helping to support each student in class. Working as a team, allows for better exercise adaptation resulting in better PE and PA participation (GTF2). The LSE's presence during the lesson is also necessary when it comes to dealing with behavioural challenges (ITM2). With 20 mainstream students in class and 1 student with a severe condition, it becomes impossible for the PE teacher to focus entirely on the student with ID. The LSE provides the PE teacher with a solid helping hand (ITM2).

GTM2 spoke about sharing the responsibility of supporting every student in class so that “*learning*” occurs holistically. CTF1 maintained that the LSE’s role is primarily to “*reinforce my [her] explanation*” to the student/s in her care. ITF1 feels that although the LSE’s presence is important in class, students sometimes perform better when they are left alone during PE. Thus, work with the LSE could be done prior to the lesson, to allow the student with ID to express themselves freely during the lesson.

5.2.2 Tools for inclusion

The sub-theme refers to the tools and resources used by both the PE teachers and LSEs during their PE lessons and the adaptations done to support students with ID in PE and PA participation. This sub-theme encompasses seven codes, namely: (a) resources used by PE teachers; (b) resources used by LSEs; (c) adaptation for better inclusion; (d) adaptations according to students’ needs; (e) the Buddy System – peer support and peer learning; (f) creating rules and conditions during games for better inclusion; (g) reward system.

5.2.2.1 Resources used by PE teachers

The PE teachers are aware that students with ID tend to be visual learners and highlighted the importance of using visual aids while explaining exercises such as flash cards (GTF2) videos and skill demonstrations using apps (CTM2). CTF4 uses video to “*enhance [her] explanation*” and help keep the students engaged. GTF1 uses videos when there is an exercise that she cannot demonstrate herself. GTF2, CTF1 and CTF4 support their explanation by giving a demonstration. CTM4 uses visual aids and questions the students to check that they are following. She also uses these techniques when giving feedback to students so that they have the opportunity to think and process the exercise (CTM4). PE teachers also use sport equipment (GTF2, CTM3) to

engage students with ID. The more equipment used the more “*fascinated*” and “*excited*” the students are (CTF2). CTM2, CTF1, GTF1, CTM4 and ITM2 use modified equipment with students with ID to ensure everyone’s safety during the lesson and facilitate the exercises for students with ID. For example, some students are “*afraid of balls*”, so CTM4 uses “*softer balls*” to encourage their participation. In such cases, CTF5 allows her students with ID to bring a ball from home and use it during class. CTF5 closely monitors the use of some equipment used during the lesson which could be dangerous to use, such as the wooden hockey stick. Contradicting the nine PE teachers who spoke about the use of equipment, CTM1 stated that his students are “*not really affected by resources*” and were not especially excited by the use of equipment. GTF1 stressed the importance of using the same “*teaching cues*” used by the LSE, for uniformity and to reduce conflict. Lastly, CTM4 feels that “*creativity is key when teaching*”; thus, it is essential to use resources that could encourage students’ participation in the PE lesson.

5.2.2.2 Resources used by LSEs.

The LSEs highlighted the importance of using visual aids to support their students’ needs during the PE lesson. LSEcM3 stated that his student is a “*visual learner*” and he feels he would be doing a “*disservice if I don’t use the student’s preferred style of learning*”. Before the actual PE lesson, LSEcF2 uses videos to “*break down the game*” and help her student understand what is required of her. LSEcF3 said that if she does not manage to show the videos before the lesson, she will show them after the lesson to “*compare and contrast*” the student’s performance. Flash cards are also a common resource used by LSEs with some students, although they are not always useful as “*there are some [students with some] conditions who would not even take note of the*

flashcards” (LSEcF6). LSEgM2 stated that it was the LSEs’ job to “*try to adapt as much as possible to the students’ needs*”. LSEcF1 likes to use colours and modified sport equipment and LSEcF5 often improvises by adapting equipment to suit her student to enable her to reach the lesson objectives. The most effective resource, according to LSEgM1, is positive reinforcement and providing students with “*different activities ... keep[ing] students engaged and interested*”.

5.2.2.3 Adaptations for better inclusion

Although students with ID benefit from being in an inclusive environment in mainstream schools, some find it difficult to interact with their classmates and struggle to follow the planned lesson, so adaptation is vital (LSEcF2). Students diagnosed with ADHD need to be kept active doing different activities or different variations of the same activity (LSEcF4). As stated by CTF3, teachers and LSEs often “*change activities for certain students*” to make sure that students with ID still participate. CTF3 highlighted the fact that adaptations should be done together with the LSE as the LSE would be better informed about the student with ID’s needs and abilities. It is important that “*adaptations [are] constant*” to support students in the best possible way (CTM4).

5.2.2.4 Adaptation according to students’ conditions

Lesson adaptations should be tailored to the students’ conditions. A student diagnosed with global development delay behaves differently from her 12-year old classmates so the PE teacher must “*adapt a number of exercises*” to include her in the lesson (LSEcF6). LSEgF1 thinks that organising activities which were “*suitable for everybody ... work out better in the long run*”. Students feel better when participating in activities that are challenging but attainable (LSEcF5) and succeeding at a task increases their self-esteem and self-confidence (LSEcF5). This is a major benefit of adaptation.

Having different adaptations and variations of an activity also benefits students with ADHD who get “*frustrated*” with long explanations and repetitive activities (LSEgM1). If the aim is to include everyone in the lesson, both PE Teachers and LSEs need to be willing to adapt the lesson accordingly (LSEcF4) and if students with ID are having a good day “*you give them challenging activities so that you improve their cognitive ability*”. Lesson adaptation helps keep every student in class on track and helps include everyone without disrupting progress (GTM2). It is important that students with ID following adapted lessons “*still follow whatever we are doing in class with the other students*” (CTF2). Therefore, it is important for teachers and LSEs to be creative and understand that “*anything can be adapted*” (LSEcF4) as long as they understand the students’ needs. They can come up with individual goals for every student with ID (LSEcM2) and “*adapt the lessons and assessments according to the students’ needs*” (LSEcF3).

5.2.2.5 Buddy System – Peer support and peer learning

Peer support was mentioned by the interviewees as one of the best resources to use during the PE lesson. CTM2 believes that having students support each other yields social benefits. Furthermore, students “*tend to learn more than when the actual teacher is helping them*” (ITM2). This collaboration benefits both students with ID (LSEcM1) and students without as it gives them a sense of responsibility towards students with ID (ITM2). After demonstrating the activity, himself, ITM2 likes to ask “*skilful*” students to support a peer who might be less accomplished. CTF5 appoints students who train outside school as teacher assistants by asking them to help in class. CTM2 stated that the buddy system frees him to spend more time going around students to “*assist where needed*”. It is fascinating watching students correct each other without any prejudice

(ITM1). However, it is essential that the students chosen to be supporting peers are responsible, otherwise *“it will backfire”* (CTM2). Lastly, LSEcF4 and LSEcM1 believe that the buddy system should be promoted as part of the school culture *“where everyone is given the opportunity to be a buddy and students would help and learn from each other”* (LSEcM1).

5.2.2.6 Creating rules and conditions during games for better inclusion

The teachers and LSEs who were interviewed highlighted the importance of setting down rules and conditions during the PE lesson to ensure that everyone is included. One such rule created by ITM2 for games was that *“everybody has to touch the ball before”* the team could score, thus introduces conditions so that everyone is included. LSEcM1 said that at their school, if the PE teacher was unhappy with the students’ attitude and lack of inclusion in class, he would *“stop the game and introduce rules”*. CTM3 and CTF1 set these types of conditions for mid-day break tournaments as well. For example, students need to make sure that every member of the team plays for at least 5 mins (CTF1), or students have to change over at half time (CTM3). This ensures that every student who wants to play gets a chance to play (CTF1).

5.2.2.7 Reward system

Rewards systems increase students’ motivation to participate. GTF2 stated that her students look forward to receiving a *“sticker”* for participation; this *“wins them over”*. CTF4 feels that *“it’s only fair to reward their effort and behaviour”*. Rewards should reflect what students like. LSEgM1 uses PE as a reward for achievements in other subjects; so, if a student performs well in another subject, *“I would ask the PE teacher to take him for another 30mins with another group”* (LSEgM1). LSEcF3 also uses PE as a reward and for positive reinforcement. LSEcF6 takes the student under her care

to the gym to move around in between tasks, calm down and regroup because he love the “*gym environment*”.

5.2.3 Roles and responsibilities

This theme concerns the roles and responsibilities of PE teachers and LSEs during PE lessons and the synergy and working relationship between them. It will also highlight the role of the parent / guardian. This sub-theme includes six codes, namely: (a) PE teachers and LSEs working in synergy for better inclusion and quality PE lessons; (b) PE teachers’ willingness to work with LSE; (c) the PE teachers’ perception of the LSEs roles/ duties; (d) the LSEs’ perception of PE teachers roles / duties; (e) PE teachers’ perception of having the LSE assisting during the PE lesson; and (f) parental / guardian involvement in their child’s academic journey.

5.2.3.1 PE teachers and LSEs working in synergy for better inclusion and quality PE lessons

The key element of working together for the benefit of the student is communication. CTF4, CTM4 and CTF1 stated that, in the beginning of the scholastic year, they meet with their respective LSEs to discuss each student with ID’s IEP which sets out the student’s goals for the scholastic year. LSEcF5 confirmed that she holds a similar meeting with the PE teacher at the beginning of the year. LSEcF1 highlighted the importance of having regular meetings with the PE teacher so that they can both plan for any adaptations that may be required. CTF3 uses such meetings to identify “*the students’ strengths and weaknesses*” together with their LSE to come up with the best possible course of action and tools to use during the lesson.

LSEgF2 also works with the PE teacher to come up with adaptations and variations of certain activities. This emphasises the importance of having a “*good link*” with the LSE

(ITF1) to be able to tackle any issues or concerns (GTF1) and create a “*positive environment*” for the student to learn in (LSEcF1). LSEiF1 adds that it is also essential that the LSE supports the PE teacher during the lesson. It is important that the LSE receives the lesson plans and schemes of work from the PE teacher ahead of the lesson (LSEcF2) so the LSE can plan and adapt activities (LSEcF3) with the PE teacher’s assistance as “*ultimately, [the LSE is] not the PE teacher*” (LSEcF2).

Working in synergy with the PE teacher will help reduce segregation as the teacher and the LSE can together come up with strategies that include every student (LSEiM1). LSEcF2 thinks that the LSE should also take the initiative to adapt exercises herself and discuss them with the PE teacher to support and ease the PE teacher’s workload. However, LSEgF1 pointed out that some PE teachers may be reluctant to get advice from their LSEs, thus she “*just suggest[s] things rather than impose things*”. LSEcF6 stated that the level of interaction with the PE teacher depends on the student’s cognitive level. Thus, if the student “*can manage the lesson with the rest of the class*”, LSEcF6 stated that she would not need to have meetings with the PE teacher and be given all the lesson plans and schemes of work ahead of time. LSEcM3 always asks the PE teacher if he needs his support during the lesson and what kind of support he needs. However, LSEcF1 stated that, irrespective of the students’ condition, PE teachers and LSEs should “*work together in harmony*” so that “*the lesson would be enjoyable both for students with ID and those students without*”. LSEcF3 believes that as professionals working for the same aim, PE teachers and LSEs should work together and support each other, otherwise the “*lesson would be a complete disaster*” (LSEcF1).

5.2.3.2 PE teachers' willingness to work with LSE as perceived by LSEs

The PE teacher's personality plays an important role in the working relationship. LSEcF2 stated that some PE teachers used to value her knowledge and input in class, others rarely spoke to her or included her in their planning or lesson. LSEcF1 concurs. She stated that, whereas some PE teachers "*are willing to listen and amend*" activities "*others... are not bothered*". In LSEgM1's case the PE teacher used to ask her not to interfere during the lesson. LSEcF4 stated that the PE teacher cannot do without the LSE as the LSE can observe what is going on during the lesson and help the PE teacher control the students and adapt lessons accordingly.

5.2.3.3 The perception of PE teachers on the LSEs' roles/duties.

The PE teachers who were interviewed agree that one of key aspects of creating a positive environment for students to learn in is sharing responsibilities. CTM1 appreciates having "*another adult in class*" who can assist students and support him when needed. Other PE teachers appreciate having the LSE in class to help with classroom management (CTF3, CTF4) and help students with ID stay focused (CTF5, CTF3) and calm (CTM1). LSEs provide students with ID with individual attention (CTF2) and adaptations (GTM2) keeping students motivated and, thus, improving the participation rate (CTF3). Furthermore, LSEs should prompt their students (CTF3) since some students with ID might "*find it difficult to remember*" all the details given by the PE teacher (ITF1). The LSE repeats key points and reinforces the teacher's teaching cues (CTM4). GTM1 stated that the LSEs' primary duty is to assist the students assigned to them for better integration in class since, as noted by CTF3, the LSE would be "*more knowledgeable*" when it comes to students with ID. CTM2, however, feels that the LSE should "*assist all the students*" and not just the student

with ID. This view is shared by CTM4 who stated that the LSE should not just “*stay with her student 24/7, because the student needs some freedom as well*”; the LSE is in class to ensure “*a smoother lesson*” and to assist and support the PE teacher. Thus, as noted by GTF2, “*their duty is to facilitate the teacher’s work*” and “*facilitate learning*” (ITM1) making the PE teachers’ and LSEs’ collaboration essential for the benefit of every student in class.

5.2.3.4 The perception of LSEs on PE teachers’ roles/ duties

The PE teacher is in control of the lesson (LSEcF1) and their primary job is to see that every student is included in the lesson. LSEcF1 stated that the PE teacher should organise and come up with “*activities that could be fun and inclusive*” so that every student “*enjoy[s] the lesson*” (LSEgF1). Moreover, the PE teacher should be mindful that there are different students with different IDs, so it is essential that any adaptation done to the tasks is done according to their needs (LSEgM1). Although “*not every child is easy to include*”, the PE teacher’s duty is to try their best to “*include them in the lesson*” (LSEiF2). The PE teacher needs to be creative and come up with different activities to promote participation and ensure that the students are not bored (LSEgM1). To be able to plan according to the students’ needs and targets, the PE teacher should have access to each student’s IEP (LSEcF5).

5.2.3.5 LSEs’ involvement during the PE lesson depending on students’ conditions

The LSEs level of involvement and support during the PE lesson depends on the students’ IDs and their IEP report. CTF4 and ITM1 stated that the LSE is only in class if the condition of the student assigned to her is severe and requires extra assistance (CTF1). If, after observing the student’s behaviour and participation in class, the PE

teacher feels that the LSE's support is not required, then the student is left to join the rest of the class without further support (ITM1, ITM2, ITF1, GTF1). Whether or not the student requires assistance is discussed during the IEP session (CTF1). A student may need the LSE during other subject lessons but not during PE (ITF1).

5.2.3.6 The importance of involving parents in decision making and the PE/PA journey

The LSEs spoke about the importance of having good communication with the parents / guardians of students with ID. Parents can pass on useful information that is not included in the IEP (LSEcF4). Having the parents working with the LSEs “*creates a link*” between home and school which leads to “*better resources*” (LSEcF3). This collaboration helps create “*uniformity cause you will be working together and on the same page*”, thus, “*pulling the same rope*” for the benefit of the student with ID (LSEcF5). Therefore, it is essential that LSEs and parents work closely together and keep “*correspondence active throughout the year*” (LSEcF2).

5.2.4 The PE teacher

This theme encompasses the PE teacher's traits and characteristics and their responsibilities when teaching students with ID. It highlights the qualities of the PE teachers, their willingness and motivation to accommodate students with ID and their practices. This sub-theme included two codes; namely: (a) the PE teacher's personality traits and characteristics when dealing with students with ID; and (b) the PE teachers' responsibilities.

5.2.4.1 PE teacher's personality traits and characteristics when dealing with students with ID

The PE teachers identified some of the qualities a PE teacher should have. GTM1 stressed the fact that the PE teacher should be patient and committed, *"you can't just give up... some students might take a long period to achieve something"*. Furthermore, the PE teacher should be dedicated and creative, using innovative tools to keep students engaged throughout the lesson (CTM4). Unfortunately, according to CTM4 some PE teachers are not dedicated enough and are *"reluctant to change"* and adapt when needed. Motivation and interest in keeping up to date and acquiring more knowledge is key (CTF1, ITF1 and GTF1) to keeping students engaged in lessons. Lastly, GTM2 stated that his main quality is determination; he is determined to *"do what it takes for kids to have a positive experience at school"*.

5.2.4.2 The PE teachers' responsibilities

One of the main responsibilities of a PE teacher is to promote PA during the lesson. It is essential that the PE teacher plans the lesson well (CTF3) so no time is wasted during the lesson itself (GTM1) and the students enjoy it and participate irrespective of their ability (CTF3, ITF1). In ITM2's views the teacher's job is *"to help each and every individual"*, because everyone can reach their goals (GTM2). CTM2 feels that his duty is *"to choose wisely, educate students ... and support everyone in class"*. GTF2 referred to the importance of having a positive learning environment and creating different activities (CTM4) that would allow students to learn *"at their own pace"* (GTF2). Another important responsibility was instilling positivity within students (CTM4). CTM4 stated that he is not just teaching students how to be physically active,

he is passing on positive qualities such as determination “*to improve*”, dedication, commitment and how to give maximum “*effort*”.

5.2.5 The LSE

This sub-theme concerns the LSEs’ traits and characteristics and their responsibilities when supporting students with ID. It highlights the qualities of the LSE, their willingness and motivation to accommodate students with ID and their practices. This sub-theme included three codes; namely: (a) the LSEs’ personality traits and characteristics when dealing with students with ID; (b) the LSEs’ responsibilities; and (c) one-to-one LSEs vs shared LSEs.

5.2.5.1 LSEs’ personality traits and characteristics when dealing with students with ID

The interviewees discussed the different characteristics an LSE should have. GTM1 and GTF2 highlighted the importance of motivation as only through motivation would the LSEs be able to reach every student under their care. With motivation, fun and discipline, an LSE can “*gain the students’ trust* (LSEgM1). A demotivated LSE, however, would negatively affect the students’ PE experience (GTM2). Without motivation, stated LSEcF3 “*I [would] not be able to give my 110% and it’s not fair on the student*”. Other important qualities mentioned by LSEiM1 were charisma and the need to help others. The latter resonates with LSEgF1 who has the urge to help every student in the class rather than focus on just one student: “*I felt I wanted to be there for other kids*”. Patience is another key attribute (LSEcM3). According to LSEiF2, with patience and determination, students with ID will be able to improve at their own pace without feeling the pressure. Lastly, LSEgF4 stated that gaining information and doing

the research, being creative (LSEiF1) and being open to feedback (LSEgF2) are essential qualities to have to be able to assist students holistically.

5.2.5.2 The LSEs' responsibilities

One of the main responsibilities of an LSE is to assist students and “*facilitate learning*” (LSEcF2). The LSE needs to be present during the lesson to “*explain further and simplify the teacher's instructions*” (LSEcF6). This was also discussed by LSEcM1, where he stated that his main duty is to “*assist the student and help him cooperate with the rest of the class*”. Furthermore, LSEcM3 stated that one of the crucial responsibilities of her role is to find resources and educational tools to assist her student in class and make his learning experiences easier. LSEgF1, LSEgM1 and LSEcF4 emphasised the importance of teamwork and good collaboration with the PE teacher. LSEgM2 stated that one of the key elements of his job is to encourage, inspire and motivate his students to reach their targets and “*reach the goal of that day*” (LSEcM2). LSEcM3 stated that “*you need to support and highlight their positive aspects*”, so that the students would be more motivated to participate during the lesson. Moreover, LSEcM2 highlighted the importance of giving students a sense of “*empowerment*” (LSEcM2) rather than just babysitting them (LSEgM1). Another important aspect that was discussed was the participation of LSEs in activities together with the rest of the class (LSEiF2) as this could encourage a student with ID to take up PA “*throughout his life*” (LSEcM2). When the student under his care is struggling LSEiM1 said: “*I step in and sort of do my thing with him, remaining with the rest of the class*”. LSEiF2 participates during the lesson to provide a positive role model and “*encourage*” participation, especially when her student is reluctant to participate. LSEcF6 stated that she would not be “*fulfilling [her] role as an LSE*” if she just leaves

her student alone as *“our priority should be our students”*. Lastly, LSEcM3, LSEcF1 and LSEcF4 claimed that their main duty as an LSE is to make sure that their student is included in the lesson with the rest of the students and the school community.

5.2.5.3 One-to-one LSEs vs Shared LSEs

The main difference between a one-to-one LSE vs a shared LSE is that the former is committed to help only one student. CTF3, CTM3 and CTM2 stated that if a student with ID is diagnosed with a severe intellectual disability, they will be placed with one LSE who will be *“full time”* with that student (CTF3). Furthermore, CTF5 and CTM2 stated that LSEs who are placed on a one-to-one basis are to follow the student under their care in every subject. Thus, LSEs who are on a one-to-one setting are *“bound to be present”* (LSEcf2) for the PE lesson and *“bound to stay with”* the students they are assigned to (LSEgF2). Although this provides the student with ID with *“holistic development”*, as the LSE does not only assist the student in their academic journey, but also provides them with tools to be included within the community (CTF4), LSEiM4 feels that being a *“one-to-one LSE ... limit[s] [his] capacity”* as it prevents him from supporting the rest of the students and the teachers.

5.2.6 The challenges faced during the PE lesson

This sub-theme concerns the challenges PE teachers and LSEs face when delivering PE lessons to students with ID in an inclusive mainstream school setting. It includes three codes, namely: (a) students' conditions as perceived by PE teachers and LSEs; (b) different abilities; (c) facilities and resources provided.

5.2.6.1 Students' conditions as perceived by PE teachers and LSEs

The interviewees referred to the types of conditions that could challenge their roles as PE teacher and an LSE. As noted by CTF5, GTM2, LSEcF5 and LSEcM1 one of the hardest conditions to work with is autism, mainly because their *"[lack of] communication might be a barrier"* (LSEcF6) making it harder to comprehend their needs (CTF5). Furthermore, LSEcM3 stated that students with autism require round the clock assistance *"which might be overwhelming"* and tiring.

Another challenging condition is students who are *"non-verbal"* (CTF5, LSEcF1, LSEcF2). LSEcF2 stated that non-verbal students find it very difficult to *"comprehend simple instructions"* which, unfortunately, *"could lead to tantrums"*. This is why, said LSEcF6, it is so important to be prepared to adapt and create resources to facilitate learning and to make their academic experience a positive one. LSEgM1 stated that his biggest challenge in PE *"is the big age gap... how to adapt according to [the student's] cognitive age"*. LSEcM1 also stated that he felt that he fared better with a student who suffers from global developmental delay than a student with Down Syndrome as *"they are hardheaded"*. Another challenging condition that was mentioned was ADHD. LSEgM2 stated that his student with ADHD *"used to find it very difficult to remember certain rules"* from previous lessons. CTF4 stated that she struggled to *"understand what to do and how to interact"* with a student with ADHD. LSEiF2 stated that she could not keep up with an ADHD student's hyperactive behaviour and, thus, it was a challenge to assist her.

5.2.6.2 Different abilities

Mixed ability classes present PE teachers and LSEs with the challenge of creating differentiated learning. Teaching mixed ability students is a common occurrence

especially in mainstream schools (CTM4). There will be situations where it would be difficult for the teachers and LSEs to include everyone in class (CTM1). Although students may be participating in the same lesson, they may be doing different activities tailored to their physical ability and skill levels (CTF2). CTM4 stated that the struggle is to include students from *“the opposite side of the spectrum”*, that is, having students who have intellectual disabilities and students who are bright in the same class. CTF1 believes that this situation is unfair for both students with and without ID as they will still be working *“on their own”*, without having any *“proper interaction”* (CTF5). The more abilities a teacher is faced with, the harder it becomes to differentiate the lesson and to include everyone in class. As stated by GTM2, *“it’s mission impossible”*. LSEcF6 stated that the *“teacher is limited on what she/he can do”* and it is *“very difficult for a teacher to adapt their scheme of work”* for every student in a year group since there will be *“10 different conditions”* (LSEcM3) to cater for. Therefore, as stated by GTM2, *“you can be very knowledgeable”*, but the more differentiated abilities there are in class, the *“harder it is to create a learning environment”* which is positive for every student in class.

5.2.6.3 Facilities and resources provided.

Another challenge faced by PE teachers is the lack of access to facilities and resources. Resources are limited and, according to CMT1, teachers *“might not have all the equipment”* needed to cater for every student’s needs and conditions. CTM3 stated that the lack of resources and equipment in schools limits their *“performance”* and creates *“challenges and barriers”*. CTM2 and CTF4 stated that they were able and willing to adapt equipment, but the school needs to provide them with the right tools. Without the right tools, CTM3 would not be able to *“follow the syllabus and teach*

properly". GTM2 emphasised the need to have equipment that is suited to every student, to increase time on task and PA participation. Besides the lack of resources, PE teachers also highlighted the lack of facilities. GTF2 stated that the number of students in class makes it challenging to carry out a lesson in a small pitch. However, if there is good "*classroom management and planning from before the lesson*" space would not be an issue (CTF3). ITF1 feels that the more space teachers have the better as it will provide students with "*quality PE*" since there will be more flexibility to deliver mixed ability lessons. CTF4 stated that "*a good location*" will put "*your mind at rest that whatever the situation is you can still deliver your lesson*".

5.2.6.4 Class size

The PE teachers feel that having a large number of students in class creates barriers and difficulties when it comes to providing students with inclusive quality PE lessons. GTM1 and CTM4 feel that this would make it difficult to provide students with "*individual attention*" as it makes it very difficult for the PE teacher to go round each student giving them assistance within the limited time frame (CTM3, CTF1, CTM1, CTM2, CTM4). Students with ID will inevitably struggle in a large class as they will not be receiving the attention they need. According to ITM1: "*you will be giving a disservice*" and hindering the students' progress. Moreover, GTM2 emphasised the importance of building a positive relationship with the students which may be difficult to do if there is a large number of students in class.

5.3 The educational system in Malta

This theme concerns the school environment and educational system in Malta. It looks at the different protocols, different school settings and the support given to PE teachers and LSEs by the local educational authorities. It encompasses four sub-themes,

namely: (a) structure of secondary schools in Malta; (b) school protocols; (c) the curriculum; and (d) the world of inclusion. Each sub-theme is further divided into codes which will be discussed below.

5.3.1 Structure of secondary schools in Malta

This sub-theme concerns the local school culture and the different school settings found in Malta. It includes three codes, namely: (a) school culture; (b) different school settings – government, church and independent schools; and (c) resources centres (special schools) vs mainstream schools.

5.3.1.1 School culture

The PE teachers and LSEs discussed different aspects of their school system. CTF1 stated that her school provides a very positive transition from primary to secondary school; the students remain together throughout the years so the students at secondary school would have known each other since primary school. ITM1 said that the school she works at provides a very supportive environment for students with ID. LSEcF3 stated that the LSEs relationship with the school administrators and teachers helps create *“a peaceful and healthier environment, both for us and for the students”*. This is the case at LSEiF1’s school where there is *“a great team working together”* that involves the school administrators, the teachers, the LSEs, the students and the parents. At ITF1’s school students without disability help their classmates with ID and make sure that they have a positive experience. Unfortunately, this is not so at LSEcM1’s school where *“the environment tends to be very stressful which does not help the student”*. LSEcF6 described how a student with ID was devastated to learn that no one of his classmates accepted him and no one wanted to play or speak with him. GTM2 said that students with ID in his school are just *“a number”* and that no one really

tries to include them within the school community. The school “*is really big*” and having “*lots of people going around, lots of noises*” makes the environment a hostile one for students with ID (GTM2).

5.3.1.2 Different school settings – government, church, and independent schools

The PE teachers and LSEs who were interviewed highlighted the differences between schools settings in Malta in terms of inclusion of students with ID. GTM2 believes that church schools might be the “*best*” setting for students with ID, as they have a “*more social and caring background*”. LSEcF1 stated that her school [church school] does not make any distinction between students with ID and those without and all students are encouraged to participate in PA “*irrespective [of] whether [they] have a condition or not*”. Church schools also include students with ID in sports days; the PE teachers design different activities that all students could take part in as it’s not “*fair that a student with ID is playing alone during sports day*” (LSEcF1).

ITM2 mentioned that their independent school’s ethos is to help students of different abilities to integrate and feel included. ITM1’s independent school provides an “*environment where [the teachers] can communicate with the kids*” freely, without any red tape or restrictions. ITM2 feels “*lucky*” that the independent school they work at is in a better financial situation than a government school as this gives them the possibility of buying more resources and building more facilities to accommodate students with ID than government schools, making them better able to support students with ID than government schools. ITM2 stated that some parents take children with ID out of government schools and enrol them into independent schools as “*they are aware of [their] inclusive*” protocols.

GTM2, however, countered this argument by saying that there have been instances of parents who decide to transfer students with ID from an independent school to a government school *“because the [independent school] is giving them a disservice [as it] is limited”*. Inclusion in government schools depends on the *“school’s aims, the management [and] how much they put into the special needs department”* (GTM2). According to CTF4, church schools are at a disadvantage when it comes to implementing the curriculum as it is too vast and difficult for church schools to implement while remaining mindful of inclusion.

5.3.1.3 Resource centres vs mainstream schools

Whether a student is enrolled within a resource centre, or a mainstream school depends on the severity of the students’ ID. GTF2 stated that resource centres are only beneficial to students if their condition is severe; *“there are professional people who would work with them”* (CTF3) and they have better resources at their disposal (LSEcF6). In resource centres students learn the *“basic skills”* which may be more beneficial in the long run than academic subjects as they help students *“function in society”* (CTM4). If a student is struggling in a mainstream setting, it may be beneficial for them to be enrolled in a resource centre (LSEiM1, LSEcF3). CTF1 stated that she saw a great improvement in her student with ID when they received a mix of both mainstream schooling and resource centre experience. LSEcF1 strongly disagrees with having students attend resource centres as *“mainstream school can give more to a student”* and assist in a holistic growth.

5.3.2 School protocols

This sub-theme concerns the school protocols and academic regulations in secondary schools in Malta. It includes three codes, namely: (a) school procedures; (b) PE status in Malta; and (c) support and information provided.

5.3.2.1 School procedures

The interviewees discussed the different procedures schools follow to ensure safety and inclusion of students with ID while promoting quality inclusive PE and PA. GTF1 stated that her school assists students with ID by placing them in a smaller class so that they could receive more individual attention. LSEcF4 has the head of school's permission to provide students with ID with more PA during free lessons to "*promote PE*". This helps them unwind (CTF1). CTM2 stated that at his school "*there is a big emphasis on acceptance*" and inclusion is a value which is promoted heavily. This is also the case at ITM2's school where students are brought up in a culture where everyone is equal irrespective of their race, gender, and ability. CTF4 makes sure that everyone is included in sports activities during the mid-day break activity by making the registration for sports tournaments available for everyone "*so if you want to take part you can just write your name*". ITM1 stated that the school's main policy is to make sure that the students with and without ID are "*mentally healthy, that they are interacting with each other*" so assistance is provided on a regular basis. For this reason, GTF1 stated that her school offers "*the learning support zone*" for those students (not necessarily with ID) who require assistance throughout their school day. Issues such as bullying are immediately reported to the SMT and acted upon instantly (LSEcM1). Furthermore, CTF1 stated that her head of school promotes inclusion by acknowledging good behaviour and praises students without ID who deliberately assist

their peers with ID *“during the assembly”*. Moreover, to protect students with ID, ITM2 stated that the school has a professional counselling service, which is there to listen, guide and give suggestions to teachers and parents alike.

5.3.2.2 PE status in schools

The LSEs brought up the fact that PE is not given sufficient significance in schools. LSEcF1 stated that, since PE is not considered to be an academic subject, *“we tend to take it lightly”* and not treat it like the other subjects (LSEcF5). LSEcF4 stated that *“PE is not given that much of importance”* and that *“it should be given more weight in the curriculum”* (LSEcM2). Although PE is a mandatory subject, it is still not valued (LSEcF5, LSEgF2) and this is negatively impacting sports participation both in and outside schools.

5.3.2.3 Support and information provided.

Both PE teachers and LSEs spoke about the importance of having access to information relating to students with ID to help them plan and deliver their lessons. In CTF3’s school, the SMT sends the relevant information about the students’ conditions before the start of the scholastic year. GTF1, ITM2, LSEgF2 and LSEcM3 also stated that their respective schools are efficient in providing them with information prior to their first meeting with the student.

CTF4 claimed that her school had a very rigorous system of information sharing whereby the head of school sends all the relevant documentation individually to the teachers who will be teaching the students with ID. In GTM2’s school, the information is passed on verbally and no document is shared with the academic staff due to *“data protection”*. This same system is also followed at CTF1’s school, where the information is passed on during a meeting and teachers *“take note”* of the students’ conditions.

ITF1 stated that the information provided helps teachers create a positive PE experience for the student as “*if the teacher [knows] what the condition is, she [is] able to plan accordingly and better*”. LSEcF1 stated that, although the SMT provides her with the relevant information, she still takes the initiative to discuss every student’s case with their previous LSEs. LSEcF4 and LSEiF1 stated that their respective schools make the information about the students’ conditions accessible in the principal’s office. The teachers and LSEs can read the students’ “*statement ... psychological report ... IEP*” to obtain a good solid background on each student with ID. LSEiF1 highlights how grateful she is to have a good support system in school as this allows her to better assist the students in her care. She would prefer it, however, if the information on the students is made available earlier than a week prior to the start of the academic year. Unfortunately, not every school offers this level of support. GTF2 stated that her school does not disclose any information to any academic staff about students with ID and planning and adaption of lessons depends on trial and error. Another important aspect related to the support provided by schools that was brought up by the teachers and LSEs was the inclusion of PE teachers in IEP. GTM1 stated that the school tries to have the PE teacher involved in the IEP session by dedicating a slot on the PE teachers’ timetable to attend IEPs and other relevant meetings.

5.3.3 The curriculum

This sub-theme concerns aspects of the curriculum followed in Malta, including whether it allows any room for adaption for inclusive quality PE, whether there should be changes to the current curriculum, and whether PE teachers and LSEs feel that the curriculum is suitable for every student in the school. This sub-theme includes five codes, namely: (a) the current curriculum; (b) the previous curriculum vs current

curriculum; (c) the perception of having a dedicated curriculum for students with ID; (d) strategies for a better curriculum; (e) and stakeholders and policymakers.

5.3.3.1 The current curriculum

The PE teachers and LSEs who participated in this study had mixed feelings when it came to discussing the curriculum. Most agree that the curriculum allows room for flexibility. GTM2 stated that the introduction of the learning outcomes in the new curriculum made it easier for the PE teachers to assess students at different levels and reach students' goals. ITF1 stated that he does not "*feel restricted by the curriculum*", as he never had issues to adapt lessons according to the students' needs. LSEcM1 stated that the curriculum allows "*room for mixed ability learning*" as the "*syllabus is quite vast, which allows room for flexibility*".

LSEcM3 and LSEgF2 feel that the curriculum can easily be adapted, and the level of adaptation depends on the PE teacher's motivation and willingness to put in the work. It is the PE teacher's responsibility to create mixed ability lessons. CTF3 feels that, although the curriculum is flexible, "*what we do in schools is quite rigid*". This is because PE teachers limit themselves to teaching mainstream sports which may not be ideal for students with ID (CTF3). Therefore, the PE teacher needs to be willing to experiment outside their comfort zone to provide students with a vast array of sports activities (CTM3). CTM4 stated that the curriculum was designed to be flexible and agrees that the way it is being implemented is very rigid.

Five PE teachers and LSEs feel that the curriculum itself is quite rigid. CTF2 feels that the curriculum does not have room for flexibility and that it is "*hard to adapt*" lessons, making the curriculum not "*inclusive*". CTM3 stated that the curriculum "*is failing students*" as it is not designed to reach students at different levels (LSEcF6) and does

not allow students “*time for experimental learning ... and free play*” (LSEcF1). LSEcF1 feels that the system is “*not allowing students to be creative*” during the PE lesson. Furthermore, CTF4 stated that the curriculum offers a “*one size fits all system*” making it difficult for students with ID to be successful (GTM1). CTF4, in fact, sometimes steps away from what the curriculum is dictating to be able to include every student in class. LSEgM1 concurs, stating that “*the current curriculum makes it very difficult to achieve differentiated learning*” and does not target students with ID (GTM1 and LSEcF3). In fact, LSEgM2 emphasised the importance of having areas in the curriculum dedicated to students with ID to allow PE teachers to be more flexible and promote mixed ability learning.

5.3.3.2 Previous curriculum vs current curriculum

Seven interviewees feel that the curriculum that predated the current curriculum allowed PE teachers to be more flexible when it came to assessments. In the new curriculum, which encompasses the Learning Outcome Frameworks (LOFs), teachers are just ticking whether students have attained a skill or not (CTF2). CTM3 claimed that the previous curriculum gave the PE teacher the possibility to adapt and “*set targets for the students*” according to their abilities (CTF2). GTF2, stated that the current curriculum and methods of assessment are “*too rigid*” and set very high expectations setting students up for failure. The previous system allowed parents to follow their child’s progress through a detailed assessment report rather than just informed whether the student had acquired a skill or not. (CTM2). LSEgM1 also feels that “*with the old system, inclusion was better*” as everyone could participate at their level and was assessed according to their abilities.

5.3.3.3 Perception of having a dedicated curriculum for students with ID

Some of the PE teachers are concerned that the current curriculum is not inclusive and support the notion of creating a curriculum specifically for students with ID. The teachers advocated grouping students with severe ID and giving them separate PE lessons that cater for their abilities and needs (GTF2). This approach is supported by ITM2 who already implements this method at his school to make sure that his students with ID are gaining something out of the PE lesson.

5.3.3.4 Strategies for a better curriculum

Four PE teachers who were interviewed put forward different strategies that could improve inclusion through a better curriculum. GTF2 said that she would rather organise different activities to teach the students life skills and values while promoting “*physical education*” (CTF5) than focus her PE lessons on skill development and assessment. CTF1 stated that the LOFs should be abolished to protect students from being labelled. CTM4 would like to be given the responsibility to choose sports activities in line with his students needs and abilities. The people setting the curriculum need to be mindful of available school facilities; thus, it is essential for the PE teacher to be given the right to choose what to teach (CTM4).

5.3.3.5 Stakeholders and policymakers

The individuals devising the curriculum need to have hands-on experience in class as the current curriculum does not reflect reality (GTM1, CTM1, LSEgF2). Moreover, according to GTM1, the people designing the curriculum need to be mindful of the mix of abilities in classes in mainstream schools; nothing should be taken for granted as physical ability varies from one student to another. Lastly, CTF1 stated that the curriculum needs to be explored, studied, and tested before being implemented.

5.3.4 The world of inclusion

This sub-theme concerns the PE teachers' and LSEs' perception of inclusion, whether inclusion is positively affecting students with ID, whether inclusion can be offered to every student in class and whether schools are inclusive. This sub-theme included six codes, namely: (a) defining inclusion; (b) is inclusion really happening?; (c) forcing the system ... failing our students; (d) inclusion depends on students' abilities; (e) inclusion depends on students' age; (f) psychological aspects brought about by inclusion.

5.3.4.1 Defining inclusion

The PE teachers and LSEs who contributed to this study discussed what they perceived inclusion is. For CTF5 it is a form of equality, where everyone is working together but at their own pace. CTF1 highlighted the importance of equal rights and acceptance. GTM2 and CTF5 emphasised the importance of teaching the school community how to accept one another without any prejudice. For LSEcM1, *"inclusion is when everyone is equal, and everyone is on the same level"*. To practice inclusion, the teacher needs to *"modify [their] entire lesson"* to ensure that everyone in class is participating (LSEgF1).

5.3.4.2 Is inclusion really happening?

A major concern of the PE teachers and LSEs contributing to this study was whether inclusion is being reinforced and implemented in schools. CTM4 and CTF5 stated that, while people talk about inclusion and it is written on every educational document, *"when it comes to reality, it's just a word on paper"*. Furthermore, CTF5 stated that although PE teachers try to remove the labelling and stigma from students with ID, students with ID still feel different from their classmates, making them feel more vulnerable. CTM3 stated that, although PE provides students with a vast array of

inclusive opportunities, PE teachers still struggle to include every student in class, especially students with severe ID (CTM4, CTF1). LSEcF2 maintains that there are still *“cases where the student is segregated and left alone”* during the lesson, which does not fit in with the notion of inclusion. This is *“unfair”* and humiliating for students with ID, as they can sense that they are not as able as and not fitting in with the rest of the class (LSEcF2, LSEcM1). Therefore, in LSEcF3’s words, it is time to practice what we speak and take action to present every student in class with a positive learning experience.

5.3.4.3 Forcing the system... failing our students

Another concern voiced by the PE teachers and LSEs is that the system is forcing students with ID to fit in a setting which is not accommodating them. CTF3 stated that *“inclusion depends on the level of disability”* and the mainstream setting might not be fitting. It is *“useless forcing something which is unattainable”* (CTF3). GTF2 stated that mainstream schooling is failing students with severe ID who are placed in class with the rest of the students but are *“not learning anything”*. CTM4 said that, although he believes that inclusion is important, it is still not *“the answer for everything”*. Unfortunately, students with severe ID are being placed in a system *“which is not meant for them”* as proof of embracing inclusion (CTM4). Although inclusion is being promoted, schools are not being structured to *“fully cater”* for the students’ needs (LSEcM1). Moreover, as noted by LSEcF2, LSEgM2 and LSEiF1, the system is depriving students with ID from their freedom of choice by forcing them to participate in activities that they are not comfortable participating in. Lastly, CTF5 voiced the concern that the inclusive educational system does not reflect the outside world; thus, we are depicting a scenario to students with ID which is not close to reality. This means

that students will struggle to find jobs and have a positive social life once they are out of school.

5.3.4.4 Inclusion depends on students' abilities

Although integration can happen, inclusion depends on the students' conditions (GTF1, GTF2, LSEcF6). ITF1 believes that students with severe ID would be "*difficult to include ... in mainstream school*". This is because, although students with ID are included in the lesson, they still struggle (LSEcF2 and LSEiF1) to play with peers as there is a great gap in their ability level (CTF1). Furthermore, since students with ID are generally doing completely different activities from the rest of the class, the inclusive school setting will be even more "*excluding*" (CTF1). This is a "*disservice*" to students (LSEcF2). The mainstream setting is harmful to students with ID as they are forced into a world that they do not belong in (GTF1).

LSEiM1 spoke about the importance of safeguarding the wellbeing of the TDP students. ITM1 stated that if a student with ID "*is a danger*" due to behavioural challenges, then for the safety of their peers "*I wouldn't want to have [them]*" in class. Furthermore, to protect other students and staff members, students with severe ID who cannot control their tantrums are forced to stay in the "*resource room*" away from everyone else, which defeats the purpose of inclusion (CTF1). LSEiM1 stated that although "*inclusion is the way forward*" it should not hinder the development of their TDPs. Also, TDPs could get frustrated with the lack of abilities and cognitive intelligence of students with ID (LSEcF6). In fact, to safeguard TDPs' PE experience, LSEcM1, LSEiF2 and LSEgF1 stated that they adapt activities for their students so that the rest of the class will carry on with the lesson without any restrictions. LSEcM2 reflected that although inclusion of students with ID is doable when doing individual

activities, it presents a challenge when the students are playing a game (LSEiM1), because the students with ID cannot cope with working in a team (LSEcM2).

Some participants feel that students with severe ID would benefit more from being “*taught basic social skills*” that would help them navigate society (CTM4). ITM2 stated that he dedicates entire lessons to teaching students with ID “*basic skills*” in the hope that one day these students will be included with the rest of the class.

5.3.4.5 Inclusion depends on students’ age

Another aspect to consider when discussing inclusion is age. CTF1 stated that she has noticed that at her school the older students are more likely to include students with ID as they are “*maturing*” and “*communication with them*” is easy. However, this view was supported only by CTF1. LSEcF4 stated that inclusion is easier at a young age as the “*younger they are the easier*” it is to accept one another. Furthermore, LSEcF1 stated that “*younger students are more open to accept everyone... with no discrimination*”. Unfortunately, students become very selective as they grow older (LSEcF5), which results in more segregation, not just during the lesson, but also during break activities. Furthermore, LSEcF4 stated that exclusion increases by age, as TDPs start choosing highly skilled students and become more competitive in PE and during break activities. Thus, the older they get, the more struggles students with ID face (LSEgF1).

5.3.4.6 Psychological aspects brought about by inclusion

Among the positive psychological aspects of inclusion is “*confidence*” (CTF1). CTF4 stated that PE provides an environment where students can work together with their TDPs without assistance from their LSE, giving them a boost in confidence level. As a PE teacher, ITF1 is responsible for making every student in class feel valued as this improves confidence and results in better behaviour. LSEcF4 stated that if the PE

teacher and LSE show students that “*they are capable and you believe in them*”, then they will start believing in themselves as well. To boost her student’s psychological wellbeing, CTF5 would acknowledge positive performance and reward the student.

Another psychological aspect of inclusion is empowerment. CTF2 stated that when a student with ID is given a task to do on their own and sees that they are “*coping during the lesson*”, they would feel a “*sense of empowerment*”. Thus, the more responsibilities you give students with ID, the more empowered they feel and the harder they would work to improve and succeed (CTF1). This success gives them a sense of pride helps them feel equal and at par with their TDPs (GTF2).

On a negative note, the older they grow, the more autonomous students with ID would want to be; thus, having the LSE always with them in class results in embarrassment and refusal to participate in PE (CTM2). Moreover, if the student with severe ID is unable to participate with the rest of the class, they may have tantrums as they would not be able to communicate their disappointment (CTF5).

5.4 The way forward

This theme outlines what the PE teachers and LSEs see as the way forward with inclusion. It highlights what participants feel should be done to improve inclusion in the educational system in Malta. It comprises one sub-theme, namely (a) requests and requirements, which was further divided into codes that are discussed below.

5.4.1 Requests and requirements

This sub-theme concerns the PE teachers’ and LSEs’ perception of what needs to be done to better the inclusive experience for students with ID. It discusses aspects within the school environment and educational system that need to be adapted for better

inclusion. This sub-theme includes three codes, namely: (a) having smaller classes; (b) teaching about inclusion – building a community for inclusion; and (c) teaching students with ID how to be autonomous.

5.4.1.1 Having smaller classes

One of the changes that the PE teachers and LSEs would make is reducing the number of students in class. One of the benefits of having fewer students in class would be that the PE teacher would be able to “*create a better environment for the student*” with ID to “*feel comfortable to participate*” in the lesson with the rest of their peers (CTM3). Moreover, classroom management would be easier to maintain (CTF4) as students would be more focused (CTF1) and the working rate would increase (ITF1) as “*time on task*” would improve (GTM1).

Another beneficial aspect of having fewer students in class is increased “*individual attention*” (GTM2). GTM1 stated that providing students with individual attention is “*important for the development of the child*”. Thus, it is essential to have smaller classes to reach every student in class (ITM2). This would allow PE teachers and LSEs to give “*individual feedback*” (CTM4) and facilitate learning (GTF2). Thus, having fewer students in class would also make it “*easier to reach the aim and objective of the lesson*” (CTF3).

Another beneficial aspect of having a smaller group to teach is the opportunity to create a strong relationship with each student (LSEgM1). Knowing the student “*inside-out*” would help the PE teacher and LSE come up with tools, resources, and adaptations that suit the student’s needs.

5.4.1.2 Teaching about inclusion – building a community for inclusion

Another aspect to tackle for better inclusion in schools is increasing social awareness and social acceptance; specifically, teaching TDPs acceptance (CTM2, LSEiF1), empathy (LSEcF3), and respect (CTF5). Furthermore, CTF5 highlighted the importance of teaching TDPs about the uniqueness of every individual and the need to embrace difference rather than belittle or shame anyone who is struggling to perform a given task. CTM2 feels that one of the main responsibilities of a PE teacher is to teach students values and good morals (GTF2, LSEcM1) as without these foundational ethical principles, there could be no inclusion. Once students learn how to accept one another (LSEiM1), inclusion would become automatic (GTM2) as would creating a positive and welcoming environment in which every student could grow and develop (LSEcF2). Thus, *“it’s all a matter of educating the students in general”* (LSEiF2) about inclusion, social acceptance, and social responsibilities (LSEcF3).

5.4.1.3 Teaching students with ID how to be autonomous

Students with ID need to have time on their own without the LSE babysitting them (LSEiF2) to enable them to acquire basic life skills. LSEgM1 stated that schools are failing these students as they are not providing them with the skills they will need in the outside world. LSEgF2 emphasised the importance of giving students independence and space for decision making and problem solving.

5.5 Discussion

The aim of the second phase of this study was to investigate the methods and practices used by PE teachers and LSEs to promote inclusive quality PE and PA among students with ID in inclusive secondary mainstream school settings. Its findings add to the pool of knowledge regarding the strategies and resources PE teachers and LSEs use for

differentiated learning and the promotion of inclusive PE and PA, the struggles and challenges they face to include every student with ID in their lessons and the support and assistance (or lack of) provided by stakeholders within the educational system in Malta. Furthermore, it presents PE teachers' and LSEs' recommendations to enhance diversity and improve inclusion in mainstream schools.

The results show that the main objective for the PE teachers and LSEs that took part in this study is to create a fun and positive inclusive learning environment in PE classes, where students would feel valued and confident that they can succeed. Such an environment can only be created if PE teachers and LSEs keep students at the heart of their lessons and plan activities that are diverse, suitable, and adapted to the different ability levels of the students they teach. The PE teachers and LSEs agree that they need to use an inclusive pedagogy which moves away from the one-size fits all concept. PE teachers and LSEs must work together to create an environment to accommodate every student in class, by delivering and organising different activities using the parallel activities found in the inclusive spectrum. Unfortunately, this poses PE teachers and LSEs with challenges that hinder their work and, ultimately, inclusion. Two of the biggest challenges identified by the PE teachers are the large number of students in class and the limited resources and facilities available in schools. These limitations make it difficult for PE teachers to include every student with ID in the lesson, especially if the student requires individual attention.

The discussion below is structured around the following themes: (a) principles for inclusive pedagogies for quality inclusive PE and PA promotion in mainstream secondary schools; (b) factors influencing adaptation and differentiated learning in PE lessons; and (c) building an inclusive school community for students with ID.

5.5.1 Principles for inclusive pedagogies for quality inclusive PE and PA in mainstream secondary schools

This chapter discussed the pedagogical approaches PE teachers and LSEs use to bring out the potential of every student in class through inclusive PE. As noted in Vickerman and Maher (2019), teachers teaching in an inclusive community are bound to alter their pedagogy in accordance to the students' needs and conditions. Thus, PE teachers and LSEs should use a student-centred approach, where they facilitate learning for students to help them "reach their maximum potential" (Liasidou, 2015, pg. 89). As identified in this study and supported in the literature, PE teachers need to be creative and adapt activities for every student in class without any discrimination (Kudláček, Ješina and Flannagan, 2010), be knowledgeable and informed about how to accommodate every student by planning tailor-made activities (Njelesani et al., 2015) and be motivated to plan and deliver lessons that are fun and challenging but also attainable by every student in class (Vickerman and Maher, 2019). Two pedagogical recommendations for inclusive quality PE and PA are the buddy system, which was discussed in this study, and the "cooperative learning" approach (Bertills, Granlund and Augustine, 2019, pg.3) which, though not referred to by its technical term by the PE teachers and LSEs in this study, is adopted by most of them to a certain extent.

The buddy system offers students the opportunity to be guided by their TDPs during the lesson (Gilbert, 2019). This gives students without ID the responsibility of supporting their peers with ID to help them improve their skills and be included in the lesson without discrimination. Also, this approach provides students with ID the opportunity to participate independently of their LSEs. As noted by the PE teachers

and LSEs who contributed to this study, students with ID tend to look negatively upon their LSEs joining the lesson as this marks them out from their peers and embarrasses them to the extent that they may refuse to participate in PE. The buddy system not only involves the TDPs in assisting their peers with ID but also creates a positive inclusive environment (Dyson and Casey, 2012).

Cooperative learning is when students with and without ID are given the opportunity to collaborate, communicate, and interact with one another irrespective of their ability level. The cooperative learning approach benefits both students with ID and their typically developing peers. Ovens, Dyson and Smith (2012) state that this pedagogical approach facilitates learning, improves cognitive and physical abilities, improves confidence and motivation, increases PE and PA participation and gives a sense of empowerment. However, this does not mean that learning is one-sided and that instructions and corrections only come from students without ID. This pedagogical approach offers students the opportunity to intertwine their knowledge and abilities to assist one another (Casey and Quennerstedt, 2020). Thus, PE teachers should organise the lesson in a way that both types of students are “accountable and positively interdependent” (Casey and Quennerstedt, 2020, pg. 1030).

This chapter also refers to the inclusion spectrum used by the PE teachers and LSEs to facilitate learning. As stated by Grenier, Miller and Black (2017), the inclusion spectrum allows PE teachers to assess the learning outcomes and environment, understand what the students require to reach the learning outcomes and adapt activities and resources accordingly. By adopting the inclusion spectrum in their pedagogy, PE teachers are able to have every student in class working on the same

objective, using modified equipment to make the learning experience positive and successful.

5.5.2 Factors influencing adaptation and differentiated learning in PE lessons

According to the PE teachers and LSEs who contributed to this study, several changes need to happen in schools to provide students with ID with quality inclusive PE. First, it is essential that schools provide the facilities and equipment that PE teachers and LSEs require to be able to implement inclusive learning methodologies (Wilson, Kelly and Haegele, 2019). Second, the PE teachers need to be provided with a curriculum that can be delivered within the infrastructure of the schools they teach in. As Lijuan, Wand and Ha (2017) note, for inclusion to be successful there should be a link between educational stakeholders in charge of writing the curriculum and schools. Educational stakeholders have the responsibility to make sure that the curriculum does not hinder inclusion (San Martin et al., 2021) and values students with ID.

Third, as indicated in the literature and echoed in this study, having many students in class is a barrier to inclusive quality PE provision in schools. Having a large number of students in class does not only affect the teacher's ability to adapt and include everyone in class but creates safety hazards for both TDPs and students with ID (Healy, Msetfi and Gallagher, 2013; Wilson, Kelly and Haegele, 2019). Therefore, for the PE teachers' peace of mind and the safety of every student in class, it is essential that PE teachers be provided with "adequate space in which to practice" and facilitate learning (Healy, Msetfi and Gallagher, 2013, p. 226).

5.5.2 Building an inclusive school community for students with ID

An issue related to inclusion within the school community is the lack of social awareness and social acceptance of TDPs of their classmates with ID (Bertills, Granlund and Augustine, 2019). In an environment where students are meant to collaborate, it is essential that TDPs are taught about inclusion, how to accept one another without any prejudice and how to work together in synergy. The PE teachers and LSEs who contributed to this study emphasised the importance of having educational sessions for students without ID on different conditions and inclusion. Unfortunately, students with ID struggle to make friends (Bertills, Granlund and Augustine, 2019) in inclusive settings as TDP choose not to interact and communicate with them (D'Eloia and Prince, 2018). Such segregation negatively influences the students with ID's experience in school which, in turn, reduces participation and promotes "self-exclusion" (Salmon, 2013, p.352).

5.6 Implications

Table 28 presents the implications brought forward from phase 2

Table 28: Implications phase 2

Implications phase 2	
Implication 1	The need to use different pedagogical strategies was one of the key insights that emerged from this study. Thus, it is fruitful to examine the different pedagogical approaches used in local secondary schools and identify the strengths and weaknesses of using these approaches. Pedagogical approaches that could easily be adopted are: (a) TGFU, where students learn through games and fun activities alongside their TDPs; (b) planning lessons that do not require a great deal of explanation so that students are kept active, thus improving time on task; (c) the buddy system and collaborative learning; (d) increased collaboration between the PE teachers and LSEs on adaptation and differentiated learning; and, lastly (e) use of the inclusive spectrum to provide alternatives for students with

	ID. PE teachers and LSEs need to be willing to carry out research on alternative teaching pedagogies. They also need to be creative. Motivation is key and keeping lessons varied will help keep PE teachers' and LSEs' motivation alive.
Implication 2	Another key element discussed by both the PE teachers and LSEs is the lack of social awareness in schools. School administrators across Malta should create a standardised social awareness campaign for TDPs and their parents to create an environment where everyone is accepted, irrespective of their ability and conditions. These campaigns should be promoted at all levels of education in Malta, starting from the primary level so that TDPs are made socially aware at a young age. This will not only assist the students' academic journey but will provide TDPs with useful tools and experiences which will be of benefit to them in the outside world.
Implication 3	Continuous development opportunities should be provided for both PE teachers and LSEs. During the interviews, both the PE teachers and the LSEs used the terms inclusion and integration interchangeably. It is essential that individuals working in the educational sector are aware of the difference between the two. Also, PE teachers and LSEs should be guided and supported by school administrators and provided with all the necessary information related to the students' condition to enable them to plan and deliver adapted PE lessons according to the needs of the students under their care.
Implication 4	The need to have different stakeholders working in harmony to create an inclusive PE, PA, and sports environment was one of the key insights emerging from this study. Academic, institutional and government stakeholders should get together and devise policies and sport programmes that accommodate children with ID and embrace their needs and requirements to be fully accepted and included in PE, PA, and sports both within the school and outside the school sport community. Unified sports should be better promoted by organising competitive unified school activities to provide students with ID the opportunity to showcase their skills and abilities in a competitive and inclusive environment.

Implication 5	Another aspect that was discussed was the need for governmental financial support. The government should provide schools and community sport clubs with professional support by engaging assistant coaches and LSEs who are sports oriented and who are knowledgeable about inclusive and adapted PE, PA, and sports. Such support would provide PE teachers and sport coaches with additional support and this would create an environment which is more welcoming and inclusive.
Implication 6	Young and old individuals with ID need to be given more authority through leading roles on committees and regulation boards. They need to be given the opportunity to participate in policy and decision making based on their lived experience as this approach guarantees positive outcomes in policies.
Implication 7	PE teachers and LSEs should be obliged to attend mandatory courses on inclusion as part of their professional development. Failure to do so should lead to the revocation of their warrant or suspension from teaching. The government of Malta should provide adequate training and financially support PE teachers and LSEs to encourage them to travel and network with colleagues teaching in foreign schools and to buy resources that could improve their lesson delivery.
Implication 8	Lastly, the professionals within the educational and academic system in Malta need to be made more aware of the different levels of severity of children with ID. Inclusion is important unless it creates discrimination or disservice to both students with and without ID. Thus, there might be the need to create special arrangements to reduce the gap between mainstream schools and resource centres.

5.7 Conclusion

This chapter presented an overview of the pedagogical methods and approaches used by PE teachers and LSEs for the provision of inclusion quality PE and PA in secondary schools in Malta. The results suggest that PE teachers and LSEs make use of three main pedagogical approaches, mainly cooperative learning, the buddy system and the inclusion spectrum. This study emphasised the importance of adaptation and

facilitative learning and identified several barriers faced by PE teachers and LSEs when delivering inclusive PE. These barriers are related to the schools' infrastructure, schools' procedures, and the curriculum. The need for more social awareness and better resources and equipment to enhance diversity and provide students with a positive learning environment was highlighted.

Chapter 6: Results – Phase 3

This chapter presents the findings of the individual interviews conducted with nine educational and governmental leading stakeholders who are involved in the educational and sports sector in Malta. 5/9 (55.5%) of the interviewees represented academic and educational institutions and the remaining 4/9 (44.4%) represented government entities and ministries. Table 29 below presents the key characteristics of the participants of Phase 3. Some details have been omitted to ensure anonymity.

Table 29: Key characteristics of the participants of Phase 3

Code	Years of Experience	Entity	Gender	Role
ESGM1	N/A	Academic and educational institutions – government schools	M	N/A
SGM1	N/A	Government entity	M	N/A
ESGF1	N/A	Academic and educational institutions – government schools	F	N/A
ESCF1	N/A	Academic and educational institutions – church schools	F	N/A
SGM2	N/A	Government entity	M	N/A
ESCF2	N/A	Academic and educational institutions – church schools	F	N/A
ESIF1	N/A	Academic and educational institutions – independent schools	F	N/A

SGF1	N/A	Government entity	F	N/A
SGF2	N/A	Government entity	F	N/A

6.1 Overview of themes, sub-themes, and codes

Three themes emerged from the interviews which were expanded into subthemes and codes (table 30). The themes were: (a) pioneers of inclusive PE, PA, and sports promotion in Malta; (b) The situation of inclusion in PE, PA, and sports in Malta; and (c) recommendations for better inclusive PE, PA and sports in Malta.

Table 30: Themes, sub-themes and codes emerging from the individual interviews.

Theme	Sub-themes	Codes	Academic and educational stakeholders	Government stakeholders
6.2: Pioneers of inclusive PE, PA and sports promotion in Malta	6.2.1: Promoters within the school community	6.2.1.1: The role of school administrators and academic staff in promoting inclusive PE, PA, and sports	ESGM1, ESCF1, ESCF2 (3/5)	SGF2(1/4)
		6.2.1.2: The responsibilities of students with and without ID in promoting inclusion	ESGM1, ESGF1, ESIF1 (3/5)	SGF2, SGM1, SGM2, SGF1 (4/4)
	6.2.2: The wider community	6.2.2.1: Collaboration between stakeholders. Sharing responsibilities	ESGM1, ESCF2, ESIF1 (3/5)	SGM2, SGF1, SGF2 (3/4)

6.3 The situation of inclusion in PE, PA and sports in Malta	6.3.1: Social awareness	6.3.1.1: The general public's perception of individuals with ID		SGM1, SGM2, SGF1 (3/4)
	6.3.2: The educational system	6.3.2.1: A system which is failing	ESCF1 (1/5)	SGM1, SGM2 (2/4)
		6.3.2.2: Inclusion on paper not in practice	ESGM1, ESGF1, ESIF1 (3/5)	SGM1, SGF1, SGF2 (3/4)
		6.3.2.3: PE not valued in schools	ESGF1, ESCF2, ESGM1 (3/5)	SGM1, SGM2, SGF2 (3/4)
		6.3.2.4: Lack of training provided	ESGM1, ESGF1, ESCF1, ESCF2, ESIF1 (5/5)	SGM1, SGM2, SGF1, SGF2,
		6.3.2.5: Training provided	ESGM1, ESCF2 (2/5)	SGM2, SGF1 (2/4)
		6.3.2.6: The gap within the educational system	ESGF1, ESCF1 (2/5)	SGF1 (1/4)
		6.3.2.7: New initiatives	ESGM1, ESCF2 (2/5)	SGF1, SGF2 (2/4)
		6.3.2.8: The PE teacher's psychological responses	ESGF1, ESCF1, ESIF1 (3/5)	SGM2, SGF2 (2/4)
	6.3.3: The academic institutions and their procedures	6.3.3.1: Mainstream schools vs resource centres	ESGM1, ESGF1, ESCF1 (3/5)	

		6.3.3.2: Blended environment	ESGM1, ESCF1, ESIF1 (3/5)	
	6.3.4: Sports in the community	6.3.4.1: Barriers posed by competitive sports environment	ESGM1, ESGF1, ESCF2, ESIF1 (4/5)	SGM1, SGF1, SGF2, SGM2 (4/4)
6.4: Recommendations for better inclusive PE, PA and Sports in Malta	6.4.1: Academic and institutional approaches	6.4.1.1: Equal rights	ESCF1 (1/5)	SGM1, SGM2, SGF1, SGF2 (4/4)
		6.4.1.2: Supporting PE teachers	ESGM1, ESCF1 (2/5)	SGM2, SGF1 (2/4)
		6.4.1.3: Training format and settings	ESGM1, ESGF1, ESCF1, ESCF2, ESIF1 (5/5)	SGM1, SGM2, SGF1 (3/4)
		6.4.1.4: Training providers	ESGM1 (1/5)	SGF1, SGF2 (2/4)
		6.4.1.5: Adapting the curriculum to meet every students' needs	ESCF1, ESCF2, ESIF1 (3/5)	SGM1, SGF2 (2/4)
		6.4.1.6: Subject based LSEs	ESGM1, ESGF1 (2/5)	SGM2, SGF2 (2/4)
		6.4.1.7: Reducing class capacity	ESCF1, ESCF2 (2/5)	SGM2, SGF1, SGF2 (3/4)
		6.4.1.8: The involvement of PE teachers in the IEP sessions	ESGM1, ESGF1, ESCF1, ESCF2, ESIF1 (5/5)	SGM1, SGM2, SGF1, SGF2 (4/4)

	6.4.2: A holistic approach to change	6.4.2.1: Building a Community of Practice	ESGF1, ESCF2, ESIF1 (3/5)	SGM2 (1/4)
		6.4.2.2: Creating more inclusive sports opportunities	ESCF2 (1/5)	SGM1, SGM2, SGF2 (3/4)
		6.4.2.3: Creating a correlation between school and home	ESGM1, ESCF2 (2/5)	SGF2 (1/4)
	6.4.3: Suggestions directed to the government	6.4.3.1: More financial support	ESCF1 (1/5)	SGM1, SGM2, SGF1 (3/4)

6.2 Pioneers of inclusive PE, PA and sports promotion in Malta

This theme focuses on who the interviewees believe the stakeholders and institutions who should be at the forefront of inclusive PE, PA, and sports promotion in Malta to be. It encompasses two sub-themes, namely: (a) promoters within the school community; and (b) the wider community. Each sub-theme was further divided into codes which will be discussed below.

6.2.1 Promoters within the school community

This sub-theme identifies the organisations and individuals who the interviewees think should be responsible for promoting inclusive PE, PA, and sports within the school community. This sub-theme includes two codes, namely: (a) the role of school administrators and academic staff in promoting inclusive PE, PA, and sports; and (b) the responsibilities of students with and without ID in promoting inclusion.

6.2.1.1 The role of school administrators and academic staff in promoting inclusive PE, PA, and sports

Four of the interviewees feel that the promotion of inclusive PE in mainstream schools should be spearheaded by the school administrators and the staff itself. ESCF2 thinks that the active support and promotion of inclusive PE by the head and administrators of a school would be reflected in the school ethos, fostering a more inclusive school culture. In contrast, if a school does not actively promote inclusive PE and highlight the importance of involving students with ID in the PE lesson, such students will not be motivated to participate in PE. ESGM1 highlighted the importance of having a collaborative approach, that is, building a workforce comprising administrative and teaching staff to promote and create more awareness and pave the road towards an inclusive environment in mainstream schools.

6.2.1.2 The responsibilities of students with and without ID in promoting inclusion

Both students with and without ID have a vital role to play in the promotion of inclusive PE and PA in mainstream schools. ESGM1 stated that, when students with and without ID work together during a lesson they are automatically promoting inclusion as they are learning from each other, supporting each other, and accepting one another. This peer collaboration creates a safe and accepting environment where every student feels that they could succeed (ESGM1). SGF2 and SGM1 stated that students with ID should be given the opportunity to voice their opinion and be included in policy discussions as they have hands-on experience through their “*lived experience*” and are able to provide ideas and strategies on how to promote inclusive PE, PA, and sports (SGM1). SGM1, ESGF1 and ESIF1 highlighted the importance of “*cultivat[ing] a*

culture” (ESIF1) where students can learn from each other how to “*accept everyone*” (SGF1) through collaborative learning, experience, seminars, and workshops on embracing inclusion.

6.2.2 The wider community

This sub-theme emphasises the importance of having different non-governmental and governmental entities working together to promote inclusive PE, PA, and sports in Malta. This sub-theme encompassed only one code, namely: (a) collaboration between stakeholders, sharing responsibilities.

6.2.2.1 Collaboration between stakeholders, sharing responsibilities.

It is paramount to have a collective approach to promoting inclusive PE, PA, and sports. According to ESGM1, “*it’s everyone’s responsibility*” and the promotion of inclusivity should be “*from top to bottom*” (ESCF2) without any reservations. SGF1 highlighted the importance of having an “inclusive community” where everyone works together to create a safe and inclusive environment for participation in sports. SGF2 stated that, in Malta, there is the need to create a link between “*regulators, organisations and [name of entity]*” and form a dedicated workforce for “*disability sports*”. ESGM1 stated that, unless there is collaboration between government, educational institutes and sports entities, inclusion will be hindered and students with ID will “*suffer*”.

6.3 The situation of inclusion PE, PA, and sports in Malta

This theme concerns the experiences and perceptions of the evolution of inclusion in Malta both in schools and in community sports clubs. It encompasses four sub-themes, namely: (a) social awareness; (b) the educational system; (c) academic institutions and

their procedures; and (d) sports in the community. Each sub-theme is further divided into codes which are discussed below.

6.3.1 Social awareness

This sub-theme highlights how society views people with ID. It explores the perception and awareness of the general public of people with ID. This sub-theme encompasses one code, namely: (a) the general public's perception of individuals with ID.

6.3.1.1 The general public's perception of individuals with ID

There is an increased awareness about individuals with ID among the general public. and knowledge about how these vulnerable individuals could be included within the community. According to SGF1, Malta has “*made a huge stride [in] awareness*”. SGM2 recalled a time when people with ID used to be bullied; however, due to this “*increased awareness*” people are more accepting and protective especially within school communities. SGM1 agrees that awareness has improved, and that people are more open minded when it comes to individuals with ID and inclusion but feels that the general public still fails to understand the “*rights*” of individuals with ID and still struggles to include children with ID in community sport activities.

6.3.2 The educational system

This sub-theme identifies the barriers and positive aspects of the educational system in relation to inclusive PE, PA, and sports. It encompasses eight codes, namely: (a) a system which is failing; (b) inclusion on paper not in practice; (c) PE not valued in schools; (d) lack of training provided; (e) training provided; (f) the gap within the educational system; (g) new initiatives; and (h) the PE teacher's psychological responses.

6.3.2.1 A system which is failing

According to the interviewees, the educational system within schools is still struggling to accommodate the diverse needs of every student in class and is, thus, failing weaker students with low physical abilities and students with ID. SGM1 stated that, unfortunately, *“the education system in Malta is not doing well”* and is not preparing students for life after school. Furthermore, ESCF1 stated that the *“curriculum in all subject[s] is too high”* and is perceived to be too difficult for children with ID making it challenging for them to catch up with their peers.

6.3.2.2 Inclusion on paper not in practice

Although inclusion is part of the educational policy in Malta, schools are still struggling to implement an inclusive environment. ESGM1, who works in a government school, stated that schools are not catering for students with severe ID and that if a school audit had to be performed, government schools would fail to make the grade in terms of inclusion because students with ID are still being segregated. SGM1 stated that, not only are students with ID not fully included in PE, some are sent to the library with their LSE to work on something that is completely unrelated. SGF1 recognises that there is a diverse range of abilities in government schools and that some students might struggle to perform every task they are set by the PE teacher but is adamant that schools should be more empathic and sensitive and work on strategies to reduce segregation. Teachers should adapt their lessons and use differentiation to include all students in the lesson. Lastly, SGF2 referring to every school setting in Malta, stated that the schools' main objective is to promote PE, PA, and sports and not to create sports champions; this means that any competitions held within and among schools should allow every student the opportunity to participate and be included.

6.3.2.3 PE not valued in schools

The subject of PE in schools is being devalued and is not being given “*its adequate importance*” (ESCF2). SGM1 stated that PE is not seen as an academic subject but as “*something extra*” (SGM2). In fact, SGF2 stated that PE is “*the first lesson*” to be “*replaced [when there is] a school activity*” and is at times not even on the IEP agenda (SGF2, ESCF2). Moreover, since PE is not considered to be an academic subject, PE teachers are not given the support required by LSEs (ESGM1). This, according to SGM1, indicates that PE teachers are not valued like other subject teachers which is “*disrespectful*” (ESGM1) and shows how “*PE is not a priority for the educational system*” (ESGF1).

6.3.2.4 Lack of training provided

The interviewees noted that the PE teachers’ preparation is inadequate and, thus, teachers lack knowledge on how to include students with ID in PE lessons. SGM1 stated that inclusion is failing as PE teachers “*are not equipped*” with training and knowledge and, thus, delivering inclusive quality PE to students with ID “*fails immediately*”. ESGM1 agreed that training on “*adapted PE for students with ID*” is still inadequate. ESGF1 feels that inclusive PE and Adapted PE (APE) are not given importance in the undergraduate course for teachers. According to ESCF1, there are not “*enough modules on inclusion*” in undergraduate courses and this is why PE teachers struggle to include students with ID in schools. Moreover, according to SGF2, even Masters’ level PE teachers do not understand the different conditions and severity levels of students with ID. LSEs also lack specific training in inclusive PE (ESGF1), resulting in “*a major disservice to our students*” (ESIF1). This is a matter which should be tackled with urgency.

6.3.2.5 Training provided

Government schools do organise continuous professional development (CPD) courses on inclusion and adaptation, especially if the school administrators acknowledge the need (ESGM1). However, ESCF2 noted that PE teachers are unlikely to sign up for such courses unless they are faced with students diagnosed with ID. SGM2 stated that the training provided to their [government entity] sport coaches is now organised on a regular basis as part of their professional development (PD). SGF1 too stated that her staff are continuously being trained in different areas of inclusion PE and Adapted PA.

6.3.2.6 The gap within the educational system

There are many gaps in inclusion in education. According to ESCF1, students with severe ID are not accepted even in resource centres [special schools dedicated for students with severe conditions] meaning that such students are unable to get an education. ESGF1 referred to the lack of opportunities provided to students with ID once they leave school at the age of 15. SGF1 stated that “*there’s a gap [no educational offering for students] between 16 and 18 [years]*” for students with ID, and sometimes this gap is greater if the student is not accepted in mainstream schools or in resource centres. The government needs to address this matter as it is obliged to provide some form of schooling to every citizen (SGF1).

6.3.2.7 New initiatives

The interviewees discussed programmes that are being run by the Education Department to improve inclusion in PE, PA, and sports in mainstream schools. ESGM1 and SGF2 referred to an initiative which is being delivered across government schools in Malta, in conjunction with “*Special Olympics and Paralympics*”. The aim of this initiative is to promote PA in schools to enhance inclusive PA participation and promote

healthy living (ESGM1, SGF2). The PE teachers who were selected for this initiative were trained by professionals within the inclusive and adapted PA spectrum, thus generating more experts in the field who can support other PE teachers (ESGM1, SGF2). However further gaps and needs were identified by ESCF2. ESCF2 referred to the series of seminars she would like to organise within church schools to provide PE teachers with tools and knowledge on inclusion PE, PA, and sports. SGF1 stated that her government entity is working alongside “*Special Olympics Malta*” to train her staff in adapted PE, PA, and sports.

6.3.2.8 The PE teacher’s psychological responses

PE teachers go through certain emotions and psychological reactions when faced with students with ID in class. SGM2 stated that some PE teachers might lack “*confidence*” and are “*scared*” to teach students with ID (ESGF1). PE teachers may be “*afraid to face these students and they are afraid to experiment [by changing their pedagogy and use differentiated teaching]*” (SGF2). Lastly, ESIF1 linked the PE teachers’ fear with the PE teacher’s motivation and stated that the moment a PE teacher feels that they have failed, their motivation will decrease, which will affect their lesson delivery.

6.3.3 The academic institutions and their procedures

This sub-theme discusses the differences between mainstream schooling and schooling offered at resource centres. This sub-theme encompasses two codes namely: (a) mainstream schools vs resource centres; and (b) blended environment.

6.3.3.1 Mainstream vs resource centres

The choice of academic setting for a student is dependent on student’s condition. ESGM1 stated that, in severe cases, students would benefit from attending a resource

centre [a special school] as resource centres offer “*individual attention*” (ESGM1) and have more resources than mainstream schools for children with ID (ESGF1). ESGF1 stated that since “*mainstream schools do not cater for all children with ID*”, a resource centres would be the best option for a student with severe ID.

6.3.3.2 Blended environment

The interviewees had mixed feelings about having students with ID attend both a mainstream school and a resource centre. ESGM1 stated that students with ID love their routine and disrupting it might hinder their progress. ESCF1, on the other hand, stated that having the opportunity to attend both a mainstream school and a resource centre would be “*ideal*” as this gives the student the opportunity to work alongside their peers without disability in mainstream schools and have teachers focus on their needs at the resource centre. ESIF1 stated that mainstream schools should have a “*resource class*” on campus with different resources to assist students with ID in their mainstream, inclusive educational journey.

6.3.4 Sports in the community

The interviewees gave their views on whether sport clubs and club coaches provide an inclusive environment that enables students with ID to participate in competitive sports and succeed. This sub-theme encompasses one code, namely: (a) barriers posed by the competitive sports environment.

6.3.4.1 Barriers posed by competitive sports environments

Inclusion in sport clubs depends primarily on the “*philosophy of the club*” (ESGM1). Although sport clubs exist to provide a service, they will only include everyone who wants to join “*until a certain level*” (ESCF2); when members reach the competitive age

category, the clubs' philosophy becomes more business oriented (ESCF2) and starts aiming for successful results (ESGM1). This is when everyone starts to *"play to win"* (SGM2) and children with ID are segregated *"for the simple reason [that] they are not at the same level as their peers"* (SGF2). Furthermore, the clubs' philosophy starts to revolve around the notion of being *"the best"* and having the best athletes that *"excel"*, thus, accepting children with ID for competition might hinder this ethos (SGF1).

Moreover, since parents of children without disability pay steep fees to have their children join clubs, they might be against inclusion, as children with ID might slow down their child's progress and hinder their performance (SGF1). Since sport clubs need money to pay coaches and provide facilities, they may choose to refuse children with ID to safeguard against losing other paying members (SGF1). Therefore, according to SGF2, inclusion in clubs will always be a challenge in Malta as sports clubs administrators *"are very protective of their club"* and *"are not willing to accept people with disability"* who they feel are *"not competitively able"* (ESGF1). Moreover, since club's budget is limited, they will find it very difficult to employ a coach assistant to support children with ID (SGM1).

ESCF2 stated that, since clubs want a *"return for their investment"*, they either choose to deny access to children with ID or organise something specifically for them (SGF1). SGF2 observed that, when clubs organise activities for children with ID, such activities are *"never professional"* and, often one finds that, they only organise them because they have obtained EU project funds that require them to organise such events.

Lastly, SGF1 stated that children with ID might not want to be included as they still feel different and are aware of their *"limitations"* and feel that *"they cannot be achievers"*.

Thus, is it essential to strike a balance “*between the competitive nature of sports and the need for inclusion*” (ESIF1).

6.4 Recommendations for better inclusive PE, PA, and Sports in Malta

This theme identifies different approaches, recommendations, and suggestions to improve the quality of inclusive PE, PA, and sports, both in the academic PE spectrum and the community sport field. It encompasses three sub-themes, namely: (a) academic and institutional approaches; (b) a holistic approach to change; and (c) suggestions directed to the government. Each sub-theme is further divided into codes that are discussed below.

6.4.1 Academic and institutional approaches

This sub-theme presents recommendations to provide inclusive quality PE, PA, and sports participation to students with ID. This sub-theme encompasses eight codes namely: (a) equal rights; (b) supporting PE; (c) training format and settings; (d) training providers; (e) adapting the curriculum to meet every student’s needs; (f) subject based LSEs; (g) reducing class capacity; and (h) the involvement of PE teachers in the IEP sessions.

6.4.1.1 Equal rights

Students with ID have every right to be treated equally as their peers. SGM1 stated that students with ID should be “*professionally taught*” like any other student in class. They should be given the opportunity to work on the lesson objectives through differentiation and resources and not be taken aside by the LSE to work on tasks that are sometimes not even related to PE (ESGF1). The main objective of educators is to find different strategies and use different tools to make sure that everyone is included

in PE (ESCF1, SGM2). Students with ID “*have the right to feel accepted*” (SGF1) and “*fully included in schools*” (SGF2).

6.4.1.2 Supporting PE teachers

The interviewees suggested ways to support teachers. ESCF1 stated that she would like to “*have more communication with the PE teacher [through meetings]*”, to provide feedback and support where needed. This would help the PE teacher “*feel more comfortable*” as it would give them a point of reference to turn to for support (SGF1). Furthermore, providing students with mentoring and feedback would reduce “*the feeling of working in isolation*” and would improve psychological aspects which, in turn, would improve planning and delivery of inclusive PE, PA, and sports (SGM2).

6.4.1.3 Training format and setting

The training provided to the PE teachers, LSEs and sport coaches should be hands-on (ESCF2). Although the theory of teaching students with ID is important (ESGM1) [referring to the CPD sessions provided by schools which focus mainly on theoretical aspects], giving PE teachers more practical sessions and “*hands-on*” opportunities (SGM1) would provide PE teachers with better knowledge and better tools (SGM1). ESCF1 and ESGF1 recommend adding more modules to the undergraduate degree programme that focus on the adaptation of the PE curriculum. ESGF1 emphasised the importance of including more teaching practice experiences to undergraduate PE student teachers. These experiences would give PE teachers the opportunity to “*find solutions themselves, based on the knowledge [and] experience*” gained through teaching practice and other teacher training opportunities (SGM2). In fact, ESIF1 emphasised the importance of “*experiential learning for PE teachers*” as this would help them create a “*truly inclusive environment*”.

SGF1 stated the importance of “*hybrid*” training that provides PE teachers with different training settings including workshops, seminars, and discussions. ESIF1 also suggested observational training, where PE teachers would observe other professionals within the field and collaborate by sharing knowledge. SGM2 and ESGF1 highlighted the importance of having ongoing professional training throughout the years. ESIF1 stated that a policy for an “*x amount of CPD hours*” should be created for PE teachers to extend their professional warrant every year.

6.4.1.4 Training providers

Different institutes and organisations were identified that could provide inclusive PE, PA, and sport training to PE teachers, LSEs and sport coaches working with children with ID. SGF1 emphasised the input that the University of Malta (UOM), particularly the Department of Disability Studies, could offer in terms of specific training related to inclusive PE, PA, and sports through its experts who could offer valuable insights and knowledge (SGF1). SGF2 stated that the UOM needs to be creative and organise courses, seminars and workshops in conjunction with foreign universities. This will provide PE teachers, LSEs, and sports coaches with different knowledge, tools, and experiences that would help them gain confidence when teaching children with ID (SGF2). ESGM1 pointed out that people with disability themselves would be the ideal candidates to provide practical training “*as they’ve been through it themselves*”. Lastly, SGF2 stated that PE teachers, LSEs and sport coaches could enhance their knowledge by following online courses and accessing online resources.

6.4.1.5 Adapting the curriculum to meet every student’s needs

Most of the interviewees agree that the curriculum needs restructuring to meet the requirements for inclusive PE, PA, and sports for students with ID. SGM1 stated that,

to improve quality inclusive PE, “*we should move forward from the current curriculum*”, as at present it is not reflecting what is really happening in schools (ESCF2). Moreover, ESCF2 stated that the curriculum should not focus on team sport and games, as students with ID might feel discouraged and “*back out*”. ESIF1 voiced the concern that the current curriculum is tough for students with ID and could be disheartening. The curriculum should be changed to expose students with and without ID to “*different types of sports*”, allowing students to try out a variety of sports and have different experiences (SGF2).

6.4.1.6 Subject based LSEs

The interviewees expressed mixed feelings about having subject based LSEs rather than one-to-one or shared LSEs. ESGF1 feels that “*it would be ideal*” to have LSEs who are focused on one subject as they would be better able to provide students with ID with support since they would be more knowledgeable about the subject. SGM2 stated that LSEs should be subject based just as teachers are subject based and “*in the ideal world... every PE teacher would be paired with [an] LSE*”. This would help reduce the workload for each of them as the PE teacher would plan the main lesson and the LSE would focus on adaptations (SGM2). Moreover, having LSEs who are expert on the subject would provide PE teachers with useful insights on what to do and what to avoid during the lesson, thus safeguarding the wellbeing of students with ID (SGM2). SGF2 disagrees with having subject based LSEs. She argued that students with ID require a routine and changing LSEs from one subject to the next could create barriers to learning as the student would feel uncomfortable and communication would be hindered, disrupting progress (SGF2).

6.4.1.7 Reducing class capacity

The participants voiced a concern regarding the current class capacity. In ESCF1's view, having a large number of students in class creates more challenges for PE teachers and hinders them from delivering inclusive PE, PA, and sports lessons. In a large class, it is very difficult to give "*individual attention*" (SGM2) and it is challenging to assist every student in class even though "*you try to be on the alert*" (ESCF2). Thus, SGF1 suggests that "*classes should be smaller*" to help the teacher reach each student and provide individual attention. SGF2 recommends that PE classes should have no more than 10 students to enable quality inclusive PE.

6.4.1.8 The involvement of PE teachers in the IEP sessions

Most of the stakeholders interviewed feel that PE teachers' input during IEP sessions is essential as they provide vital information both about the subject and about the student's behaviour and performance during the lesson. Unfortunately, during IEPs decisions are "*taken without any expert feedback*" (ESGM1), thus "*missing part of the puzzle*" as PE teachers are the experts in the field. As stated by SGF1, PE teachers "*spend a lot of time with the children*", therefore "*every piece of information*" (SGM1) could lead to a better plan and more specific goals for the student. Apart from delivering the lesson, PE teachers would also have observed the students and identified their strengths and weaknesses, thus gaining a clear image of what each student can and cannot do (SGF1). This is why having the PE teacher present at IEPs is essential (SGF2) especially if PE is the main subject under discussion (ESCF1). Since PE teachers are not always available to join the IEP sessions, ESIF1 started a procedure where PE teachers are given an IEP form through which the teacher can provide

feedback on the student. This initiative has proven to be effective and ESIF1 recommends that it is taken up by every school in Malta.

6.4.2 A holistic approach to change

This sub-theme highlights the changes that need to be done within the community to promote inclusive PE, PA, and sports participation. This sub-theme encompassed three codes, namely: (a) building a Community of Practice; (b) creating more inclusive sports opportunities; and (c) creating a correlation between school and home.

6.4.2.1 Building a Community of Practice

The three academic and institutional stakeholders and the government stakeholder contributing to this code, stated that the best practice for inclusive PE, PA, and sports for children with ID would be a collective collaboration where different stakeholders come together to work for the common good. ESGF1 emphasised the importance of PE teachers and LSEs working together, sharing knowledge, resources, and practices. Moreover, SGM2 stated that PE teachers from different schools and different countries should get together and create a network of support among professionals. This is essential as *“it’s impossible for one teacher to know everything”* about the different intellectual disabilities. ESIF1 proposed that every academic institute have *“a diversity action group”* comprising PE teachers and LSEs who work together to adapt activities and create differentiated lesson plans and resources to assist students with and without ID. Lastly, SGM2 stated that PE teachers and LSEs should collaborate with parents to ensure uniformity and provide one another with support on inclusive PE, PA, and sports.

6.4.2.2 Creating more inclusive sports opportunities

The interviewees agree that more inclusive sports opportunities need to be created for children with ID. SGM1 stated that Malta cannot just depend on SOM as they have a long waiting list since they are the only local organisation to provide sport activities to children with mild to profound ID (SGF2). SGM2 stated that parents should not force the system; since it is very difficult for children with ID to join a mainstream sport club, parents should “*scrap other sports and let them do Special Olympics*”. ESCF2 stated that there should be competitions dedicated to children with ID, to give them a “*fair chance*” (SGM2) of participating and succeeding in sports.

6.4.2.3 Creating a correlation between school and home

The interviewees highlighted the importance of creating a bridge between school and home to create uniformity and provide students with ID with a routine. ESGM1 stated that “*the school cannot work autonomously from what happens at home*”; it should create connection so what is practiced at school (behavioural correction, discipline, PE activities) is transferred to the home environment and vice versa. This way parents will be able to use the same techniques and practices used in school (ESGM1). Furthermore, ESCF2 emphasised the importance of having a good relationship with the parents to create continuation and provide support both for the parents and for PE teachers, LSEs, and coaches alike. Lastly, SGF2 referred to the importance of allowing parents to be present during the IEP sessions so that the same techniques could be practiced at school and at home.

6.4.3 Suggestions directed to the government.

This sub-theme highlights the backing requested from the government to improve inclusive PE, PA, and sports for children with ID. It encompasses one code, namely: (a) more financial support.

6.4.3.1 More financial support

The interviewees discussed the financial support that should be provided to sports clubs and schools to provide more support to students with ID. SGM1 stated that the government should “*finance and give opportunities to LSEs*” to work in “*extracurricular activities*” alongside PE teachers and sport coaches. By providing such a subsidy, the government would be assisting schools and clubs to provide inclusive PE, PA, and sports activities to students with ID (ESCF1) as PE teachers and sports coaches would be provided with additional help through an LSE during the PE lesson or training session. SGM2 stated that the government needs to “*invest*” in human resources, to be able to as noted by SGF1, provide PE teachers and sport coaches with additional support, which in turn would provide students with ID with more inclusive sport opportunities and individual attention.

6.5 Discussion

The aim of the third phase of this study was to investigate the contribution to inclusive PE, PA, and sports of the various academic, institutional and government stakeholders in Malta. Thus, this chapter adds to the knowledge on the initiatives undertaken by stakeholders to improve inclusion provision in PE, PA, and sports both in schools and in the outside school sport community. Apart from highlighting the barriers to inclusion in the local sports scene, the chapter puts forward possible strategies that could be implemented to improve the inclusion of students with ID in PE, PA, and sports.

Results indicate that there should be different promoters of inclusive PE, PA, and sports and a collaborative effort among different stakeholders in schools and outside schools, working together and sharing responsibilities. To achieve a positive environment for children with ID, PE teachers, LSEs and sport coaches should be provided with the proper training in the field of inclusion and adaptation. One of the main concerns highlighted in this respect was that the training provided does not cover adaptive PE, PA, and sports, nor does it offer PE teachers, LSEs and sport coaches the knowledge and skills they need to support children with ID in a mainstream setting. For this reason, educational and academic institutes should tailor courses for PE teachers, LSEs, and sport coaches to enhance their knowledge and help them create an environment where every child with ID feels accepted and successful. Such courses should be part of their professional development and should be offered on a continuous basis.

This chapter discussed the different initiatives which are being implemented in various schools around Malta to assist PE teachers and LSEs in planning and delivering quality inclusive PE lessons. The aim behind these initiatives is to create a Community of Practice where professionals working in the field of PE, PA, and sports share experiences, knowledge, and strategies.

The discussion below is centred around the following major findings: (a) a holistic approach to improved inclusive PE, PA, and sports for children with ID in mainstream settings; (b) factors influencing the provision of inclusive PE, PA, and sports in mainstream settings; (c) sport for all environment: Building an inclusive outside school sport community for students with ID.

6.5.1 A holistic approach to improved inclusive PE, PA, and sports for children with ID in mainstream settings

The interviewees discussed the importance of having a Community of Practice where professionals working within the field of inclusive PE, PA, and sports would support each other, shifting their mentality to improve the provision of inclusive PE, PA, and sports for children with ID. As discussed in the United States Individuals with Disability Education Act (IDEA) of 2004 children with ID have the right to be included in an inclusive academic and educational setting, where equal opportunities are created (Özer et al., 2013; UNESCO, 2015). In line with the 'Eight P Framework,' this can only be achieved if PE teachers, LSEs, and other sports stakeholders critically reflect on their personal philosophical approaches, understand the concept of fundamental human rights, and take proactive steps to create an environment that supports every student in the classroom. This requires considering the perspectives and input of various stakeholders to establish a unified partnership and a collaborative approach to fostering inclusion (Vickerman and Maher, 2019).

Thus, as noted in this chapter, a collaborative approach by stakeholders is essential to provide more initiatives and more inclusive sport opportunities (Arnell, 2022). Furthermore, as indicated in this chapter and in line with the findings of the literature, stakeholders should create tailor-made PE, PA, and sports initiatives that promote inclusion for children with ID (Arnell, 2022). Organising these initiatives will not only provide children with ID with more inclusive PE, PA, and sport opportunities, but it will enhance social awareness, making the community more accepting.

One of the main aspects discussed in this chapter was the involvement of PE teachers and LSEs in the IEP sessions. IEP sessions are organised to discuss the students with

ID's academic progress and learning needs addressing the student's holistic development from the psycho-social aspect to the cognitive and physical objectives (Ministry for Education and Employment (MEDE), 2012). Thus, it is paramount to involve every stakeholder responsible for the students' educational journey including the PE teacher and the LSE. This is because these sessions enable PE teachers and LSEs to discuss and analyse the students' progress during the PE lesson, highlighting their strengths and weaknesses. This analysis provides critical detail that would help to create an inclusive environment and a tailor-made programme for the student with ID to enable them to join the PE lesson together with their TDP (Vickerman and Maher, 2019). Therefore, school administrators should empower PE teachers and LSEs by giving them the opportunity to be involved in the decision making process about the student which, as noted in the literature, is an essential part of quality inclusive PE, PA, and sports (Wilson, Kelly and Haegele, 2019).

Another essential collaboration indicated in this chapter is that between PE teachers and LSEs in class. As noted in this chapter and as reported in Qi and Ha (2012) and Lieberman and Block (2019), having the LSE assist the PE teacher in class helps classroom management and helps provide easier adaptations as LSEs are more knowledgeable about inclusive and adaptive education (Maher, 2016; Lieberman and Block, 2019). This fosters a holistic approach to inclusive PE, as sharing experiences, knowledge, and insights with LSEs can assist PE teachers in implementing effective measures and actions (Vickerman and Maher, 2019). However, due to the nature of the PE lesson (Vickerman and Blundell, 2012), LSEs might struggle to support students with ID as they lack "PE-specific training" (Maher, 2016, pg. 270; Maher, 2010, pg.277) and "knowledge and expertise" (Maher, 2010, pg.277). Subject based LSEs

could help reduce this risk and provide better assistance to PE teachers to facilitate learning in an inclusive environment for students with ID. However, if having subject based LSEs is not possible due to lack of human resources in schools, LSEs should be provided with relevant courses, seminars, and knowledge (Maher, 2016).

Students who “qualify for special education services” through specific psychological tests should be provided with an academic journey in the “least restricted environment” (Lieberman et al., 2017, p. 10). To make this possible, PE teachers, LSEs, and sport coaches should be provided with the “resources, information and guidance” required to be able to support every child with ID under their care and produce alternative opportunities for every child to participate in quality inclusive PE, PA, and sports (Vickerman and Maher, 2019, pg.92).

This chapter also discussed parents as being vital stakeholders in the promotion of inclusive PE, PA, and sports. Wilhelmsen et al. (2021, pg.1061) finds that collaborating with parents helps create a correlation between school and home, thus bridging “two important developmental arenas for children”. As noted in this study, parents are seen as role models; thus, if they promote PE, PA, and sports at home, the student with ID will exhibit a more positive attitude towards participating in inclusive PE lessons. This is why it is essential to involve parents in their child’s academic journey by providing them with information and including them in decision making (Qi and Ha, 2012 and Wilhelmsen et al., 2021).

Lastly, this chapter referred to the input of SOM and the initiatives which are being implemented in government primary schools. Special Olympics coaches are supporting primary PE teachers by providing them with useful knowledge on adapted PE, PA, and sports. In Germany, Special Olympics is providing inclusive and

mainstream sports clubs with access to assistant sport coaches to provide additional help during training sessions (Pochstein et al., 2023). It is essential to use resources efficiently and strategically to meet the inclusive PE, PA, and sports requirements for children with ID.

6.5.2 Factors influencing the provision of inclusive PE, PA, and sports in mainstream settings.

According to the stakeholders involved in this study, to provide students with ID with the opportunity to participate in inclusive PE, PA, and sports, several changes need to be made by the government and academic and educational institutions. To start off, the government need to provide students with ID with an environment which is suitable for their needs, and which supports their development. As argued by the participants, students with ID cannot be forced into a system which does not cater for their needs, so schools and sports clubs should be equipped with the resources they need (Qi, Wang and Ha, 2017). Lieberman and Block (2019, p. 263) refer to the “inclusion philosophy” suggesting that students with and without ID will only “receive a comprehensive [and] appropriate education” if schools provide students with adequate resources and a professional setting where PE teachers and LSEs are knowledgeable on inclusive PE. Although inclusion is an educational mandate, as the stakeholders and the literature point out, the success of mainstream inclusion depends on the student’s severity level (Warnock et al., 2010).

Students who "qualify for special education services" based on specific psychological assessments should be offered an academic experience in the "least restrictive environment." (Lieberman et al., 2017, p. 10). This raises critical questions about whether mainstream education is the appropriate setting for every student or if we are

placing some students with ID in environments that are hostile and fail to meet their individual needs. Drawing from the social model of disability, it can be argued that an inclusive environment might inadvertently foster discrimination if schools and teachers are not adequately prepared to support diverse learners (Fitzgerald and Long, 2017). In such cases, the mainstream setting may become disabling rather than inclusive. Thus, if inclusion does not suit the student with ID, it will harm their development and increase segregation as they will struggle to fit in mainstream schools (Warnock et al., 2010). This would be a disservice in a hostile environment. Vickerman and Maher (2019) further advocate for providing students with opportunities to express their concerns and needs which is a critical component when providing high quality inclusive PE. By listening to students, PE teachers and Learning Support Educators (LSEs) can collaboratively create environments that are better suited to supporting their development and well-being. PE teachers, LSEs, and sport coaches should be provided with the “resources, information and guidance” required to be able to support every child with ID under their care and produce alternative opportunities for every child to participate in quality inclusive PE, PA, and sports (Vickerman and Maher, 2019, pg.92).

Students with ID are to be academically placed in an educational setting which suits their requirements. This means either placing students in inclusive mainstream education or in a more protected individualised environment such as in a special school or resources centre (Lieberman et al., 2017). Winnick (2017, p. 72) discussed the 7 different levels making up a comprehensive “continuum of alternative instructional placement in PE”. Winnick (2017) suggests that the first level refers to students who do not require any special assistance and for whom mainstream schooling is

appropriate as it meets their needs. Level 2 refers to students who are capable of following instructions and for whom mainstream schooling provides a positive educational environment with minimal support requested from LSE. Students placed in level 3 are students who require regular support in a “resource room” which is extra in their timetable. Thus, the student is still in an inclusive mainstream setting, but is provided with specific individualised supervised training. Level 4 refers to students who require a one off “segregated physical education class”. The students are provided with a hybrid environment, where they are sometimes fully integrated with the rest of their peers and other times follow an individualised programme away from the mainstream setting. Level 5 refers to special educational classes, where students are segregated from the rest of their peers during the PE lesson. Level 6 and 7 refer to students requiring individualised PE lessons round the clock. Lastly, levels 8 and 9 refer to resource centres and special schools, where the needs of students cannot be met in mainstream settings as their cognitive and physical levels are limited (Winnick, 2017). The stakeholders highlighted the importance of having more resource centres in Malta or mainstream schools equipped with appropriate facilities to reduce the gap in the educational system in Malta and allow students with ID to feel comfortable and welcome in an educational setting.

As indicated in the literature and echoed in this chapter, another aspect which needs to be tackled with urgency is the PE teachers’, LSEs’ and sport coaches’ preparation in terms of training provided (Qi, Wang and Ha, 2017; Wilson, Kelly and Haegele, 2019). Full inclusion often necessitates extensive accommodations or differentiation, reaching levels that many teachers find overwhelming. As Kauffman and Badar (2016) emphasize, it is essential to first assess whether those responsible for implementing

inclusion are equipped to do so effectively. Özer et al. (2013) believe that training increases confidence and improves self-efficacy, which in turn improves motivation. As noted in the “Self Determination Theory” by Ryan and Deci (2017, p.3), for an individual to feel motivated, they need to feel “autonomous”, they need to feel that they are part of a community (“relatedness”) and, lastly, they need to feel competent in what they are doing. If one of these pillars is missing, they will struggle to feel motivated. Thus, improved motivation and a positive attitude towards inclusion is likely to occur when PE teachers, LSEs and sport coaches feel professionally prepared. Universities, disability departments, government entities and private academic institutions need to design hands-on and tailor-made courses to provide professionals working alongside children with ID with training and knowledge on designing quality inclusive PE, PA, and sports. Stakeholders referred to the importance of networking and creating exchange programmes with foreign based universities to create a consortium on inclusive PE, PA, and sports. Through such collaboration, PE teachers, LSEs and sport coaches would be able to share knowledge, discuss concerns and develop strategies to facilitate the learning of students with ID in an inclusive environment (Vickerman and Maher, 2019).

Another concern discussed by the stakeholders contributing to this chapter and which was also referred to in previous chapters is the issue related to the large number of students in class which reduces the possibility of individual attention and creates a hostile environment for students with ID. Loud environments can affect students with ID’s wellbeing, leading to segregation and lack of participation (Lieberman et al., 2017). Thus, having fewer students in class would result in more inclusive PE lessons.

An interesting change requested by the stakeholders who were interviewed was the additional support of experts in adapted PE, PA, and sports in both schools and sport clubs. The stakeholders argued that the government should financially support schools and sports clubs by engaging professionals who are knowledgeable about both ID conditions and sports. Lieberman and Block (2019, p.263) state that many societies are failing to achieve the “international recommendations for inclusion” as respective governments are not providing monetary provision to employ qualified individuals in inclusive education and PE, PA, and sports in schools and in sport clubs. Pochstein (2023) states that having additional hands-on assistance will provide PE teachers and sport coaches alike with a better environment to include students with ID and with diverse abilities in PE, PA, and sports.

6.5.3 Sport for all environment: Building an inclusive outside school sport community for students with ID

An issue related to inclusion within sports in the community is the culture that permeates sports clubs in Malta. As noted by the stakeholders who were interviewed, sports clubs in Malta are geared towards competitiveness. Moreover, the interviewees stated that sport clubs' personnel feel that the skills level of children with ID are not up to the level expected. This perception hinders participation of children with ID, as it does not fit in the club's ethos and might hinder the club's objectives (Pochstein, 2022).

It can be argued that sports clubs in Malta adopt a perspective aligned with the medical model of disability, focusing primarily on students' limitations rather than their capabilities. According to Fitzgerald and Long (2017), individuals with ID or other forms of disabilities often face discrimination and exclusion from physical activity and sports. This exclusion arises from perceptions that these individuals are unable to meet the

performance standards demanded by the clubs, regardless of their actual abilities. To address this challenge, local clubs and sports providers in Malta should adopt a social and humanistic model of disability, focusing on removing barriers to participation and promoting equality (Fitzgerald & Long, 2017). This involves dismantling social barriers and eliminating discrimination, ensuring that individuals with ID or other forms of disabilities can engage in PA and sports without facing environmental or societal restrictions (Haslett & Smith, 2020). Programs such as unified sports or tailored opportunities could help overcome segregation. These initiatives are designed to reduce competitiveness and foster inclusion, enabling children with and without disabilities to participate together in recreational activities (Harada et al., 2011).

This calls for sports federations and associations in charge of organising sport coaching training courses to start providing their coaches with theoretical and practical knowledge on inclusive PA and sports to promote inclusion in sport clubs. Professional development and training need to be “rooted in practice rather than theory” (Pochstein et al. 2023, p. 59) and involve individuals from various sectors, such as Special Olympics and other disability entities. Furthermore, Pochstein (2022) highlights the importance of sports federations in knowledge transfer to sport coaches. This practice is already being followed in European countries, such as Germany, where the government provides sports clubs with personnel who are qualified in disability sports and inclusion and obliges them to provide sports provision to children with ID (Pochstein, 2022).

6.6 Implications

Table 31 presents the implications brought forward from phase 3

Table 31: Implications phase 3

Implications phase 3	
Implication 1	One of the key recommendations that emerged from this study was the need to have different stakeholders work in harmony to create an inclusive PE, PA, and sports environment. Academic, institutional and government stakeholders should get together and devise policies and sport programmes that accommodate children with ID and embrace their needs and requirements so that they can be fully accepted and included in PE, PA, and sports both within the school and within the wider sport community. Unified sports should be better promoted, by organising competitive unified school activities to provide students with ID the opportunity to showcase their skills and abilities in a competitive and inclusive environment.
Implication 2	Another element discussed was the financial support provided by the Government. The government should provide schools and community sport clubs with professional support by engaging assistant coaches and LSEs who are sports oriented and knowledgeable in inclusive and adapted PE, PA, and sports within schools and sports clubs. This support would provide PE teachers and sport coaches with additional support, which in turn would create an environment which is more welcoming and inclusive.
Implication 3	Individuals with ID need to be given more authority, by giving them leading roles on committees and regulation boards. They need to be given the opportunity to discuss and be involved in policy and decision making as they have lived experience which guarantees positive outcomes in policies.
Implication 4	PE teachers and LSEs should be obliged to continue their professional development by attending mandatory courses. Failure to do so should lead to their warrant being revoked and their suspension from teaching. In turn, the government of Malta should provide adequate training to PE teachers and LSEs, subsidise their travel to network with colleagues teaching in foreign schools and financially help them buy

	resources that could improve their pedagogy and delivery of lessons.
Implication 5	Lastly, the educational and academic system in Malta needs to be more aware of the different severity levels of children with ID. Inclusion is important unless it creates discrimination and provides a disservice to both students with and without ID. Thus, there might be the need to create special arrangements to reduce the gap between mainstream schools and resource centres.

6.7 Conclusion

This chapter presented an overview of the contribution of the different academic, institutional and government stakeholders in Malta on what needs to be done to improve inclusive PE, PA, and sports provision. The results suggest that stakeholders need to create a collaborative approach to create an environment for PE, PA, and sports which is beneficial to students with ID. Individuals coming from different educational, inclusion and disability sports fields together with parents and individuals with ID should get together to create a workforce to help design policies, curricula, and inclusive sports strategies that would help provide inclusive PE, PA, and sports for children with ID. Moreover, this chapter discussed the importance of having unified sports activities in schools for students with and without ID that are not necessarily competitive.

This chapter also discussed the importance of having more resources centres or mainstream schools equipped with resource classes for students who would find it difficult to fit in a mainstream school setting due to their lack of physical and cognitive ability. The educational system in Malta cannot force students into a system which does

not cater for their needs and, thus, it is essential that students with ID are tested and streamed in the setting which is congruent with their development.

The role of parents in teaching their own children without ID how to accept others, without any prejudice or bias, was also discussed as being fundamental. Parents should instil a positive attitude towards inclusive PE, PA, and sports and they should support the inclusion of children with ID in mainstream sport clubs. With regards to sports clubs, it was highlighted that the government needs to provide clubs with financial support to be able to engage LSEs or assistant sport coaches to enable them to cater for children with ID. Moreover, the government must provide sport coaches with useful ongoing training in inclusive sports which is focused mainly on practical and hands-on activities. This would provide children with ID with an alternative inclusive sport programme apart from SOM, giving them more opportunities to take part in PE, PA, and sports outside of school.

Chapter 7: Discussion and conclusion

7.1 Introduction

To my knowledge, this is the first study that has looked at change in policy and effective practice in Malta in the field of inclusive PE, PA, and sports. It is hoped that the findings of this study will contribute to change in this field in Malta. The aims of this study were to: (a) explore the barriers and challenges faced by students with ID in inclusive PE, PA, and sports as perceived by students with ID and their guardians; (b) look into views and the different pedagogical strategies used by PE teachers and LSEs to promote inclusive quality PE and PA participation with students with ID in government, church and independent mainstream schools in Malta, and (c) explore the role of different educational and government stakeholders, identify current initiatives and the challenges faced when organising inclusive PE, PA, and sports for children with ID in a mainstream academic and sport setting and identify the promoters for inclusive PE, PA, and sports in Malta. This chapter will discuss the main findings arising from this research within the context of key insights from the literature under the following themes: (a) barriers to the provision of inclusive PE, PA, and sports in Malta; (b) meeting the diverse needs of children with ID through different pedagogical strategies; and (c) a national approach towards a better inclusive PE, PA, and sports provision for children with ID in Malta.

7.2 Barriers to the Provision of Inclusive PE, PA, and Sports in Malta

The findings of this research and the literature (Coates and Vickerman, 2010; D'Eloia and Price, 2018; Buttigieg and Dimech, 2022) emphasise the fact that inclusive PE, PA, and sports participation presents students with and without ID with numerous social, psychological, and physical benefits. However, a number of barriers to PE, PA,

and sports participation for students with ID were identified in the study. One potential barrier to inclusion is the attitudes of PE teachers and LSEs towards integrating students with ID into mainstream inclusive PE lessons. Their perceptions of disability and the abilities of students to participate in PE can lead to discrimination, which in turn restricts student participation. An overarching barrier that was highlighted in this study was the lack of knowledge PE teachers, LSEs, and sport coaches have about working with students with ID. They lack not only experience, but also motivation and self-confidence. This may be linked to the fact that few have been specifically trained on how to offer inclusive PE, PA, and sports. Moreover, lack of resources and facilities, the large numbers of students in class and lack of support to PE teachers and sport coaches also create barriers to inclusive PE, PA, and sports provision. These factors contribute to poor experiences of children with ID in inclusive PE, PA, and sports participation which increases concerns about students with ID not meeting the recommended MVPA levels as stated by WHO (2020). Additionally, an inclusive setting presents students with ID with both psychological and physical barriers that they cannot overcome without the appropriate support.

7.2.1 PE teachers' perception on disability and inclusion

While the challenges of inclusion are often attributed to the lack of awareness, knowledge and expertise among PE teachers, barriers to inclusive PE can also stem from the teachers' perceptions of disability and inclusion. To provide high-quality inclusive PE, it is essential for teachers to reflect on their personal philosophy, their behaviour and attitude towards students with ID and other disabilities, and their overall perspective on disability (Vickerman & Maher, 2019). If disability is seen as a barrier or as something that indicates inferior abilities compared to others (Miller, Parker &

Gillinson, 2004), then inclusion is unlikely to succeed, as it would lead to the creation of a hostile environment that fosters social oppression. On the other hand, when PE teachers value the importance of inclusion, acknowledge the needs and perspectives of students with ID, and recognize education as a fundamental human right (UNESCO, 2015a), they are more likely to create a positive and inclusive learning environment that supports all students.

Inclusion should not be seen merely as placing students with ID into a PE program without any adaptations or modifications (DePauw, 2023). Instead, inclusion should be viewed as "an attitude and a process" (DePauw, 2023, p.16), one that is continuously evolving (Vickerman and Maher, 2019). It necessitates a shift in culture, perception, and attitude. Ultimately, it depends on the individual choice of whether a PE teacher is willing to modify existing lessons and implement more inclusive teaching strategies (DePauw, 2023). This process demands dedication, motivation, and patience. It involves focusing on the abilities of students with ID, rather than their limitations.

7.2.2 Overcoming the lack of knowledge and understanding

In line with the literature (Vickerman, 2007; Qi, Wang and Ha, 2017; Wilson, Kelly and Heagele, 2019), this study has found that PE teachers, LSEs, and sports coaches in general lack knowledge on adapted PE, PA, and sports. This is partly due to the fact that the teacher training on inclusion and disability issues focuses on class-based subjects rather than PE, PA, and sports (Morely et al., 2020). Lieberman and Block (2019) state that, to improve the students with ID's experience in PE, PA, and sports, PE teachers, LSEs, and sports coaches should be provided with tailormade practice-based training. Training goals should shift, moving away from the "ordinary physical education teacher" provided with "single teaching knowledge and skills" to a more

holistic approach (LI, 2020, p.78) on how to successfully include every student in class. Although inclusion is a global movement, global educational entities are still failing to include resources for teacher training on inclusive education (Lieberman and Block, 2019, p.263).

Some universities in France, Czech Republic and Portugal, among other European countries, have specialised Masters' or undergraduate degree courses on APE. The Latvian Academy of Sport Education in Riga offers mandatory courses in APE for PE teachers and health care professionals (Mauerberg-deCastro et al., 2019). Ongoing compulsory courses in APE are also offered in Poland, where APE teachers are legally obliged to follow CPD courses throughout their career. Unfortunately, Malta does not cater for specialised APE teachers and the degree courses on PE and sport offered by the University of Malta provide very limited information on inclusive PE or APE/APA training. Thus, unlike other European universities that organise APE specialised courses, educational training providers in Malta lack institutional collaboration when planning training courses for PE teachers. PE, PA, and sport training providers should collaborate with the departments that deal with disability studies to design modules that would lead to a holistic approach to PE teaching. Therefore, it is crucial for Malta to take a proactive approach by forming partnerships with local and foreign stakeholders to assess and enhance training for educators involved in inclusive PE, PA, and sport.

Sport administrators working outside the school system also struggle to accept children with ID in their mainstream clubs as their sport coaches are not equipped to offer sport training to individuals with ID. Training courses that are specifically tailored for sports coaches focus on skill development, understanding tactics and sport psychological

aspects and do not generally comprise modules on inclusion of children with ID (Pochstein, 2022). This means that, although coaches do have the necessary qualifications, they lack knowledge on inclusive sports, leading to the rejection or segregation of children with ID.

Training on APE, APA and differentiated learning should be the fulcrum of CPDs. This study recommends that such training should be provided on a yearly basis and made obligatory for PE teachers, LSEs, and sports coaches. As Mauerber-deCastro et al. (2019) emphasise, however, the important of having such training reflect real life situations. For the training to be fruitful, it should include hands-on experiences with children diagnosed with different types of ID and from experienced professionals who have been working within the field for a long period of time (Pochstein et al., 2023; Hardin, 2005, Wilson, Kelly and Heagele, 2019). Training on APE, APA and differentiated learning would not only improve the students' experience, but would also enhance the PE teachers', LSEs', and sport coaches' attitude towards assisting students with ID in mainstream settings (Taliaferro, Hammond and Wyant, 2015).

7.2.3 Overcoming lack of competence to enhance motivation and self-confidence in PE teachers and LSEs

Along with a sense of autonomy and belonging, competence is one of the main pillars of motivation (Ryan and Deci, 2017). Thus, if PE teachers and LSEs feel knowledgeable about inclusive PE, PA, and sports for children with ID, their ability to include students with ID through adaptation and modification of activities would improve as their motivation and self-confidence would increase (Özer et al., 2013). As noted in this study, increased motivation and self-confidence will result in better PE lesson delivery and increased proficiency in the adaptation of various teaching tools

and resources to meet the diverse needs of the students in class. This will encourage students with ID to participate and help them reach their potential. However, as Taliaferro, Hammond and Wyant (2015) point out, competence and confidence are not directly related. Furthermore, as noted both in the literature and in this study, the PE teachers' perception of the abilities of students with ID affects the PE teachers' motivation and confidence in adapting the curriculum, resulting in limited participation and segregation of students with ID (Pocock and Miyahara, 2018). Thus, knowledge on the various types of disabilities should be provided. A solution to this challenge would be providing PE teachers and LSEs with continuous support through mentoring programmes where PE teachers and LSEs are given the opportunity to discuss their concerns with professional individuals within the field including Inclusive Education Coordinators (INCOs), occupational therapists, health and medical personal. Thus, creating a community of practice for the common good.

The school environment also plays an important role in maintaining the motivational levels of PE teachers and LSEs. As noted in this study, when the school ethos does not embrace inclusion and does not support inclusive PE, PA, and sports, the PE teachers' and LSEs' motivation might decline, resulting in poor performance and lesson planning. Thus, by creating a whole school approach to inclusion, the responsibility for inclusion would fall on every member of the school community and not just the PE teacher or the LSEs. Every member of the school community should work to embrace and promote inclusion. This would help PE teachers and LSEs feel supported, enhancing confidence and making inclusion more attainable.

7.2.4 The provision of resources, facilities and equipment for inclusive PE, PA, and sports

A subject cannot be taught well if the appropriate equipment and facilities are not provided to the teacher teaching the subject. This is especially true for PE lessons. As noted in this study and in the literature (Wilson, Kelly and Haegele, 2019), PE teachers and LSEs will not be able to provide students with adapted and differentiated learning unless the right equipment and resources are provided (Morley et al., 2005; Lante et al., 2011). The PE teachers and LSEs interviewed for this study were highly concerned about the lack of inclusion happening in mainstream schools due to lack of facilities and equipment.

The purchase of specific equipment for PE lessons is often a burden for schools as this specialised equipment can only be used during the PE lessons (Morley et al., 2005). This concern was highlighted mostly by teachers teaching in government schools as their budget for equipment is limited. Due to the lack of finances, PE teachers and LSEs end up with no or limited resources and equipment and this presents a barrier for inclusive PE, PA, and sports participation. One way to mitigate this problem is to procure specific equipment which could be used by both students with and without ID. This would encourage participation, promote social skill development and provide students with a fun and enjoyable learning environment (Kristen, Klingvall and Ring, 2022). The government of Malta should follow the example set by other European countries, such as Belgium, Hungary, and Bulgaria²⁰, and provide schools with better infrastructure. If this is not possible, it should allow schools to use sports facilities free of charge through a subsidy. Moreover, PE teachers should

²⁰ The work these countries are doing is illustrated in the document European Commission (2013)

be provided with a range of sports equipment to allow room for modification and adaptation of the curriculum. If the school's infrastructure does not embrace the inclusion of students with diverse needs (Lidor and Hutzler, 2019), PE teachers' and LSEs' motivation will decline as they will not be able to provide students with a positive learning environment where every student in class can be successful in their own way.

7.2.5 Number of students in class

Students with ID find it hard to focus in loud and crowded environments. For students with ID to fully participate in PE, PA, and sports activities, PE teachers and sport coaches need to provide individualised attention and support (Collins and Staples, 2017, p. 49). Having more than 25 students in class makes it difficult for PE teachers and LSEs to provide students with one-to-one support and "quality instructions" (Qi, Wang and Ha, 2017, p.94). Thus, reducing class population was one of the recommendations made by the stakeholders interviewed in this study. This would help schools adhere with inclusive policies (Young, McNamara and Coughlan, 2017) and make PE lessons meaningful by meeting the diverse needs of each student in class (Buttigieg and Dimech, 2022).

As noted in this study and in the literature, classroom management issues and problems with students' misconduct can be a result of the large number of students in class (Wilson, Kelly and Haegele, 2019). Not only does this affect the PE teachers' ability to deliver modified and adapted lessons, it also poses a safety hazard in the classroom (Healy, Msetfi and Gallagher, 2013; Wilson, Kelly and Haegele, 2019). However, due to the declining number of teachers in Malta (Debono, 2020), reducing class sizes is problematic. However, if the Maltese authorities are to provide students with and without ID with a positive academic journey and facilitate learning for students

with ID, it is essential that a solution to this situation is found (Healy, Msetfi and Gallagher, 2013). The government of Malta needs to promote the teaching profession and provide work incentives (better working conditions, better pay) to encourage undergraduate students to take up the teaching profession.

7.2.6 The need for more human resources for further support

McDermott et al. (2022) state that, to create a positive and welcoming environment in PE, PE teachers require the support of academic professionals in the field of inclusive PE and adapted PE, PA, and sports. APE teachers and LSEs could work with PE teachers to build a collaborative approach to teaching students with ID and TDP (Qi, Wang and Ha, 2017). Unfortunately, the cost cutting happening globally in the educational field has seen a drop in human resources, reducing the number of LSEs and support teachers in schools (Wilson, Kelly and Haegele, 2019). The stakeholders interviewed in this study stated that no financial support is being provided to schools and sports clubs to employ professional experts and experienced individuals within the field of inclusive PE, PA, and sports to support PE teachers, sport coaches and students with ID. It is, thus, essential to provide PE teachers with assistance and professional support by creating a network of professionals (LSEs, APE teachers), whose job would be to go around different schools in Malta. This could be done in collaboration with SOM, as is successfully done in other European countries (Ireland, Germany) where SOM coaches are deployed to assist PE teachers to adapt PE lessons.

7.2.7 Overcoming the psychological challenges faced by students with ID in an inclusive setting.

Students with ID may lack certain cognitive abilities which is manifested in lack of focus (ref Chapter 4) and difficulties processing information and instructions (McDermott et al. 2022). Many of the students interviewed in this study reported feeling frustrated when they did not understand instructions or lacked the confidence to perform a task. This feeling is also reported in the literature (Stevens et al. 2017; McDermott et al. 2022). It is evident that students are better able to focus when the lesson objectives and targets are explained clearly prior to the lessons (Mauerber-deCastro, 2019).

As indicated in this study, unlike their TDP, students with ID participate in PE, PA, and sports for fun and enjoyment and they are not motivated by competition. This lack of competitive streak segregates them and keeps them from making friends (Melbøe and Ytterhus, 2016). Unfortunately, as seen in this study and highlighted in the literature, students with ID suffer from social stigma (McGarty, Westrop and Melville, 2020) and are often ashamed to perform alongside their TDPs. Reeve (2014) discusses the concept of direct psycho-emotional disablism, where students with ID may be discouraged from participating due to the perceptions of their typically developing peers (TDPs) and negative interpersonal experiences. As a result, to avoid being viewed as different or subjected to patronizing remarks, students with ID may choose to withdraw from participating in inclusive PE. Thus, most of these students opt to participate in individual sports to safeguard their wellbeing and avoid being ridiculed and humiliated by their TDPs. Furthermore, parents of children with ID refuse to enrol them in mainstream sport clubs and opt to enrol them in SOM as the environment there is safer and more protective. Although SOM should be encouraged and promoted,

children with ID should still be supported to join mainstream sports clubs. The mainstream sports clubs should promote social acceptance by providing students with ID with an environment that embraces “diversity and individual improvement”, offering them alternative opportunities to be physically active outside school (Bota, Teodorescu and Șerbănoiu, 2014, p.26). This can be achieved through unified sports activities that support social interaction (Özer et al., 2012), as children with and without ID play alongside each other and support one another, and highlight abilities rather than disabilities (Harada et al., 2011). Unified global programmes such as the ones organised by Special Olympics International help eliminate such psychological barriers (Special Olympics, 2015). PE teachers in Malta should feel confident promoting unified sports in schools that can help teach students, with and without ID, collaboration, cooperation, and teamwork. Local PE teachers should be open to creating unified school sport teams with the aim of promoting positive PA participation, moving away from the competitive environment of sports clubs. This approach should be promoted during breaktime activities and interschool competitions as well as PE lessons. It is essential that the PE environment is fun, enjoyable, and positive so that all students can learn and develop. Educational stakeholders in Malta should keep in mind that a positive and enjoyable PE learning experience will promote lifelong PA participation.

7.2.8 Overcoming the physical barriers - lack of physical fitness and ability

Children with ID struggle with fundamental motor skills due to their lack of physical abilities (Collins and Staples, 2017; McDermott et al., 2022). This makes it harder for them to be included in mainstream PE, PA, and sports in schools and sports clubs are reluctant to accept them as they lack the level of physical fitness and physical abilities of their TDPs (Healy, Msetfi and Gallagher, 2013). By grounding the club's statutes in

the human rights model and incorporating the social model of disability, local clubs could remove environmental and social barriers, ensuring that students with ID are recognized as equals with every right to participate in PA and sport (Fitzgerald and Long, 2017).

They also lack the drive to compete, when competition is the ethos of most sports clubs. Since TDPs play to win, they are reluctant to include individuals with ID as they feel they would impede the team's success. Unfortunately, this aspect gets more pronounced as the children grow older, making it hard for children with ID to be included in mainstream sports (Bossink, Van der Putten and Vlaskamp, 2017). This leads to children with ID being segregated and channelled towards SOM which is their only remaining PA and sport opportunity outside school. To eliminate this bias and provide children with ID with inclusive sports activities outside of school, the government of Malta should provide sports clubs with assistant coaches who are knowledgeable about inclusive PE, PA, and sports. Unified sports in sports clubs in Malta should be promoted as should the organisation of unified sports competitions for children with ID who wish to be given the opportunity to participate in sports.

7.3 Meeting the diverse needs of children with ID through different pedagogical strategies and approaches.

The literature (Armour and Chambers, 2014; Grenier, Miller and Black, 2017; Liberman et al., 2017; Pocock and Miyahara, 2018) and the findings of this study show that, for students with ID to be included in PE lessons, PE teachers and LSEs need to use a range of pedagogical strategies and approaches. They must be mindful to adopt the strategies that would be most effective to use with their students, reflecting the students' attributes, content to be taught, and the environment. It is important to keep

in mind that “there is no one best style” (Collier, 2017, p. 261). A student with ID may struggle to comprehend information at one go, lack physical attributes such as coordination, flexibility, and strength, and have trouble with social interaction; these are aspects which the PE teacher needs to take into consideration when planning the lesson. In such cases, minimum instruction, the use of modified equipment, and individual rather than group activities should be planned to safeguard the student with ID and provide them with a comprehensive and adequate PE lesson. Moreover, it is essential that the PE teacher chooses a strategy that would challenge every student in class, according to their ability (Vickerman and Maher, 2019). Tasks that are too easy or too challenging would result in boredom and demotivation, respectively.

There needs to be increased collaboration between PE teachers and LSEs, where they share knowledge on inclusive education and share resources such as modified equipment, flash cards and videos, to facilitate learning and create a positive environment for each student. As noted in this study, PE teachers and LSEs were able to implement inclusive PE lessons when they used modified equipment, such as softer balls, shorter hurdles, lower basketball rings, to make the activities challenging yet attainable. Such modifications allow PE teachers and LSEs to teach students the same lesson objectives using equipment to suit the students’ diverse needs. PE teachers and LSEs cannot treat every student the same as they have different needs; thus, the one-size-fits-all pedagogical approach should be abolished. Lastly, although it is critical that the PE teacher be confident in the style that they adopt, there is no harm in them experimenting with different strategies to enhance their knowledge and understanding of inclusive PE, PA, and sport (Collier, 2017). Four main pedagogical strategies could be adopted in this context, namely: (a) the peer tutoring/ buddy system; (b) the

cooperative learning strategy; (c) the inclusive spectrum; (d) and creating a community of practice. These are discussed below.

7.3.1 Using the peer tutoring / buddy system

Peer tutoring is when students without ID are paired with students with ID to provide them with additional support (Collier, 2017). This allows the PE teacher to task the TDP with the responsibility of assisting the student with ID which, in turn, helps create a positive inclusive environment (Dyson and Casey, 2012). This strategy allows students to work together to improve physical abilities, enhance social aspects and eliminate discrimination. As indicated in this study, this strategy is often adopted to give students with ID a break from their LSEs as older students with ID prefer to participate in the PE lesson without LSE support. Thus, to protect the student from any embarrassment and help them overcome psychological challenges, PE teachers adopt the buddy system that helps students with ID feel autonomous and “normal” like the rest of the students. Another form of peer tutoring that can help shield students with ID from direct psycho-emotional disablism is "classwide peer tutoring" (Westwood, 2018, p.119). This approach pairs every student in the class with a partner, ensuring that the focus is distributed evenly and not solely on the student with ID. By fostering collaboration between all students, this method helps establish a positive and inclusive environment, effectively reducing interpersonal discrimination. Students with and without disabilities are trained to be effective tutors and to support one another, enhancing not only skill development but also promoting social interaction and inclusivity. This approach encourages students with IDs to express themselves, share feedback, and address their concerns with their TDPs in a supportive environment where they feel safe and equal to their peers.

7.3.2 Cooperative learning strategy

This strategy is used when students with and without ID work together towards a common goal (Collier, 2017). The aim behind the cooperative approach is to have students with and without ID work collaboratively, supporting each other irrespective of ability. This approach provides students with ID with more motivation, as it empowers them and promotes development through positive participation in PE (Dyson and Smith, 2012). This approach does not require a leading facilitator; thus, support is interchangeable, with both students supporting each other and sharing their knowledge and understanding (Casey and Quennerstedt, 2020). Unfortunately, although this strategy provides positive outcomes, the PE teachers and LSEs in this study did not make any reference to it, implying that cooperative learning is not being implemented as a strategy in schools in Malta. To successfully implement such a strategy, students without ID should be made aware of different conditions and experience peers with ID in the school environment from a young age, ideally from primary school.

7.3.3 The inclusion spectrum

As noted in literature and discussed in this study, the inclusion spectrum provides the PE teacher with a flexible approach to teaching and learning, as students learn together according to their needs (Grenier, Miller and Black, 2017; Vickerman and Maher, 2019). This strategy uses a student-centred approach and provides the PE teacher with five different strategies - 1. Open – everyone can play, 2. Modified – change to include, 3. Parallel - ability groups, 4. Separate – alternate; and 5. Disability sport – adapted physical activities (ref Table 2 in Section 1.5.1) - to use according to the students' abilities (Vickerman and Maher, 2019, p.61). A student can shift from one strategy to the other according to their needs, promoting participation and inclusion in

class. This strategy moves away from the one-size-fits-all pedagogy and embraces diversity, which is essential to inclusion education. The findings indicate that, in Malta, PE teachers mostly fall back on parallel activities; however, it is suggested that PE teachers explore the remaining four strategies in the inclusive spectrum to eliminate segregation. This once more highlights the importance of having the right equipment and resources, as only by having necessary tools can the PE teacher organise PE lessons using the different strategies in the inclusion spectrum.

7.3.4 Creating a community of practice

To create an environment which embraces diversity and supports inclusion, PE teachers and LSEs should work together for the common good (Morrison and Gleddie, 2019). PE teachers and LSEs should understand that they are not separate units working on separate activities, but that they are pulling the same rope to facilitate learning and promote inclusive PE, PA, and sports. The PE teachers and LSEs interviewed for this study are aware of the importance of working together and sharing experiences, resources and knowledge on inclusion and adapted understanding. However, such sharing of knowledge and resources is not common practice as LSEs do not always follow PE lessons, or PE teachers and LSEs do not have the time to discuss and plan lessons. However, it is critical to understand that LSEs are gradually gaining more respect in the educational field (Vickerman and Maher, 2019) and, thus, it is essential that this community of practice is supported by the school administrators who should provide PE teachers and LSEs with slots in the timetable to discuss adaptation and lesson planning.

7.4 A national approach towards a better inclusive PE, PA, and sports provision for children with ID in Malta

The third phase of this research study highlighted the importance of having more support from the government to provide children with ID with further PE, PA, and sports opportunities in Malta. Students with ID have every right to be provided with education in an inclusive setting (Özer et al., 2013; UNESCO, 2015); thus, the government of Malta needs to support further inclusive PE, PA, and sports initiatives and provide PE teachers, LSEs, and sport coaches, with the necessary tools to be able to provide inclusive services to children with ID. Policy makers should work hand-in-hand with people working within the field to create policies which reflect realities (Qi, Wang and Ha, 2017). Although a great deal has been done and said about inclusion, this research study highlighted that Malta is still far from delivering positive inclusive PE, PA, and sports.

7.4.1 School settings in Malta

As noted in this study, out of the three different academic institutions in Malta (government, church and independent), church schools provide students with ID with the most effective inclusive PE, PA, and sports opportunities. Church schools recognize and value students with disabilities as individuals entitled to education and the necessary resources to ensure full inclusion in the school environment. Embracing both the social and human rights models of disability, these schools prioritize understanding and addressing the unique needs of each student. However, it must be right to say that this is more possible in church schools as the school population in church schools is small and the students have a sense of belonging. Moreover, the school ethos reflects acceptance and diversity, making it easier for students with ID to

feel included and not just integrated. Unfortunately, as noted in this study, although policies in Malta refer to inclusion, students with severe ID are still not being included in PE, PA, and sport but are being integrated, meaning that students with ID are either placed in a different class on their own with their respective LSE working on something completely different from the rest of their classmates, or are retained in class but are still not included with the rest of the students. This is mostly the case in government schools.

Unfortunately, some students with ID are placed in a school setting which is not conducive to their needs, causing them to fail in their academic journey. Mainstream schools are not always the ideal setting for students with severe ID (Warnock et al., 2010). It is useless to place a student in mainstream schooling if they are unable to follow lessons with the rest of their classmates. This is a disservice to them and a demotivator for learning (Warnock et al. 2010). In fact, some of the students with ID who were interviewed for this study stated that they would prefer an alternative academic setting from the mainstream setting as they still feel different and segregated. Inclusion should not be viewed as a mere placement but as an ongoing process (Vickerman and Maher, 2019) that prioritizes listening to and valuing the opinions and needs of students. This process places students with ID at the centre of decision-making rather than relying solely on the perspectives of stakeholders who are not directly impacted (Haeghele and Willson, 2023). Achieving meaningful inclusion requires a shift in power dynamics, where the voices of students with ID are both acknowledged and respected. It is essential to recognize that, even when students with ID are physically included in mainstream PE lessons, their experiences may differ

significantly. This highlights the importance of understanding inclusion from their perspective.

Thus, it would be ideal to place students in an educational setting which is favourable to them and provides the student with a positive learning experience. Winnick (2017) presents nine levels of alternative placement settings for students with different levels of ID. The different levels require different levels of support according to the students' needs. Thus, level 1 (mainstream schooling) is for students who do not have a severe disability and manage to follow lessons alongside their classmates. Students at levels 8 or 9 require constant one-to-one support and would probably be best placed at a resource centre. Placing students in settings which best meet their needs helps them to develop at their own pace in an environment which is positive and conducive to their holistic development. Some of the students interviewed for this study confirmed that mainstream education induces stress as they feel 'different' from their TDPs. It is recommended that the government of Malta adopt an alternative placement system where students are placed according to their abilities and needs. This placement could be revised yearly at the IEP meeting when it could be decided to move students to another level according to their progress.

Lastly, as highlighted in this study, there are students who are highly disruptive and whose disability is so severe that they struggle to be accepted even in resource centres, forcing them to remain home for their entire secondary education. This is an unfortunate gap which needs to be addressed with urgency as these students still have a right to an education. Thus, Malta is not fully upholding the commitments made in the 1994 Salamanca Convention, which emphasized education as a fundamental human right.

7.4.2 The importance of the IEP sessions

The IEP session is an essential part of the students with ID's development and academic progress. It was developed to address the varying learning paces and challenges faced by students with ID, allowing for the creation of personalized plans and goals for each academic year (Zigmond, 2003). While this tailored approach offers numerous benefits, in Malta, its potential is not fully utilized. However as noted in this study PE teachers are often excluded from these discussions, reflecting a perception that PE, as a non-academic subject, lacks importance in the educational framework. This is because during the IEP sessions, the general class teacher, the LSE, the school administrator and the parents or guardians are the only stakeholders to discuss the students' targets for the scholastic year (Vickerman and Maher, 2019). Excluding the PE teacher from this process results in the omission of valuable insights regarding the student and their progress in PE. All the teachers who are responsible for the student's academic development should be involved in the IEP session to discuss the strategies to use during the year and to set that year's targets.

Lastly, during the IEP session it is essential to discuss the student as a holistic individual and not just focus on academic aspects. Students with ID require skills development to prepare them for an independent life once they finish school. Thus, it is essential that the school environment provides them with the life skills that will enable them to function without restrictions in the community.

7.4.3 National policy to embrace inclusive PE, PA, and sports.

As discussed in this research study, policies should not be discussed and designed by individuals who are not experienced in field, but should include parents, teachers and students who live and face barriers to inclusion on a regular basis. These stakeholders

should be given the opportunity to discuss the way forward for inclusion, thus paving the way for future students with ID who might struggle to fit in. These policies should be designed to act as the foundation for every institute or sport entity seeking to provide inclusive PE, PA, and sports provision (Kreinbacher-Bekerle et al., 2023).

Apart from policy documents, the government of Malta should provide every school with occupational therapists (OT), physiotherapists (PT) and speech therapists (ST), so that students with ID would be provided with the therapy they need to develop holistically.

Only by doing so, will the Ministry for Education in Malta ensure that children with ID who are enrolled in mainstream schools are given the learning and developmental experience that they deserve.

7.5 Summary of findings

The table below highlights the key findings of this study.

Table 32: Key findings

Key findings	
Key finding 1	Although it is important to have students with ID in inclusive mainstream settings, it is also essential to make sure that this setting suits the students’ diverse needs, otherwise the educational system would be doing them a disservice. Having students with ID enrolled in an inclusive school and sport environment and working alongside TDPs provides students with and without ID with social, emotional, cognitive, and physical benefits. Unfortunately, this population and area of study is not given the attention it deserves especially in Malta. Through this PhD study I have attempted to offer insights and highlight implications to improve the inclusive PE, PA, and sports provision in Malta. Discussing the psychological and physical barriers students with ID face when participating in inclusive PE, PA, and sports, sheds light on the importance of

	providing children with ID with an environment which eliminates barriers and promotes diversity, acceptance, and inclusion.
Key finding 2	Unfortunately, sport clubs are still struggling to accept students with ID as sport coaches are unaware of how best to support them during training. This was also the case with certain PE teachers and LSEs. Whereas PE teachers are proficient in teaching sports and PA, they lack knowledge on inclusive PE, PA, and sports. On the other hand, LSEs are proficient in adaptation and differentiation, but lack knowledge of how to teach PE, PA, and sports. For this reason, it is essential that PE teachers and LSEs work together to support each other and share knowledge and resources.
Key finding 3	Another aspect highlighted in this study was the importance of using different pedagogical strategies, through adaptation, modification of equipment and differentiated lessons. A student-centred approach should be used, keeping the student at the heart of the lesson plan. Targets discussed during the IEP should be relevant to the students' needs in line to the students' strengths and weaknesses.
Key finding 4	This study highlighted the educational gaps in Malta which need to be addressed with urgency should Malta aim for ideal inclusive PE, PA, and sport provision. Policies should reflect realities and should be put in practice. Policy decision-making processes should include every member of the community, be it parents, teachers, ministers and, most importantly, individuals with ID. Malta requires all stakeholders to get together and work collectively for the common good in inclusive PE, PA, and sports.

7.6 Downfall of inclusion in Malta

This study highlighted the lack of inclusive practices in PE, PA, and sports in Malta. Although inclusion has been on the education agenda in Malta for over 20 years, Malta is still struggling to implement inclusive policy recommendations. What happens in

schools is more akin to integration than inclusion and this, unfortunately, has a negative effect on the psychological wellbeing of students with ID.

As noted in this study, for students with ID to feel motivated to participate in an activity, the three pillars of the self-determination theory by Ryan and Deci (2017) need to be present, that is, the sense of belonging, the sense of autonomy and feeling competent. Some of the students in this study referred to feeling isolated and segregated, not belonging to the sport club's community or in the PE lessons. Some referred to their need for autonomy, that is, to be able to participate in PE lessons without their LSE's support and others alluded to the fact that they would rather not participate in PE, PA, and sports than fail and be ridiculed.

The inadequate environment being provided both in schools and in outside school sport communities is creating barriers. This is an issue which needs to be addressed with urgency. Although progress has been made, Malta is not yet successfully implementing the recommendations and policies for inclusion set by UNESCO (2005, 2015a, 2015b).

7.7 Limitations of the study

Table 33 provides the limitations of this study:

Table 33: Limitations

Limitations of this study	
Limitation 1	The first limitation of the study relates to the selection of students with ID in Phase 1. For students to participate in the interview, they had to have good communication skills. Although the students could communicate quite well, some found it difficult to articulate their thoughts and had to have their guardians' step in to probe for a reply.
Limitation 2	Every student who participated attended mainstream schools, implying that none of the participants had severe ID. Thus, these findings are only generalisable to individuals with mild to moderate ID. Although this is a limitation, these participant characteristics enabled me to gather useful information for this study and future research.
Limitation 3	Although English was the preferred language for this study, Maltese was also used by some of the participants, making it necessary to translate their replies.
Limitation 4	The fourth limitation was related to change in the interview process due to restrictions put in place during the Covid -19 pandemic. The interviews that were planned to be held face-to-face had to be held online as I was precluded from entering the schools. Although holding the interviews online introduced more flexibility with regard to scheduling and availability, it made it harder for the students with ID to connect and start a conversation with a stranger. Following some ice breakers, however, the students became more comfortable talking about their experiences in PE, PA, and sports. The process was, however, time consuming as each interview took longer than expected making the data collection process for Phase 1 quite lengthy. Erratic internet connections also created an obstacle and some interviews had to be rescheduled while others were carried out with interruptions. Moreover, due to weak network signals, some interviews had to be carried out without the video camera being on, which meant that I could not observe the interviewee's body language.

Limitation 5	Another limitation was that this study did not include PE teachers and LSEs teaching in Resource Centres. Their inclusion would have made it possible to explore their thoughts on mainstream schooling vs resource centres.
Limitation 6	The last limitation relates to the lack of professionals within the field of inclusion and ID in Malta. Although the stakeholders who were interviewed came from different entities and provided useful information, it would have been ideal to involve other stakeholders who oversee policy making within the field.

7.8 Strengths

Despite the limitations presented above, I have managed to obtain rich data through this PhD study. Using a bottom up approach, I was able to explore inclusion from the students' perspective up to the stakeholders' perspective, an approach which is rarely taken in studies related to inclusion. This was one of the few such studies conducted in Malta. Allowing children with ID to voice their opinion was an essential element in this CBPR study. The pragmatic approach taken in this study allowed me to explore the students' lived experiences and understand the challenges they face as they perceive them from their own experience. Another positive aspect of this research was that it included every school setting in Malta, except for resource centres which fell beyond the scope of this PhD study. Such studies usually encompass only government schools.

7.9 Recommendations for future studies

Table 34 presents recommendations for future studies:

Table 34: Recommendations

Recommendations for future studies	
Recommendation 1	One of the recommendations for future studies that I would like to make is to conduct a study that focuses on the promotion of social awareness and social acceptance of students with ID by their TDPs, thus creating a standardised social awareness programme to be delivered in schools. It would be useful to assess to what extent such a programme improves inclusion in schools.
Recommendation 2	Another suggestion is to follow up this research with a study on the impact of CPD training on specific areas of inclusion and adaptation for PE, PA, and sports training professionals on the inclusion of students with ID. It would also be useful to design a resource pack for PE teachers and LSEs with different lesson plans and adaptations in line with the curriculum.
Recommendation 3	An interesting study would be to explore the impact of having subject-based LSEs, that is having a teacher assistant who is proficient in PE and inclusive PE. It would be interesting to see whether inclusion of students with ID would improve and whether instructions and adaptations would be easier to deliver.
Recommendation 4	Exploring the relationship between children with and without ID in a competitive sport environment is another area of research which deserves more attention. It would be useful to explore unified sports activities in Malta to possibly create unified interschool competitions.

7.10 Concluding remarks

With this last and final chapter, I conclude my PhD journey. This chapter encompassed a detailed discussion of the key findings elicited in the three phases of this study to answer my three research questions. It focused on the struggle of inclusion in Malta and discussed the challenges Malta is facing when it comes to including children with ID in PE, PA, and sports.

The PhD's limitations and strengths were highlighted and explored. This was followed by recommendations and suggestions for future studies within the field of inclusion PE, PA, and sports in Malta, addressing different aspect with the aim of having a positive inclusive PE, PA, and sport community in Malta.

In the discussion of the findings that were gathered through the three research phases, implications were highlighted, and suggestions were made that could improve the inclusive provision for children with ID in Malta. This research suggests that, unless the government of Malta provides students with ID with an environment which is conducive to their needs, inclusive PE, PA, and sports will be a struggle and will be difficult to achieve.

Lastly, I am grateful for having embarked on an enriching journey where I provided students with ID with a platform to voice their struggles and talk about their experiences.

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Appendices

Appendix 1: Data Extraction Table (Demographic Table chapter 2)

Study	Aim, Design, Methodology & Paradigm	Participants	Sampling, Sample Size and Setting	Data collection and analysis	Key Results
1. Morely et al (2005)	Aim concept teachers perceptions of inclusion in PE Design Qualitative Study, likely some type of phenomenology	43 participants according to: (a) PE subjected leader from children in schools where SEN was present (6 Females, P 1-6, 6 Males P7-12) (b) least experienced teacher (5 females, P13–P17; 6 males, P18–P23); (c) most experienced teachers (5 males, P24–P28; 5 females, P29–P33) (d) Teachers with at least 37	<i>Sampling</i> Purposive likely; a range of experience and type being sought. One teacher from each secondary school within PE departments of one education authority Sample size No justification for sample size given Setting Presumably the school where the teacher worked	Outcome Measure Semi structured interview Pilot; Pilot interview undertaken Outcome measure had four sections (1), <i>Inclusive PE, definitions and purpose; (a) perceptions of benefits of PE for all pupils, (b) understand ideologies. (2) Professional development; (a) training</i>	Five major themes: Inclusion as an aspiration Concepts of inclusion – 1 sub-theme; spectrum of inclusion

		years of experience (5 females, P34–P38; 5 males, P39–P43).		opportunities teachers had for teaching children with SEN, (b) satisfaction with such training. (3) <i>Resourcing and support of children with SEN</i>, (a) perceived differences between PE and other curriculum subjects, and the use of, (b) relationships with, support staff. (4) <i>Contextual elements</i>, (a) assessment of perceived confidence in teaching children with SEN.	
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Study	Aim, Design, Methodology & Paradigm	Participants	Sampling, Sample Size and Setting	Data collection and analysis	Key Results
2. Qi, Wang and Ha (2016)	Aim Understanding of the perception of PE teachers regarding inclusion Design Qualitative study Based on Vygotsky's Social Constructivist Theory	8 participants (five females and 3 males) Using 3 criteria to identify participants – Trained in PE teacher Education program (PETE); in possession of the PE teacher certification; Experience in teaching students with disabilities in PE lessons (Secondary school) A further 4 participants were	Sampling – Convenience sampling technique Secondary PE teachers in Hong Kong, who have experience in teaching students with disability and participated in a survey titled “Hong Kong PE Teachers’ attitudes toward teaching students with disabilities” at the Department of PE of Local university. Sample Size – No justification for sample size given Setting – One of the researchers conducted the interviews in the selected schools. No further	Outcome Measure Semi structured interview Pilot and actual data collection Outcome measure had five sections (1), <i>teachers’ general feelings and perception on inclusion in PE</i>; (2) <i>Personal experiences when teaching students with disabilities</i>; (3) <i>Support provided to teachers whilst teaching students with disability</i>; (4) <i>Communication skills used to share thoughts on</i>	3 Major Themes 1. Favourable but with concerns 2. Hope to be professional 3. Lack of connection Subthemes – Social Benefits; Inclusion Barriers; Needs for professional knowledge; Lack of parental support; Communication and collaboration with colleagues

		used for the pilot study.	information given with regards to the setting	<i>teaching and learning in inclusive PE; (5) Their perception of how the social environment influences their perception on inclusion PE.</i> <i>Analysis – Content Analysis</i>	
Study	Aim, Design, Methodology & Paradigm	Participants	Sampling, Sample Size and Setting	Data collection and analysis	Key Results
3. Ammah and Hodge (2005)	Aim: To describe the beliefs and practice of general physical education (GPE)	2 General PE teachers Five Criteria – Individual teachers taught in separate school districts located within a 50-mile radius of the	Sampling: Purposeful Intensity Sampling (Patton, 1990) Sample Size – No justification for sample size given Setting – An experienced APE teacher educator and PETE graduate student, both	Data Collection – Teacher Questionnaire for demographic data; Observations of lessons; Semi-Structured face-to-face interviews	The teachers mostly verbally interacted with those students who had severe disabilities. They varied in their teaching efficacy

	teachers (high school level) on inclusion and teaching students with severe disabilities Design: Qualitative Paradigm: A combination of naturalistic observations and interviews	researchers; experience teaching GPE in high school; 5 years of experience in respective schools; only male teachers; teachers taught classes containing students without disabilities and at least one or more students with severe disabilities	knowledgeable in the conduct of descriptive-qualitative research, served as data collectors	Data Analysis – Qualitative data analysed through constant comparative method and narrative analysis procedures; qualitative data was supported through quantitative data through AIPE-T and these data were reported as frequencies and time durations.	Three recurring themes emerged from the data: (a) wavering beliefs, (b) complexities of inclusion, (c) and troubled confidence.
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Study	Aim, Design, Methodology & Paradigm	Participants	Sampling, Sample Size and Setting	Data collection and analysis	Key Results
4. Haycock, D. and Smith, A. (2011)	to explore PE teachers' perceptions of: (1) the roles played by LSAs in the provision of PE lessons; (2) the kinds and extent of support LSAs offer pupils in lessons; (3) their working relationships with LSAs; and (4) the perceived impact that	12 PE teachers (five males; seven females) Ages between 25-34 years of age Teaching Experience – 1 to 10 years	Sampling – purposive sampling Sample Size – No justification for sample size given Setting - Each of the focus groups took place in a small private office and was audio tape recorded by the researchers	Data Collection – Focus Groups Data Analysis – Thematic analysis	(a) teachers spoke positively of these relationships when LSAs were perceived as making a positive contribution to the development of pupils' learning and when they supported teachers as they did in other school subjects. (b) when LSAs and other support staff failed to provide teachers with information that was related to pupils' needs in PE, and when LSAs did not possess the required skills, knowledge and expertise of the

	working with LSAs has on pupils' learning in, and experiences of, PE. Design: Qualitative				subject, teachers were rather critical of their relationships with them. (c) LSAs were seen as placing a particularly significant constraint on teachers' ability to meet the needs of pupils in PE lessons.
Study	Aim, Design, Methodology & Paradigm	Participants	Sampling, Sample Size and Setting	Data collection and analysis	Key Results
5. Heagele, Zhu, and Davis (2017)	Aim: To explore the barriers and facilitators to participation in physical education (PE) for students with disabilities (SWD) from	Participants – 168 physical educators from the US (72% n=121 Female; 28% n = 47 Male)	Sampling - convenience sample Sample Size - No justification for sample size given Setting – Online survey	Data Collection – A four-item questionnaire, adapted from one developed by Shields and Synnot (2014) Data were collected electronically, utilizing an online	participants listed 741 facilitators and 652 barriers most teacher-related barriers related to either teacher knowledge or attitudes, and the most commonly reported programmatic

	the perspectives of in-service physical educators Design Quantitative	Teaching experience 1-50 years		survey platform (i.e. Qualtrics)	barriers were related to personnel shortages
Study	Aim, Design, Methodology & Paradigm	Participants	Sampling, Sample Size and Setting	Data collection and analysis	Key Results
6. Hodge et al., (2004)	Aim: To describe the behaviors and beliefs of secondary general physical education (GPE) teachers relative to inclusion and teaching of	Participants 9 GPE teachers (n=7 males; n=2 females)	Sampling - purposeful sampling; operational construct and intensity sampling Sample Size – 5 Criteria: 1. teachers taught in school districts located within a 50-mile radius of at least one of the researchers. This criterion ensured the feasibility of data collection.	Data Collection – Observations and Interviews Questionnaire just for demographics Data Analysis - descriptive summaries and narratives	Key Results – (a) teachers were positively disposed to inclusion as an educational philosophy, (b) teachers had differential efficacy in achieving successful inclusion, and (c) teachers encountered challenges to

	students with disabilities Two research questions guided this study: 1. What were the behaviors of secondary GPE teachers relative to teaching students with varied disabilities in their classes? 2. What were the beliefs of secondary GPE teachers about inclusion practice and teaching		2. teachers had experience teaching GPE at the secondary level. 3. Had established reputations as effective teachers within their respective school districts and with local teacher education faculty who worked with them. 4. Teachers had at least five years of experience teaching in their schools. This criterion was used to ensure that the teachers had progressed to the maturity stage of development (Katz, 1972). 5. Teachers taught in an inclusive setting with students with and without disability We sampled teachers to reflect meaningfully on their beliefs about inclusion practice. Setting – Participants respective schools Data collectors were two PETE graduate students (research locations 1 and 2, respectively) and		establishing inclusive practice. (d) Despite their mostly favorable beliefs about inclusion, several teachers felt inadequately prepared or lacked support and resources to effectively teach students with more severe disabilities.
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	students with varied disabilities in their classes? Design - Naturalistic inquiry (qualitative)		an APE professor (i.e. known as on-site researcher 3 at research location 3)		
Study	Aim, Design, Methodology & Paradigm	Participants	Sampling, Sample Size and Setting	Data collection and analysis	Key Results
7. Bryan, McCubbin, and Van der Mars (2013)	Aim – to examine the role of the paraeducator in the general physical education environment from the perspectives of special education, physical	Participants – 15 (n=7 females; n=8 males) Experience – 2 to 35 years paraeducators (n = 4), special education teachers (n = 3), general physical education teachers (n = 4),	Sampling – Criterion sampling: (a) students with disabilities were included in general physical education classes; (b) the school used paraeducators to help support students with disabilities in the district; and (c) the school had a certified/credentialed adapted physical education specialist for the district.	Data Collection – Interviews and observations Questionnaires for demographics Analysis – phenomenological approach	concerns about the clarity of the role of the paraeducator in physical education. Emerging themes include 1) elastic definitions of student protection and teacher backup, 2) contradictory expectations and

	education, and adapted physical education teachers and paraeducators Design – Qualitative	and adapted physical education teachers (n = 4) working at the middle school level	Setting – respective participants schools		mixed acceptance, and 3) paraeducators' role ambiguity
Study	Aim, Design, Methodology & Paradigm	Participants	Sampling, Sample Size and Setting	Data collection and analysis	Key Results
8. Braksiek (2019)	Aim to assess the teachers' subject-specific attitude toward inclusive PE and identify institution-and person-related factors	Participants 900 PE teachers 57.6% were male (n=518) and 42.4% (n=382) were female; Age – Between 41-45 years experience, teachers had an	Sampling – Couldn't find information on this	Data Collection – 1 st confirmatory factor analyses to test the factorial and convergent validity We examined as related constructs "school support" and "socialintegration"	1) Results indicate that both factorial and convergent validity of the scale were good. While amount of work experience, teaching

	that may have influenced it Design – Quantitative	average of 11-15 years of experience		using items from the EZI7 scale 2 nd SEM (Structural Equation Modeling) model to investigate factors that influence attitude toward inclusive PE and to identify interactions among them. Data Analysis – Quantitative data – SPSS	conditions for(inclusive) PE, and private experience with people with disabilities had a significant influence on the PE teachers' attitude toward inclusive PE, (inclusion-related) collaboration among PE teachers and occupational stress did not.

9. Özer et al (2013)	Aim 1. To investigate the attitudes of secondary PE teachers in Turkey when teaching students with ID 2. To determine the effects of age, gender, teaching experiences and acquaintance with ID and students	729 Secondary PE Teachers (214 females (29.36%) and 515 males (70.64%)). Age: 353 – between 21 and 30 years; 281 – between 31 and 40 years; 95 – between 41 and 60 years. Teaching Experience in PE: 548 – between 1 and 10 years; 121 – between 11 and 20 years; 60 – 21years plus	Sampling – Random sampling Sample Size – sample had to surpass 10% of the total of PE teachers in the respective city. This was determined using calculations of Krejcie and Morgan (1970). 1223 selected, 729 participated Settings – Surveys were sent by mail to the respective schools and handed to the PE teachers.	Outcome Measure Survey – The teachers Attitudes towards Children with Intellectual Disability Scale (TACIDS) Outcome measure had two sections (1), <i>39 items with a five-point Scale, of which 22 items in the survey were positively phrased and 17 items negatively phrased;</i> (2) <i>6 selection type or open-ended demographic questions addressing gender, age, years in service, marital status, having</i>	Younger teachers who had acquaintance with ID and less teaching experience had more positive attitudes towards inclusion. This could be coming from the introduction of APA classes in 2000, thus teachers graduating after the year 2000 were given more knowledge and tools to work in a mixed ability class environment.
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	with ID in related to their attitudes Design Quantitative study Baes on Vygotsky's Social Constructivist Theory	44.99% had acquaintance with ID 49.93% had students with ID in class		<i>acquittance with ID and have students with ID in class.</i> <i>Analysis – Statistical analysis – SPSS -X</i>	
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Study	Aim, Design, Methodology & Paradigm	Participants	Sampling, Sample Size and Setting	Data collection and analysis	Key Results
10. Smith (2004)	how PE teachers endeavour to include pupils with special educational needs (SEN) in secondary school physical education (PE). Design – Qualitative	Five male and 2 female Teachers (5 of which were HODs)	Purposive sampling	Data Collection – Semi-structured interviews Data Analysis – Qualitative Content analysis	whilst teachers expressed a commitment to providing pupils with SEN with ‘equal opportunities’—to participate in the same learning contexts as their ‘more-able’ peers—in practice, this was not always the case. the apparent tendency of teachers to prioritise ‘traditional’ team games within PE serves to exclude, rather than facilitate the full inclusion of many pupils with SEN.

					Moreover, it appears that these pupils are in effect being integrated into, rather than included in, PE.
Study	Aim, Design, Methodology & Paradigm	Participants	Sampling, Sample Size and Setting	Data collection and analysis	Key Results
11. Morrison and Gleddie (2019)	Aim: analyse Japanese physical education teachers' beliefs on teaching students with disabilities in integrated classes Design: Qualitative Methodology:	5 PE teachers 3 males and 2 females Criteria Each teacher has to graduate from PE teacher education and held a B.Ed. degree	Sampling: Homogeneous Sampling Sample Size: 3 Males and 2 Females Setting: Teachers' respective schools	Data Collection: Demographic Questionnaire Focused interviews using open-ended interview guide	The teachers believed teaching students with disabilities, particularly those with severe disabilities, is difficult and complicated. Despite their concerns, the teachers worked at teaching students with disabilities largely because they were motivated to do so in compliance with significant referents

	Semi-structured interviews Paradigm: descriptive-qualitative case study				and policies supporting integrated schooling.
Study	Aim, Design, Methodology & Paradigm	Participants	Sampling, Sample Size and Setting	Data collection and analysis	Key Results
12. Maher (2016)	to explore the processes and practices that shape the views and experiences of LSAs and ultimately the extent to which they facilitate an inclusive culture in PE.	154 LSAs completed the survey out of 343 309 females 34 males	Tailored designed method participant contact strategy Used a gatekeeper – SENCO	Data Collection Web Survey consisting of closed and open ended questions Analysis Quantitative data – descriptive statistics Qualitative data – Thematic Analysis	hegemonic status of English, maths and science when it comes to the allocation of SEN resources, which most LSAs support and often reinforce. PE is particularly disadvantaged in this hierarchy of subject priority.

	Mixed Method				The majority of LSAs have not received PE-specific training, which brings into question their ability to facilitate inclusion in PE. Moreover, many schools do not appear to value the involvement of LSAs in the planning of differentiated lessons, which could have a negative impact on the PE experiences of some pupils with SEN given that LSAs are perhaps most aware of the specific learning needs of the pupils they support.
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Appendix 2: Full details of Synthesis (Chapter 2)

Synthesis

Before coding results, data was classified according to the methodology and sampling characteristics used by the respective article (Whittemore and Knafl, 2005). Data reduction involves looking at similarities between articles and identifying parallel codes across studies and inputting them into a predesign table for better organisation. Furthermore, this phase involves the use of quotations and statistical data to assist in code generation. This is done to produce organised and concise data extraction from the chosen articles to facilitate comparison with the primary data source (Whittemore and Knafl, 2005). Data display involves exporting the data from each primary source into one document for comparison. This is followed by the data comparison phase where similarities are highlighted and themes created. For this review a spider diagram was used to generate themes and sub-themes. Initially 2 themes, 7 sub-themes and 32 codes were generated. These themes were then defined, and results were tabulated under the corresponding themes. In the conclusion and verification phase, on looking at the original spider diagram, it was decided to merge some themes, sub-themes and codes, ending up with a revised diagram of 1 theme, 5 sub-themes and 18 codes. The final stage of an integrative review, in line with Souza, Silva and Carvalho (2010), is the presentation of results. Here the final table with the themes, sub-themes and definitions was further reduced to provide a narrower focus on the main aspects and concepts elicited from the articles and any quantitative research included was also added to support further findings.

Appendix 3: Audit Trail for the Integrative Review (chapter 2)

First Stage: Synthesis mapping stage and coding

Study	Results	Comments by Amanda
Study 1 Morely et al (2015)	Inclusion as an aspiration As with PE teachers' other 'everyday philosophies' (Green, 2002), teachers' attitudes towards inclusion can appear highly impressionistic. In this study it seemed as if the teachers viewed inclusion as a 'journey', or a progressive path, towards an ultimate target. To some, there were barriers which needed addressing before inclusion could be achieved at any level, such as the need for extra planning on the part of teachers, themselves: 'it would take a lot more thought and a lot more work, but I can't see any cases where you absolutely could not include a child, it just takes a lot more thought' (P28). But the spirit of inclusion was seen as in the travelling, not the arriving, and, in this sense, inclusion was understood by many of the teachers as a normative concept, to which it would always be possible to make further progress. Overcoming barriers to achieve inclusion was also apparent from different perspectives, or what Salvia and Munson (1986) refer to as 'teacher-related variables' and 'child-related variables'. In this context, teacher-related variables are reflected by teachers' perceptions of their own inadequacy in providing for children with SEN, as well as the severity of the individual child's need. One teacher expressed apparent frustration at the current situation in their school thus: You have ideas, you read things, you see things but its sometimes that not knowing, and being, not knowing, uncertainness, not having a definite direction of where to go with them and how to help them sometimes. You want to help them; you want them to do their best, you want to include them but	The path to undertake to achieve inclusion Barriers/ challenges – are they willing to spend more time and thought? No barrier can stop hinder inclusion Teachers believe that inclusion in normal practice, that keeps on adapting by time... are teachers ready to progress? Are they ready to change their pedagogy to meet the demands of every student in class? Success of inclusion reflects the teacher's perception on their self-efficacy/ self-confidence Uncertainties/ Frustrations as teachers feel books will not provide them with the best solution for inclusion... are they

	Is knowing how to adapt it to suit them' (P29). The implications here may be the need to modify existing school-based plans for curriculum delivery perhaps by changing the chosen activity, adapting the activity or increasing the range of differentiation strategies used within the lesson. Indeed, the SEN Code of Practice (DfES, 2001: 6) recognises that fully including pupils with SEN is a 'challenging objective'. Therefore, if lack of knowledge of how to adapt activities is an issue for teachers it is unsurprising that the greater the degree of adaptation required to include a child in a lesson then the greater the perceived challenge for teaching delivery is likely to be. Moreover, other teachers referred to a more general frustration with varying levels of teacher competence and opinion: 'staff's ability to adapt activities to suit children with disabilities, because you don't always quite know how to adapt things, I can't see it happening all the time because of people's reservations on how to include them' (P8). It could be suggested that specific and general feelings of 'not knowing' relate to teachers' lack of confidence and knowledge of how to adapt activities. There are clear implications here for initial teacher training and continuing professional development opportunities (see 'Relevance of training opportunities' section later in this paper for further exploration of these implications). With regard to child-related variables, some teachers discussed the child's level of need as a barrier, 'I think it would depend on the ability or inability of that student as to whether they could be integrated into a certain activity' (P30). Such levels of 'pragmatic' response have been highlighted by other researchers of professionals' views of inclusion (Croll and Moses, 2000) who found that a strongly avowed commitment to the principles of inclusion is often equally strongly qualified by a sense of limited practicality. In our research these practicalities seem to reflect a	reaching everyone? Is the adaptation assisting every individual in class? Education – not a one size fits all Changes in the system not just teacher's pedagogy. Making the curriculum more friendly Full inclusion is a challenge Barriers – teachers lack of knowledge – the greater the severity the greater the challenge Struggles to include everyone as they are unaware of how to do so. It's all about self-confidence... if teachers are not confident, they will struggle with inclusion Training as one of the most important aspects of inclusion Barrier – Students ability to be included with the rest of the students
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	number of emerging issues related to other aspects of effective mainstreaming, such as levels of support and perceived confidence with certain types of SEN, which will be highlighted later in this article. Conceptions of inclusion General responses relating to concepts of inclusion were varied, ranging from the almost subliminal: 'I tend to think "yes that child is statemented" and not think why, just class it as one thing rather than anything specific' (P28), to the consequences of including children with SEN on other children in a class, 'You want to be giving them a good deal and then I do think about the other members of the group wondering if that person is holding them back' (P39). The perceived detrimental effect on the pupils without SEN becomes more apparent when pupils with diverse ranges of ability are taught within the same group, 'Sometimes in a lesson if you've got a very able and very disabled group, especially here the children get quite frustrated with a child that they can't participate as well as them and it might put them off participating' (P29). Another teacher hinted at the challenges to inclusive practice from competitive environments: 'You have to be careful you don't negate the point of it for the more able bodied pupils, so that they're bringing the level of their play down to include the others. You can lose spirit. . . young people want to play to the best of their abilities' (P12). These comments seem to reflect a conflict inherent in a subject area that seeks to promote equity and excellence simultaneously, as part of its explicit aims and objectives, as outlined within the national curriculum for PE (DfES/QCA, 1999). Moreover, the comments suggest that the effect on the more able pupils and more specifically the level of ability reached by such pupils is the key factor in the success of the lesson. Where such conflict exists, whereby teachers express concern regarding the potentially detrimental effect the inclusion of pupils with SEN may have on more able pupils within a lesson, it seems the inclusion of pupils	Not highlighting the issue... not labelling?? Issues related to typically developed students (TDS) – big difference in ability – Discouraging students - could also effect the TDS as they would not perform at their best just to include their peers As long as everyone benefits from inclusion its fine. How do Students with ID effect able pupils?
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	with SEN comes at a fairly expensive price. Spectrum of inclusion Connected to the teachers' conceptions of inclusion was the frequently mentioned matter of the extent to which a child with SEN could be included within the lesson, for example, 'I am saying they can be included, I am not saying it is always in their best interests to include all' (P12). Winnick (1987) proposed a spectrum that represents different levels of inclusion possible within an activity setting, ranging from the total inclusion of pupils within mainstream activities in which everyone is included without adapting or modifying the activity, to pupils with SEN participating separately within separate activities. This has been simplified even further as an activity continuum with three levels of activity; discrete adapted activity; parallel activity and inclusive adapted activity (Wright and Sugden, 1999). In the first level, children 'participate individually', in the second they 'play the same game but on their own' and in the third there is 'an opportunity for all children to participate in adapted versions of games and activities' (Black and Haskins, 1996, cited in Wright and Sugden, 1999: 29). These conceptual frameworks can be used to effectively represent teachers' attitudes in this study which suggested that inclusion can occur on a variety of levels dependent on the nature of the planned activity and the desired outcomes. Teachers mentioned the varying degrees of participation within the context of inclusion in PE from one extreme, 'I think if you have got the resources and you have got the awareness and you know exactly what kind of child you are dealing with, exactly what their needs are, I can't think of an example where you absolutely cannot include every kind of child in one activity' (P28), to the other, 'We do have a separate alternative curriculum in year 10 and 11 which is very similar to basic PE but it is not with the others' (P37). Whilst the rationale for the employment of the separate curriculum is unclear, such responses suggest that some teachers equate	Is inclusion best for students with SEN? Different types of settings Objectives of the different settings Not a one size fits all attitude... more than one type of inclusion Different teacher's opinions on inclusion Knowledge and context will provide teachers with the right ingredients for inclusion
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	the success- ful inclusion of all children in all PE activities to the availability of suitable resources, and to their awareness and understanding of childrens' differing needs. It follows then that if further inclusion is to be achieved, and teachers' aspirations realised, ongoing support in terms of resourcing and staff development will be crucial. Distinctiveness The distinctive nature of PE was the focus of a great number of responses in terms of eliciting support, the nature of the activity and the general conception of PE as an inclusive subject. Eliciting support One of the main identified differences between PE and other subject areas was the level of support received from Learning Support Assistants (LSAs). The majority of teachers commented on the lack of support from LSAs thus: 'Assistants, we don't really see that much of in PE which if anything we probably need more so than other subjects' (P28). When referring to children with statements of SEN, one teacher suggested a hierarchy of need by saying: 'These are all pupils who have LSA support in other lessons but we very rarely get support in PE, they are needed in other lessons. In some cases the LSAs can't really do a lot and so they are better off being elsewhere helping others' (P34). Increasing pressure to provide for children with SEN seems to have raised teachers' awareness of levels of support within PE. 'More and more kids, it used to be just two or three who couldn't manage but now we seem to get more and more. . . We don't get help. Special needs assistants never come to PE' (P37). It would seem, albeit implicitly, from these comments that the level of support from LSAs in PE lessons is not commensurate with the increasing demands of recent policies. One of the reasons for these comments could be the fact that there are more children with statements for SEN placed in secondary schools than there has ever	Successful inclusion will only occur if teachers are knowledgeable, equipped and understand needs The need for more help in PE with regards to LSAs Waste of resource? More students in class with SEN thus help is requested! Pressure on teacher increases... help from LSAs is missing More students with SEN in secondary schools
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	been (DfES, 2003), or perhaps the comments simply reflect recent policy concerns about the availability of specialist expertise and resources to support inclusion in main- stream schools (DfES, 2004). The following teacher typified the majority of responses by suggesting: They [LSAs] are needed for classroom lessons, they are not needed for PE, that seems to be the attitude. We have asked when we had the cerebral palsy girl going through, their answer was to give us a sixth former to help her on appar- atus which we were not happy with. Even now with the two partially sighted pupils going through the feeling is we will manage (P33). The teachers seemed to be suggesting, therefore, as a result of the distinctive charac- ter of the subject, PE is perceived to require additional and different levels of support, but this is support that is rarely evident as the following comments from two teachers indicate: Stamented pupils are given support in other areas, PE is always the place it is missed out so we do have someone who comes down but we have had to really fight for him and the chances are his contract might come to an end (P31). In other curriculum areas they get maybe 3 LSAs in a class for their reading and writing skills. If we request them in PE we do get them but it is pretty much that we are not high priority (P24). The negativity expressed by teachers within the study in relation to the inadequate levels of support raises concern for the potential impact such negative attitudes will have on pupil experiences, particularly when previous research suggests that positive attitudes to inclusion are enhanced if support is provided by the school's special education teachers (Center and Ward, 1987; Clough and Lindsay, 1991; Kauffman, Lloyd and McGee, 1989).	Lack of resource to meet the demands? PE not given the same importance as other subjects? Authorities seems to be giving PE less importance... providing support not in line with the support provided to other subjects. PE teachers struggle to have assistance PE is not the priority... teachers ask for help... help not provided automatically Lack of support could demotivate teachers influencing students experience.
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	The teachers in this study were critical of the nature and lack of training that LSAs received: 'They've maybe tried it initially but it wasn't beneficial for them and I think they have withdrawn on that front' (P12). 'The main training that they have had is in the classroom rather than a practical or PE base' (P13). 'We have a couple of LSAs that come down and support the children but a lot of those have got no training in the supporting of children within physical activity' (P2). This has been reflected by research suggesting that, in terms of qualifications, professional development, conditions of employment and career structure, in spite of the considerable demands placed upon them, such staff continue to be inadequately prepared for their role (Moran and Abbot, 2002). Conceptions of PE Some teachers relied upon their general experiences of PE in formulating the perception that the subject area was different to other subjects, and this was seen to be a major reason why inclusion in PE is destined to be more difficult than in other subjects. Whilst some writers (e.g., Block and Horton, 1996) suggest that the majority of children with SEN can still be included in PE lessons, it is clear that some teachers in the study recognised that heightened awareness of safety was a significant element of concern: 'It is very different to what we have to teach them in PE to do with the physical side of the needs they perhaps have and we are involving equipment and a lot more safety issues I think which we have to be aware of' (P31) and 'some activities can be potentially dangerous, potentially dangerous to everybody, if the student has a physical disability obviously that could be even more dangerous to them' (P30). One teacher commented upon the limiting effect that the physical element of the subject could have: Physical education is about them being aware of	LSAs not training in PE. The uniqueness of the subject could make it hard for inclusion... different than classroom setting Safety reasons might be an issue when discussing inclusion in PE
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	their bodies and what they can do with their body and being aware of their health and fitness and if the child is physically disabled a lot of what we do in PE they are going to be unable to do or they are going to have to be taught in a different way. That automatically restricts them rather than the other subjects (P14). There is a clear indication here that children who have been identified as having SEN often experience very different types and levels of challenge in PE as compared to other subjects. Given the lack of involvement of PE staff with the identification and statementing process (discussed elsewhere in this paper) this is a particularly important issue as the unique demands of the subject area may require a more subject-specific approach to identifying, and providing for, the needs of pupils with SEN than afforded within the existing whole-school framework. Another teacher refers to the interaction levels within PE being different to other subjects by saying, 'It's a practical hands on subject whereas in a classroom it tends to be a piece of paper, pen, pencil. Interaction with the piece of paper, pen, pencil . . . whereas in PE it's that social interaction, the physical interaction, the relationship interaction' (P22). Whilst another mentioned the teaching environment as being more distinctive in PE than other subjects and used the teaching of examinable class- room-based PE to explain the comments made: It is not just a case of making sure they can see what is on the board or making sure they can hear what you are saying, it is a lot more difficult. The conditions of the playing area, the equipment that you are using, it is a lot different to classroom teaching. We do have exam PE so we teach PE in a classroom, but in terms of practical PE it is very different (P2). The distinctive nature of both the context and content of physical education would seem to have important	PE provides students with more challenges Having teachers participant in IEPs might help prepare an environment suitable for students with SEN Involvement of PE teachers in IEPs PE consists of different environment from the classroom settings – more social context PD not related to review
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	implications for the planning and provision for pupils with SEN. The acknowledgement of this reflects earlier discussions by theorists and practitioners that question the value of physical educators using a generic descriptor of 'SEN', arguing instead for a more focused and subject-specific distinction between children who have a SEN which is primarily described in terms of their movement skills (such as physical disabilities and motor difficulties) and those who have a SEN in physical education, but which is secondary to other needs (including learning difficulties, sensory impairment and behavioural problems) (Bailey and Robertson, 2000, Sugden and Wright, 1996). Conceptions of challenge The teachers involved in the study discussed a range of challenges to inclusion, which influenced their attitudes regarding the extent to which inclusion was, and could be, achieved. Conceptions of challenge included, among other things, the accessibility of physical resources such as facilities and equipment, the type of activity being taught and the specific SEN of the pupils. Resources Modifying or planning alternative activities often requires different equipment designed to support learners with special needs. Whilst, in most areas of the curriculum, equipment may be purchased for use across the whole school, in PE the burden tends to fall to one department and this is likely to constrain the development of an inclusive environment. The creative use of equipment to assist in differentiation of lessons was evident in a large number of responses: 'We have got special equipment which is user friendly. Softer balls, easier to handle equipment, smaller or lighter, more colourful, more attractive to them' (P33). Others reflected upon the issue of accessibility within their own school by saying, 'We do have a problem of access, for the lads' sport changing rooms are upstairs and they need to go upstairs to get to PE, so there's a flight of	What type of SEN is requested? Is it motor assistance? Challenges in PE PE Equipment that is suitable for inclusion
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	stairs there and there's no ramp or anything to get them anywhere' (P26). These comments substantiate recent policy findings that suggest many staff feel ill equipped to meet the wide range of pupils' needs in today's classrooms as a result of the inadequate amount of resources available for SEN provision (Audit Commission, 2002). Activity The picture that emerged with regard to whether activity specific issues affected the inclusion of pupils with SEN in PE is a somewhat hazy one but the debate is generally related to the activity area being taught and the location in which it is delivered. <i>Activity location</i> It was generally agreed by most teachers in the sample that it is easier to include pupils with SEN in PE in indoor activities, not least because: 'you have more control of them . . . probably a little bit easier to keep an eye on the group or control the activities differentiated for those children' (P28). Although it was also recognised that access to facilities is a precondition for indoor activities: 'I think the indoors ones as long as there's access for wheelchairs, access through changing rooms. Indoor sports obviously are easier' (P9). Thus, many of the teachers in this sample were aware of the fundamental importance of access to full engagement, rather than mere opportunity to join in, as a necessary condition for inclusion in physical education. This discussion, which is a familiar one in general discussions of inclusion seems to take on a special significance in physical education contexts, where the environment for learning plays such a central role. <i>Activity area</i> Certain physical activities will have considerably more 'mainstreaming potential' than others (Meek, 1991: 80), in that they are less exclusive by design and therefore less likely to require substantial	The need for more Equipment Teachers in favour of indoor PE for inclusion Safer environment PD NOT TO USE
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	modification in order for all pupils to be included. Individual activities were identified as being less likely to present barriers to inclusion: swimming, gymnastics, dance, outdoor adventures . . . They're the easiest because of the space facility, the temperature, climate (P2). I think gymnastics is quite a good one because it's all about body management, you can integrate students in there in floor work (P30). The level of control and individual challenge achievable in gymnastics were reasons for this teacher contradicting the previous response when they suggest, I don't think gymnastics would be too difficult . . . I think it is a lot easier because it is more of an individual activity you tend to pay attention to the individual rather than, obviously you should do that but an individual activity is easier to keep control and watch individuals as they are performing at their own level (P28). However, a note of caution was struck some teachers regarding the prerequisite abilities for undertaking certain activity areas, for example: 'If there are some that have physical impediments, then gymnastics is the one that will cause them the most problems' (P34). Activities that contained an element of teamplay were considered to be more problematic in terms of their potential for including all pupils when compared to individual activities. The rationale for such a claim was proposed in a number of ways, for example, The team situations, the game situations, okay with the skills that's fine but when they're actually put into a game situation if their level of learning isn't, if that's the inability they get lost, they get confused, its frustrating for them then because they don't know where they're supposed to be within the spatial	Individual activities better for inclusion PD NOT TO USE Individual activities better for inclusion Is it a sense of Laziness? Playing it safe? Challenges of inclusion in team sports
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	aware- ness of things (P30). Others spoke of team sports, suggesting that certain disabilities precluded participation of some groups of pupils: there are certain safety considerations particularly with invasion games like basketball etc., 'then we tend to move a small group across to the assembly hall . . . for . . . sort of modified versions of the game' (P12). One teacher suggested that striking and fielding games provide opportunities to work in a more controlled environment than other games whilst still competing as part of a team: 'Rounders we've found works quite well because you have a static sort of situation where . . . they're playing off a tee and they can get the thrill of going round the pitch while the fielders are trying to get them out . . . that can be managed . . . like a one off situation within a game' (P12). The teachers in this sample seemed attuned to the 'mainstreaming potential' of certain activities, rather than others (Meek, 1991: 80), and their comments suggest both experience of and reflection on seeking to include pupils with a range of needs in PE lessons. This sensitivity to differential opportunities presented by activity areas should, however, not be taken as advocacy of SEN-friendly or disability-friendly activities, in which certain activities are prioritized (and others marginalized) in a well-meaning response to some generalized notion of SEN. To do so would be to impose upon the language of SEN and disability greater ontological import than it deserves. Type of need The majority of teachers in our sample stated that it was more difficult to teach children with behavioural problems in PE than children with any other type of difficulty. The following responses present a representative summary of the views of many teachers:	Making the game 'safer' for students Safer than invasion games PD NOT TO USE Behavioural problems harder to teach
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	The biggest problems we have would be behaviour, and their behavioural problems are the biggest thing for me (P28). When they have behavioural problems, I find that the hardest especially when they are refusing to join in for no particular reason, they just feel that way out (P33). Behavioural, because they can wreck your whole lesson (P37). In the light of these concerns, some teachers were apprehensive towards increasing the inclusion of children with SEN into mainstream schools: The one that troubles me most is the increasing number of kids that have really severe behaviour problems who, when I first started teaching, would not have been in mainstream schooling, they would have been in a special school for extreme behaviour and it is coping with them and still keeping a lesson moving along and bringing about quality work (P31). Some teachers seemed content with categorizing those children who present the most difficulties in a PE environment, whilst others went further and proposed reasons for why children with behavioural problems cause most difficulties in a PE environment: The only way they cause more problems is because of more of the caged animal feeling in a classroom and suddenly they have got a bit more space and so get a bit more excitable and it is getting them pinned down a bit more, that is only within our general discipline problems with them (P34). The main ones are the ones that have behavioural problems, not ones with physical difficulties . . . PE sometimes has extra problems in that because of the extra bit of freedom to move around, instead of being stuck in a classroom behind a desk where they are a	Teachers concerns on Students is behavioural issues in mainstream schools PE creates a sense of freedom thus their behavioural is a result of excitement
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	bit more trapped, because they have an open space they can cause extra problems for us with their behaviour than it maybe does in a classroom (P17). Conversely, some teachers felt confident teaching children with learning disabilities, and to a lesser extent those children with physical disabilities, a view consistent with previous research of teachers' attitudes towards inclusion in PE (Rizzo, 1984), 'Any physically disabled pupil or any physical problems would be less of a concern to me, I would find them easier to deal with than anything else' (P14). This reduction in concern of the teacher may be due to the directly observable nature of physical impairments, the amount of resources that are widely available to support children with physical impairments in comparison to other SEN, or perhaps the perceived low level of impact on the learning experiences of others in the group. Training opportunities Continuing professional development was seen by some of the teachers as the key factor to increasing opportunities for pupils with SEN, and this reflects earlier research into the development of equitable practices in PE (e.g., Robertson, 2000). Some teachers made it clear that training in SEN for them was limited; for example, one teacher commented: 'None at all, we are not trained' (P31). However, the majority in our sample had experienced some training, whether it was informal or formal. <i>Formal training opportunities</i> Definitions of 'formal' and 'informal' training opportunities were not offered to the participant during the interview, thus distinguishing between these concepts was at the discretion of the teacher. The types of formal training opportunities were wide-ranging, with some training being matched to contextual need: When we had the boy with the weakness down the left hand side we had an hours session with the co-	Teachers confidence level The need for CPD sessions Concerns with lack of training
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	ordinator of special needs at the time, plus the physiotherapist from the unit to give us some advice about how to deal with him (P41). Other training that was perceived as being valuable was associated with support staff: I have had no training externally, just what the school does within itself. I think we have a strong special needs department in the school and they have regular meetings to inform you of children and have had regular input and training days to keep us up to date with everything (P39). <i>Relevance of formal training opportunities to PE</i> The mention of formal training often contained a disclaimer and this was in the form of the 'irrelevance' of the training to a PE context. The comments of one teacher provide a particularly useful illustration of the perceived inadequacy of school-based training opportunities: 'We do internal school insets. One of them was on inclusion in lessons but it wasn't aimed at PE. It was on general classroom lessons. A lot of it was not relevant to what we do down here because they are not behind a desk with a book in front of them' (P42). The level of relevance was not restricted to whole-school issues however, for it was also evident that some externally delivered courses were viewed as irrelevant as well: I went on a course about inclusion but I didn't think it was suitable because all they went on about was playing Boccia and that was it. There was nothing on how to adapt lessons to suit all children . . . It was more how to have an able bodied person playing a normally disabled sport not how to have this person with a disability, how can I adapt them and get them involved in an able person's lesson (P29). <i>Informal training opportunities</i> Although direct mention of valuable formal training opportunities was limited, there was greater reference to informal training opportunities that was generally conducted at departmental level: 'Within	Schools input with regards to training PD NOT TO USE Training not relevant to the PE context What courses should consist of In house training
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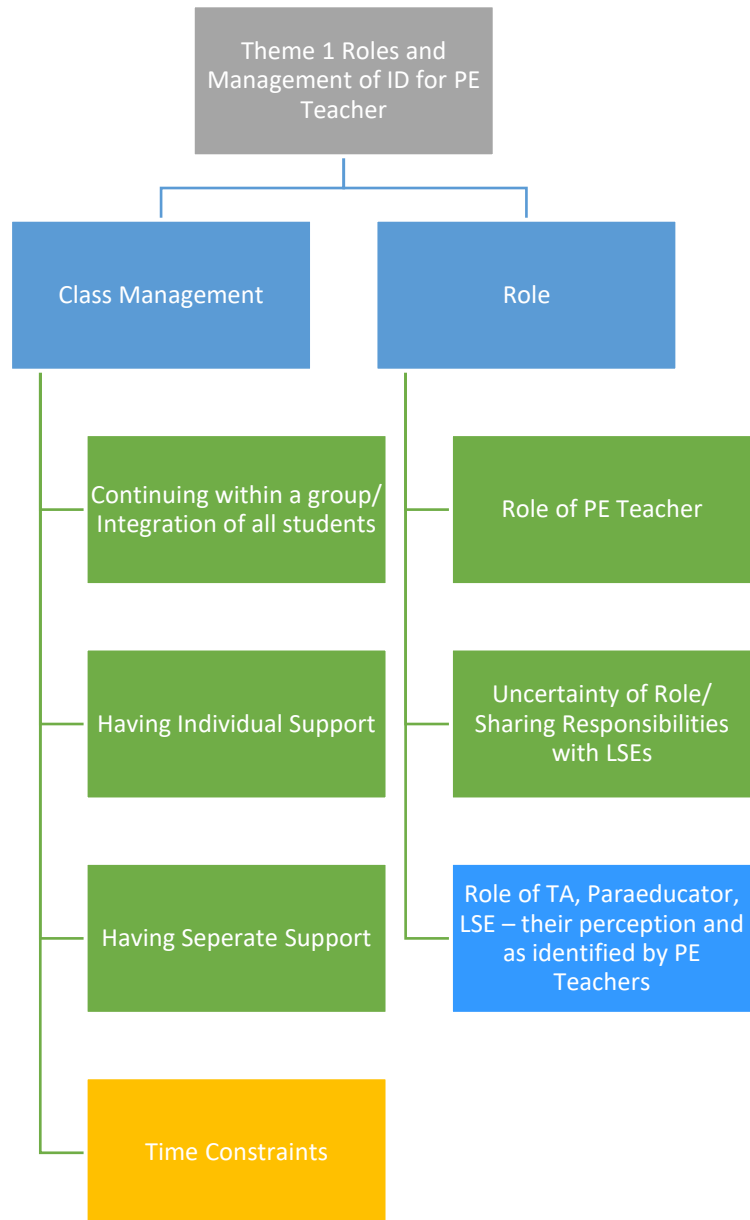
	the department we have had informal get togethers and chats and decided what type of special equipment we needed, how to incorporate the special needs children within the subject areas' (P33), or by referring to someone with more experience on an individual level: 'Usually informal chats. If I felt I had a problem with somebody that I knew was very low ability then I would talk to [name of other teacher] and say ask the best way to treat this particular person. Very informal conversation' (P34). The 'informality' of such training, particularly when judged in the light of the dearth of formal training opportunities, raises issues about the effectiveness of teacher preparation for teaching children with SENs. Such instances of imbalance of opportunities could have serious repercussions for the quality of support experienced by children with SEN when training is conducted in such an adhoc manner. <i>Initial teacher training (ITT) opportunities</i> Concerns have been raised about the impoverished nature of SEN and inclusive provision generally within ITT (Robertson, 1999; Special Educational Needs Training Consortium, 1996), and this is clearly reflected within the majority of responses from PE teachers. For example, when asked about their experience of SEN training during their teacher training, teachers commented: 'I haven't had any. It wasn't catered for in my teacher training' (P36) and 'I must admit it was very limited' (P1). Allied to the concept of limited provision during ITT was a recurring theme that such training was based solely on theoretical issues surrounding the teaching of children with SEN: Training on my PGCE was not practical at all, it was just all theory so although it gave you ideas on how to differentiate I don't think that can prepare you for when you actually come into contact with that kind of child (P28). When I was at university we had lectures on it, we	PD NOT TO USE Peer feedback and assistance Concerns of teachers lack of preparation Concerns of teachers lack of preparation Concerns of teachers lack of preparation... lack of hands on experience Concerns of teachers lack of preparation... lack of hands on experience
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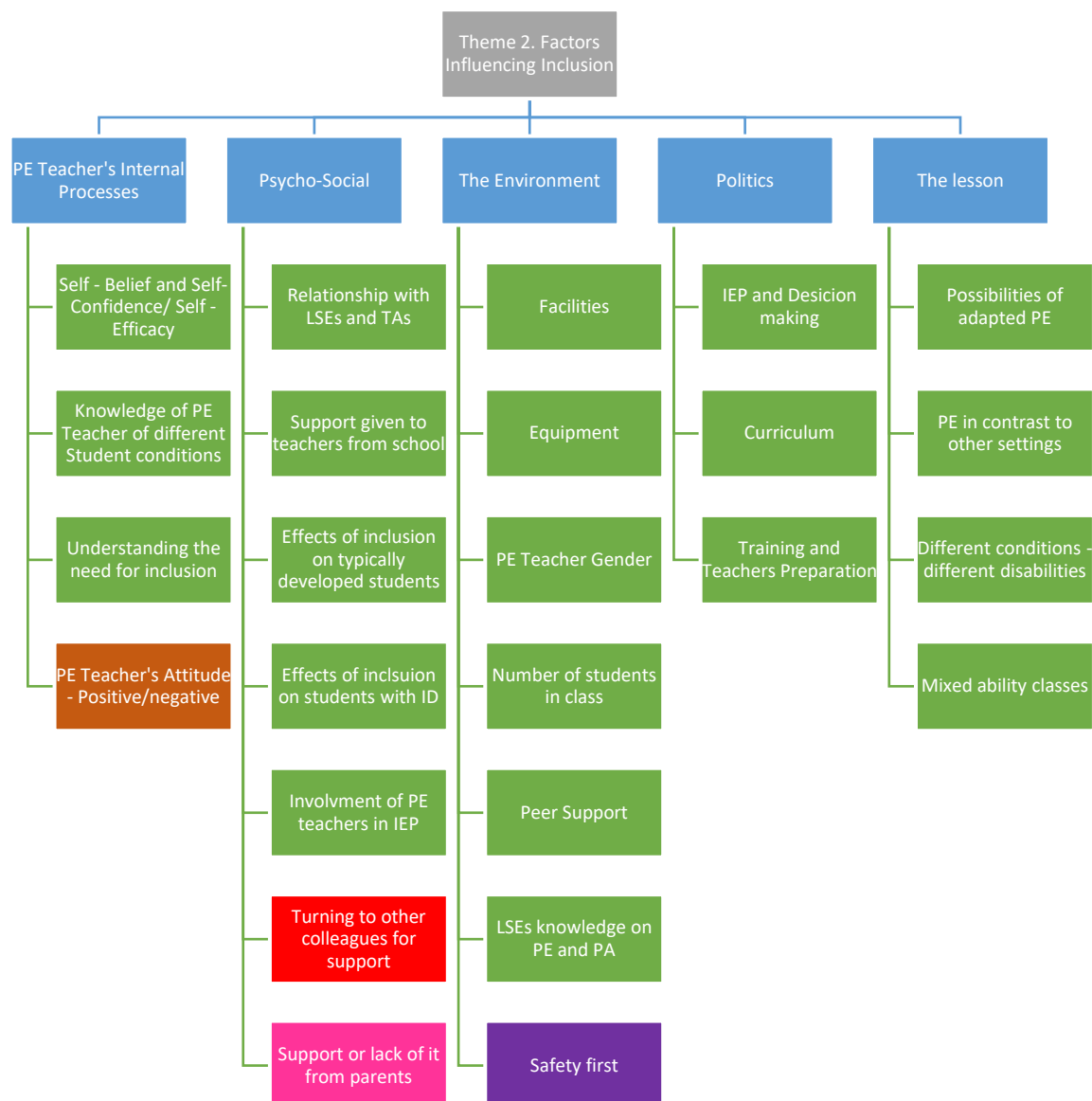
	did not have a great deal of practical work on it, it was mainly the theory side (P43). This reinforces the doubts raised by Vickerman (2002) regarding the extent to which trainee teachers are adequately equipped with the necessary skills and resources to meet the needs of pupils with SEN. Such findings also raise issues regarding the successful interpretation and implementation of policies such as the Qualifying to Teach standards (Teacher Training Agency, 2002) and the amount of practical and relevant experience trainee teachers actually receive during ITT. Confidence and experience Reflecting earlier studies (LeRoy and Simpson, 1996; Rizzo and Vispoel, 1992), many teachers reported that experience played a pivotal role in gaining confidence with working with children with SEN. For example, one teacher commented on the necessity for experience over theoretical acquisition of knowledge: (I'm) Not particularly confident because I don't have a lot of experience with a range of physical disabilities, I am not confident at all because I haven't had the experience. Even if I was being given the theory on how, I have piles and piles of material on how to deal with a child with this disability in this school, really specific things. It gives us ideas if I ever came across a child with this physical disability then I wouldn't be able to research it and plan my lessons for that child simply because I haven't had the experience of dealing with it (P21). But caution was also sounded by some about the equation of the cumulative acquisition of experience and the development of confidence. One teacher, relatively early in his career, expressed this view when he wrote: My opinions on this will probably completely turn around after a few years of teaching and after having dealt with far more disabilities than I have dealt with	Inadequate training Hands on experiences gives teachers more confidence Confidence in relation to years of teaching and experiences of different disabilities
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	so far and my answer to that question will be 'no' having dealt with those kind of child. Because I haven't it is probably easier for me to say they probably can be. That doesn't necessarily mean they can be and it doesn't necessarily mean that all children will get the best they can out of inclusion simply because we can't cater for all needs (P25). In a similar vein, some teachers equated their lack of confidence with a perception of insufficient levels of support: 'I wouldn't say I'm confident at all, I wouldn't say any of us in the department are confident at all because we haven't had that support to know how to adapt them fully into a lesson' (P29). So, experience seems to be viewed as a necessary, but not sufficient condition for confident and competent inclusion of pupils with SEN. If, as discussed earlier, teachers enter the profession without specific training in this aspect of their work, and are not offered enough support once they are qualified, it is understandable that exposure to an increasingly wide range of abilities and needs can lead some to feel uncertain and inadequately prepared.	Unsure of what the future holds? Lack of support resulting in lack of confidence Experience not the only force of confidence building PD NOT TO USE
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Second Stage: Themes Development and Codes

Mind mapping





Third Stage: Refining Thematic Development

Theme	Subtheme	Code	Unit	Study
Theme 2 Factors that influence the inclusivity of students	PE Teacher's and LSEs Internal Processes	Self-belief, self-Confidence and Self-Efficacy	Definition of Code: Some PE teachers self-belief that they were able to provide for the needs of people within ID. This was identified as to be one of the main ingredients of a successful PE experience for students with ID. PE teachers demonstrate a variation in their confidence at working with individuals with ID (1). However, there was some consistency in support for individuals with PE teaching highlighting low confidence in teaching as a problem (1,2). However, there was variation in this (2) and evidence that practical experience aided this process (3), for instance one PE teacher stated: <i>"when you first do it [teach SwID] you are a little worried about whether or not you can handle it"</i>. Being uncertain how to adapt activities and how to include despite training and reading (1) and identifying both experience and training were needed to feel confident was important (3). Quotations: teacher-related variables are reflected by teachers' perceptions of their own inadequacy in providing for children with SEN	1

			You have ideas, you read things, you see things but its sometimes that not knowing, and being, not knowing, uncertainty, not having a definite direction of where to go with them and how to help them sometimes. You want to help them; you want them to do their best, you want to include them but its knowing how to adapt it to suit them	1
			some teachers felt confident teaching children with learning disabilities	1
			many teachers reported that experience played a pivotal role in gaining confidence with working with children with SEN.	1
			My opinions on this will probably completely turn around after a few years of teaching and after having dealt with far more disabilities than I have dealt with so far and my answer to that question will be 'no' having dealt with those kind	1
			'I wouldn't say I'm confident at all, I wouldn't say any of us in the department are confident at all because we haven't had that support to know how to adapt them fully into a lesson'	1
				2

		experience seems to be viewed as a necessary, but not sufficient condition for confident and competent inclusion of pupils with SEN	2
		I have weak confidence in teaching students with disabilities in a huge class size	3
		After attending the meeting, I feel confident about teaching these students	
		He stated that at the start of his career he was uncomfortable teaching students with disabilities, but now he was more comfortable, "...when you first do it [teach SwSD] you are a little worried about whether or not you can handle it"	3
		In general, these teachers' favorable beliefs had been influenced by positive interactions and occasions were they felt comfortable in teaching SwSD.	3
			6

			In contrast, these teachers' unfavorable beliefs had been impacted by uncertainties about their own efficacy in teaching SwSD, which made them feel uncomfortable.	7
			Mr. Simms acknowledged that at the beginning of his career he was uncomfortable teaching such students but now was more comfortable.	9
			She mentioned how difficult it was because the teacher seemed nervous and “not knowing what to expect” from the students or her as a paraeducator	9
			revealed that the PE teacher with 1–10 years of experience had more favourable attitudes in factor 2 (feeling) than those of the PE teachers with 21 or more years of experience ($P < 0.05$)	9
			Beliefs were more favourable towards teaching children with specific learning disabilities and less favourable towards teaching children with emotional and behavioural disorders	11

			Significant predictors of positive beliefs in this study were perceived competence, positive teaching experience with children with disabilities, and course work in APA	11
			The teachers believed that their self-efficacy in teaching students with disabilities depends largely on their experiences, knowledge, formal training, student disability type and its severity, resources, and availability of supports (e.g., teacher aides), but they had limited experience, knowledge, and formal training to teach students with disabilities	11
			Not surprisingly, they were uneasy and had low to modest confidence on teaching students with disabilities. No teacher had more than 2 years of experience teaching such students. Those who had more experience teaching students with disabilities were, however, a bit more confident compared to those who only had experience teaching only one or two students with mild disabilities	11

			I do not have any confidence at all. I have attended workshops, which deal with disability but who knows the best way to teach? It depends on the disability. When I thought that this is the best solution, he [student with disabilities] may feel my solution is completely off base. [There are] ...many different factors involved in teaching him. This is a reason that I do not have any confidence to teach students with disabilities. (personal communication, March 27, 2006)	11
			general lack of knowledge on various student disability types made her less confident teaching such students.	11
			low confidence was also influenced by student disability type and its severity. They felt more confident teaching students with mild disabilities compared to those with severe disabilities.	11
			Misaki and Takashi believed that their confidence was lowest when they were in situations requiring them to adapt lessons or modify class activities.	
			their confidence was lowest when teaching students with severe disabilities who required individualized instruction.	8

			students with severe disabilities, if they need extra help, I lose all confidence to teach them. (personal communication, March 29, 2006 . “I have confidence to teach students with disabilities in my class. I taught four students with disabilities in the past. Those experiences built my confidence” 67.9% of respondents suggested training enhanced their competence, whilst 32.1% suggested it did not. only teaching conditions of PE teachers ($\beta=0.180$, $p<0.001$) and private experience with people with disabilities($\beta=0.208$,$p<0.001$)had a significant and positive influence on attitude toward inclusive PE. Amount of work experience ($\beta=-0.165$, $p=0.007$) had a significant negative influence on attitude toward inclusive PE.	
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Appendix 4: The between and within study appraisal (chapter 2)

Between study critical appraisal; COREQ assessment qualitative studies

An average score of 6.5/13 was obtained across the three domains of COREQ. The lowest scoring domain was domain 1 with an average of 2/5. Domain 2 and 3 had similar averages (2.9/5 and 1.6/3, respectively). All qualitative studies (8/8) were consistent at reporting the derivation of themes providing details of the framework used for coding. Seven studies (7/8) were able to position their research within a paradigmatic view and seven (7/8) were able to provide information about the methodological orientation and theory.

No studies (0/8) identified the relationship between the researcher and participant. Only two (2/8) studies (Ammah and Hodge, 2005; Sato and Hodge, 2009) considered research training and none of the studies provided evidence of an audit trail or coding tree.

Between study critical appraisal; Kitto and Grbich (2008) tool (qualitative studies)

All the studies had appropriate aims and research questions that linked with the research they had undertaken. There were some studies that had a poor description of the methodology used (4/8) and design (2/8) although this had little impact on the results. All the studies provided good detail of the assessment undertaken. None of the studies identified an audit trail (0/8); however, seven (7/8) studies provided information on how the data was collected and the findings were related to the participants' answers. Only one (1/8) study did not mention sampling techniques. Methodological detail could have been enhanced for all the studies but none of the results were questioned. As identified with the COREQ 2/8 studies failed to report on reflexivity.

Between study critical appraisal; MMAT (2018) tool (quantitative studies)

All the studies had appropriate aims and objectives but only three (3/4) studies provided a research question. All (4/4) had an appropriate sample size and participants in accordance with the methodology and design undertaken. None of the studies highlighted the confounders accounted for in the design and analysis.

Within study critical appraisal; COREQ (qualitative studies)

The strongest methodological studies were Ammah and Hodge (2005) (scoring 9/13) Qi et al. (2017) and Bryan et al. (2013) (both scoring 8/13) and Haycock and Smith (2011) (scoring 7/13). The weakest study was Morely et al.'s (2005) (scoring 3/13).

Within study critical appraisal; Kitto and Grbich (2008) tool (qualitative studies)

One of the strongest overall studies was Haycock and Smith (2011) as it set out a clear research question, had a thorough justification of the research design chosen and clearly described the sampling technique used. Another strong study was Sato and Hodge (2009). This study also had a clear research question, discussed why the chosen research design was selected, clearly stated that it had obtained ethical approval and presented a good case for the transferability of results. One of the weakest studies was Morley et al.'s (2015) as the research design was not clearly justified, no audit trail was presented, and the study lacked reflexivity.

Within study critical appraisal; MMAT (2018) tool (quantitative studies)

All the studies provided a strong rationale for their chosen methodology. Only one (Heagele, Zhu and Davis, 2017) did not provide a research question and provided only the aims and objectives of the study.

Appendix 5: Synthesis of Results

2.1 PE teacher's internal processes

This theme represents the thoughts and perceptions of PE teachers. It was represented by two codes; namely (a) self- confidence and self-belief; and (b) understanding the need for inclusion.

2.1.1 Self-confidence and self-belief

The results of this review have shown that PE teachers weigh their pedagogical success against their confidence level and years of experience. Eight studies (8/12) supported this code and presented content in relation to teachers' self-confidence about delivering inclusive PE lessons.

PE teachers relate their self-confidence to various factors including uncertainty, lack of knowledge related to disability and type of disability. As noted by a PE teacher in Sato and Hodge (2009, pg. 168), *"I do not have any confidence at all. I have attended workshops, which deal with disability but who knows the best way to teach? It depends on the disability. When I thought that this is the best solution, he [student with disabilities] may feel my solution is completely off base"*. Teachers' confidence level was also linked to their years of teaching students with disability (3/12, 25%). It was noted that, as the years go by, teachers would equip themselves with more courage and confidence. A PE teacher in Ammah and Hodge's (2005, pg. 48) study stated that *"...when you first do it [teach SwSD] you are a little worried about whether or not you can handle it"*. Furthermore, teachers across the studies noted that the more severe the disability, the less confident they feel as they would not know how to adapt lessons to suit their students' needs, especially if the class size does not allow for individual attention: *"I have weak confidence in teaching students with disabilities in a huge class size"* (Qi, Wang and Ha, 2017, p.94). Teachers also related their lack of self-confidence to the lack of support provided by the school and to the lack of resources available in schools (2/12, 16.6%). Lastly, two (2/12, 16.6%) studies stated that practical experience with a positive lesson outcome resulted in improved confidence and an improvement in the teacher's perception of inclusive PA.

2.1.2 Understanding the need for inclusion from the PE teacher's perspective

This code identified the importance of inclusion as perceived by PE teachers. The main focus of this code was to understand whether PE teachers believe that inclusion is the best learning environment for every student with ID. PE teachers identify certain changes that need to be done to their working conditions. Eleven (11/12) of the studies within this review discussed content related to this code.

Most PE teachers believe that inclusion is part of their duty. For instance, one PE teacher stated: *"As a teacher, I have a responsibility to receive all of the students, whether they are students with good sports abilities or students with disabilities. This is my duty."* (Qi, Wang and Ha. 2017, pg.95). As a result, to enable inclusion, PE teachers make particular requests. Six studies (6/10) identified the need for better working conditions, such as more time to plan for lessons (4/10), more support by the school (4/12) and better resources (3/12). Further to this, three studies (3/12) highlighted PE teachers' concern that inclusion might not benefit every student in class: *"I am saying they can be included, I am not saying it is always in their best interests to include all"* (Morley et al., 2005, pg. 93). Thus, further investigation should be carried out on this issue.

2.2 Psycho-social factors

This theme concerns the interpersonal and intrapersonal processes and support mechanisms adopted by PE teachers, LSEs, and students with and without ID. It was represented by four codes, including; (a) PE teachers' relationship with LSEs, teachers' assistants (TAs) and adapted physical education teachers (APEs); (b) effects of inclusion on typically developing students; (c) effects of inclusion on students with ID; and (d) turning to other colleagues for support.

2.2.1 PE teachers' relationship with LSEs, TAs and APEs

This code illustrated that PE teachers still have mixed feelings about having LSEs and TAs in class. Studies identified that both PE teachers and assistants wanted to work together as a team; however, PE teachers have some reservations and concerns when asked to work with LSEs. Eight (8/12) of the studies within this review discussed content related to this code.

PE teachers interviewed in Morley et al. (2005) stated that LSEs should assist in academic subjects rather than in PE lessons. A PE teacher in Haycock and Smith's (2011) study, however, stated that working with LSEs is a blessing as they give a good helping hand: *"They're generally really helpful"* (pg. 844). A PE teacher in Sato and Hodge's (2009) study stated that an LSE is mostly needed if the student's disability is severe as this scenario creates *"anxiety in physical education class"* (pg. 169). Six studies (6/12) listed the benefits of having LSEs in PE classes. To have a good working relationship with the LSE, it was stated that the LSE should be "enthusiastic" (Haycock and Smith, 2011, pg. 844), should be prepared to share class responsibilities and supervise students with ID (Qi, Wang and Ha, 2017, pg. 94) and should fall in line with the PE teacher's pedagogical style. As noted by one of the teachers interviewed in Haycock and Smith (2011): *"One of the strengths of the TAs [teaching assistants] is the fact that they do liaise with the staff well and we do talk about what we are going to do and we do plan for them and incorporate them into the lesson"* (pg. 844). LSEs in Maher's (2016) study stated that they would like to be more involved in the planning phase of the lesson as they know the students better than the PE teachers and would be able to provide them with useful suggestions and ideas: *"Because we usually spend more time with specific students we sometimes have a better insight into them than some teachers"* (pg. 274).

On a negative note, a PE teacher interviewed in Haycock and Smith (2011) stated that, at times, LSEs are not really motivated to assist students in PE: *"Some of them are sort of reluctant to ... come out and if it's cold it's like 'I think she [a pupil] will be alright today, do you?' Or they just sort of turn up when you're just about to start your lesson."* (pg. 845). One (1/12) article stated that female PE teachers were more welcoming and worked better with the LSE provided by the school. As noted in one of the observations in Bryan, McCubbin and van der Mars (2013): *"The female physical education teacher talked to the special education students and the paraeducator [LSE] and had an overall more positive learning environment in contrast to the male physical education class"* (pg. 173).

2.2.2 Effects of inclusion on typically developing students (TDS)

The results of this review show that, according to PE teachers, inclusive PE presents both positive and negative experiences for students without disability. These experiences were tackled by 6/12 articles.

Three (3/12) studies state that inclusion has a positive impact on students without disability. Some support students with ID out of their own initiative: *“I have kids going out of their way to be helpful and kind to them [SwSD]”* (Ammah and Hodge, 2005, pg. 48). Others organise sports days and activities specifically for their peers with disability (Sato and Hodge, 2009). Moreover, to assist students with disability and challenge students without disability two (2/12) articles discussed the use of the buddy system, where students with and without disability pair up and work together during the PE lesson.

However, three (3/12) articles stated that students without disability might get frustrated in an inclusive PE lesson as they would want to compete, and they believe that their peers with disability might hinder or weaken the level of competition due to their lack of ability. As noted by a PE teacher interviewed in Morley et al. (2005, pg. 92): *“Children get quite frustrated with a child that they can’t participate as well as them and it might put them off participating”*. Another concern highlighted in one of the studies (1/12) was that students without disability tend to lower their ability level to match the ability of their peers with disability to help them feel included. Behavioural issues was another negative aspect of inclusion highlighted in this code. Two (2/12) studies pointed out that TDSs would bully students with ID and belittle them due to their lack of ability to perform certain tasks. As noted in Qi, Wang and Ha (2017): *“Students nowadays are often self-centred and tend to exclude their peers with disabilities. When their peers with disabilities cannot fulfil some skills, they often laugh at them or bully them”* (pg. 94).

2.2.3 Effects of inclusion on students with ID

This code concerns the impact of inclusive PE on students with ID. It highlights the beneficial aspects as well as the negative impact that such a setting presents to students with ID from the PE teachers’ and LSEs’ perspective. Nine (9/12) studies within this review supported this code.

Teachers and LSEs teaching general PE classes believe that an inclusive setting presents students with ID with several benefits (2/12), from improving self-esteem and confidence (Haycock and Smith, 2011, pg. 846) to feeling accepted in society (Qi, Wang and Ha, 2017). However, for inclusion to be beneficial, teachers should be willing to adapt lessons and build a positive relationship with the students so that the latter would feel comfortable asking teachers for assistance. Two (2/10) articles suggest that inclusion is not always beneficial as the benefits depend on the students' conditions and severity of their disability. A teacher, interviewed in Hodge et al. (2004, pg. 407), stated that *"there are some students with disabilities who really have a tough time"* and that the students' level of independence played a vital role in this aspect: *"Tommy's lack of independence, due to the severity of his disabilities, hindered his full participation in activities"*. LSEs in Maher (2016) emphasised the importance of differentiated learning as only this could create a positive learning environment for their students. However, as noted by a teacher in Sato and Hodge (2009), it is important to keep in mind that students with ID might not want to participate in PE (pg. 169). Thus, it is important to further examine the students' desire for inclusion as forcing this setting could backfire and result in unwanted behaviour.

2.2.4 Turning to colleagues for support

This code illustrates the importance of working in a team environment. Thus, the importance of having schools equipped with a positive support mechanism for PE teachers. 5/12 studies within this review supported this code.

Five (5/12) studies stated the importance of having collaborative colleagues who are willing to assist PE teachers when they struggle to include everyone in a lesson. Such colleagues would present PE teachers with useful knowledge, gained through their own experience and resources, to make inclusion more positive and feasible. As noted by one of the teachers interviewed in Qi, Wang and Ha (2017, pg.96): *"When students with disabilities are in my PE classes, I generally find my peers who joined the disabilities courses to seek some suggestions, or to determine if we can cooperate to adequately meet their learning needs"*. It would be interesting to investigate the support mechanism in schools. As noted in Sato and Hodge (2009) other colleagues are valuable resources that should be available in schools.

2.3 The environment

This theme concerns PE teachers' lesson conditions. It was represented by two codes, namely: (a) number of students in class; and (b) LSEs knowledge on PE and PA.

2.3.1 Number of students in class

The results of this review have shown that PE teachers often struggle to deliver an inclusive PE lesson as teachers are forced to teach overcrowded classes, making it difficult to support every student in class individually. This concern was presented in 7/12 articles.

Teachers frequently complain about class-size, as it presents them with several barriers. One of main barriers, mentioned by a PE teacher in Ammah and Hodge (2005, pg. 49), is that such an environment does not allow them to give students individual attention: *"They [SwSD] need that extra help from you and you really don't have the time because you have 25 or 30 students and ...can't devote all your time to that one person"*. As stated in one of the studies (1/12), this could create a negative experience for both teachers and students as it makes it difficult for the teacher to deliver differentiated learning and propose adaptations. This resulting downtime could lead to misbehaviour and students becoming demotivated. Another concern mentioned in the study was that, since classes are overpopulated and teachers find it difficult to adapt their lessons, they would start questioning their pedagogical style, whether they are doing a decent job and, ultimately, whether they are reaching every students' needs without neglecting the TDSs: *"It's [inclusion] more taxing on me to plan a lesson ...I have real concerns about integrating a pupil with a disability fully and ensuring it isn't to the detriment of others"* (Smith, 2004, pg. 45). However, 1/12 studies stated that these barriers and concerns could be tackled if schools presented students and PE teachers with support from LSEs.

2.3.2 LSEs' knowledge on PE and PA

This code emphasises the importance of having LSEs assisting the PE teacher who are knowledgeable in the subject and motivated. The results show that such knowledge would build more trust between PE teachers and LSEs, which would result in a

healthier inclusive environment. Only 4/12 studies within this review supported this code.

The LSEs' knowledge of PE is as important as the teachers' knowledge of disability studies and adapted PE techniques. PE Teachers are not willing to work with LSEs (1/10) who lack knowledge of PE especially if the LSE is not willing to acquire such knowledge. A PE teacher stated that "*there is no point*" of having LSEs in class if they are not aware of how to assist students in PE (Haycock and Smith, 2011, pg 845). This was further discussed in Maher (2016) who noted that 71% of the LSEs within the study did not feel comfortable assisting students in a PE setting as their training was inadequate. This does not mean that LSEs are not willing to learn and acquire skills but they are not always given the opportunity. As noted by one of the LSEs in Maher (2016): "*I have never been offered this. I would most certainly love the chance to have PE-specific training in my role as LSA*" (pg.271). One study (1/12) noted that when PE teachers recognise that the LSEs have positive attributes and the motivation to really assist in class, they are not averse to sharing class responsibility. As stated by one of the teachers interviewed in Haycock and Smith (2011, pg. 843) about an LSE: "*He is a coach in lots of different sports and he actually trained to work with these students ... So we want to utilise him as much as we can, rather than just try and do it ourselves all of the time*". Assistance from LSEs has several benefits ranging from good behavioural management in class to the possibility of having one-to-one support for students with ID. It also allows teachers to group students and have the LSE support one of the groups (1/12). One (1/12) study stated that some LSEs voiced concern about supporting PE teachers because they would be learning by doing, thus gaining knowledge through experience, which might hinder the students' experience rather than assist them.

2.4 Politics

This theme concerns all the decision making related to the students' educational life, PE structure and teacher preparation. It was represented by three codes, namely: (a) the Individualised Educational Program (IEP) and decision making; (b) the curriculum; and (c) training and teacher preparation.

2.4.1 School support, IEP, and decision making

This code illustrates the need for schools to provide PE teachers with relevant and necessary support to enable inclusion in PE. It highlights the school support system provided to PE teachers, suggesting that the value of the subject within the school system against other academic subjects is weak and less importance and support is given to PE than any other academic subject. Moreover, it emphasises the importance of including PE teachers in decision making and IEP sessions to provide teachers with all the necessary information related to the students with ID prior to teaching them. Nine (9/12) studies within this review supported this code.

Three (3/12) studies found that school representatives believe there is no need to have LSEs supporting PE teachers during lessons. As noted in Maher (2016), schools tend to prioritise assistance and financial support for core subjects over secondary subjects such as PE. One (1/10) study noted that LSEs are immediately assigned to assist subject teachers and students in subjects other than PE. Schools tend to prioritise core subjects as these subjects lead them to academic achievements and this lessens complaints by the parents regarding “*exam results ... and government targets*” (Maher, 2016, pg. 268). As noted by one of the teachers in Morley et al (2005, pg. 94): “*In other curriculum areas they get maybe 3 LSAs in a class for their reading and writing skills. If we request them in PE we do get them but it is pretty much that we are not high priority*”. Another teacher in Haycock and Smith (2011, pg. 845) stated that: “*PE is like the dumping ground, the bottom of the pile ... Some kids do have like a learning support assistant with them, but we rarely do in PE.*”.

Four (4/12) studies listed the need for PE teachers to be given prior information about students so that they will be able to plan for the lesson accordingly. The lack of information provided by the school and the Special Education Need (SEN) departments creates anger and frustration among teachers as they would not be prepared for and would not be able to include students with ID during the lesson. As one teacher pointed out “*[the] school did not provide us with documents relevant to students with disabilities. Thus, I did not know about the presence of students with disabilities. I felt frustrated when I could not teach them. If the school can earlier convey in advance the precise message about the students with disabilities to me, then I can make adequate preparation*” (Qi, Wang and Ha, 2017, pg. 97). Two (2/12) studies

discussed the importance of having the possibility of purchasing special equipment if needed as not having specialised equipment could result in an unsafe environment. Another study (1/12) discussed the importance of involving PE teachers in meetings with the SEN department as this would assist teachers “*incorporate the special needs children*” within their lessons (Morley et al., 2005, pg.100).

Three (3/12) articles highlighted the importance of involving PE teachers in IEP sessions and decision making. During IEP sessions, PE is rarely considered as decisions are taken within a “*whole-school framework*” (Morley et al., 2005, pg. 95), and may not be relevant or specific to PE as, in PE, students are faced with different scenarios that incorporate different social, physical, and relational interactions, as stated in one (1/12) study. Thus, as noted by one of the teachers interviewed in Haycock and Smith (2011, pg. 841), the IEP team should dedicate some time to devise a plan for the PE setting not focus solely on the classroom environment: “*Like their IEPs (Individual Education Plans) ... they are sort of saying ‘They [pupils] should do this. They should sit at the front’. And we’re like, ‘Well, we don’t work ... like that. We don’t have people sitting at the front’. We don’t have like one-to-one discussions about it ... You’re just given it [information about pupils’ needs] ... the first day back ... I just keep it in my drawer.*” Furthermore, as noted in Hodge et al. (2004), PE teachers believe that the link between the IEP team, school administration and themselves should be improved to provide teachers with tools that would help them to be more efficient when teaching students with ID in an inclusive setting (1/12). As noted by Hodge et al. (2004, pg. 409): “*Lack of such effective communication was viewed as adversely impacting their efficacy in teaching students with disabilities*”. Having the right information would provide teachers with tools to be more efficient and effective when planning and teaching students with ID (1/12).

2.4.2 Curriculum

The results of the review show the importance of having a flexible curriculum to allow teachers room for adaptation. The curriculum should not be designed only for high achievers as this would defeat the purpose of inclusion. This concern was presented in 4/12 articles.

Unfortunately, PE teachers believe that they are not practicing inclusion successfully in PE as the curriculum lacks flexibility. The curriculum in many schools does not always allow room for modification and differentiated learning and this often results in integration not inclusion (4/12). As noted by one of the teachers in Smith (2004, pg. 47): *"We have a lad who, because of his disability, cannot do a lot of PE. He (can) do table tennis so we integrate him by getting the table tennis stuff set up next to where others in the group are playing (a different activity) ...and get him to play with a friend ...but that isn't inclusion"*. Two (2/12) studies presented a concern related to assessment. Teachers are bound to assess students; however, the assessment criteria are difficult for students with ID to meet and, thus, grading these students according to these criteria is unjust. A teacher in Qi, Wang and Ha (2017, pg.96) states that: *"This aspect does not mean that they never try to learn, but their motor performance is far from the ordinary curriculum standards. I worry that this bad grade will have a negative feedback on them."* Moreover, a teacher in Sato and Hodge (2009) expressed her concern about which skills students with ID should be graded on. This concern demands further investigation if students with ID are to be successfully included in the PE educational system.

2.4.3 Teachers' training and preparation

The results of this review highlight the importance of having PE teachers specifically trained in inclusive PE and providing PE teachers with hands-on experience in their university years as students. This concern was presented in 9/12 articles.

The teachers who participated in the studies reviewed stated that, at times, they struggle to adapt lessons (3/12), as they lack preparation and knowledge (4/12) and experience (2/12) in the field of adapted PE. One of the participants in Sato and Hodge (2009, pg. 169) stated that their training had not been adequate: *"What I want to learn is away to eliminate the [learning] gap [between students with and without disabilities]"*

and put the learning environment together, then social interaction, motor performance, etc. That is what I want to learn". Moreover, two (2/12) studies stated that, what training PE teachers did receive in this area was not sufficient to help them in the real world of teaching inclusive PE. One (1/12) study also stated that teachers are unaware of how to use special equipment provided for adapted physical education activities. Thus, it is essential that schools provide teachers with continuing professional development (3/10) as these *"workshops could enhance their ability to implement inclusive PE programmes"* (Qi, Wang and Ha, 2017, pg. 95). Even LSEs believe that PE teachers should reinforce their knowledge and follow specific training in APE to implement inclusion in PE through differentiation (Maher, 2016).

2.5 The lesson

This theme concerns pedagogical aspects and the value given to PE as opposed to other subjects. It was represented by two codes, namely: (a) possibility of APE (b) mixed ability classes.

2.5.1 Possibilities of APE

This code highlights PE teachers' and LSEs' perception and concerns regarding the possibility to adapt lessons to include every student in class. 7/12 of the studies within this review supported this code.

The first barrier to inclusive PE was shared by four (4/12) studies. These studies suggested that PE teachers prefer teaching individual sports in an inclusive setting rather than team sports. This is because team games present students with more challenges, as noted by a teacher in Morley et al. (2005, pg. 97-98): *"The team situations, the game situations, okay with the skills that's fine but when they're actually put into a game situation if their level of learning isn't, if that's the inability they get lost, they get confused, it's frustrating for them then because they don't know where they're supposed to be within the spatial awareness of things"*. In fact, one (1/12) study noted that, in such situations, PE teachers prefer splitting the class into smaller groups and having students with ID practice the same skills as their TDPs with their LSE. However, as a teacher in Smith (2009) notes *"inclusion would mean planning your lesson to include everybody"*, that is, adapting activities so that everyone plays together (pg. 46). Segregating or giving students with ID different activities than their peers would result

in “*integration*” (Smith, 2009, pg. 46). This interpretation was also given by an LSE in Maher (2016). The LSE stated that teachers should plan and run the lesson in an inclusive manner by “*vary[ing] the lessons to fit individual needs*” (pg. 273). This could be easily handled with the help of the LSE. However, as noted in one (1/12) study, time constraints and timetable load do not allow teachers and LSEs to get together to discuss and plan accordingly. Other reasons hindering adapted lessons could be lack of equipment, lack of knowledge and lack of support (3/12)

Teachers showing empathy and who are tolerant are more inclined to have a positive attitude to adapting their lessons (1/12). A teacher in Hodge et al. (2004, pg. 409) stated that: “*The best way in overcoming barriers is being creative*”. This implies that inclusion can occur across the curriculum as long as the teacher is motivated to adapt the lessons (3/12).

2.5.2 Mixed ability classes

The results of this review highlight the different concerns related to mixed ability classes, from discrimination, lack of equality in class and assessment problems. They also point out the importance of informing PE teachers and LSEs about the students’ conditions as lessons should not have a one-size-fits-all structure but should be adapted to reach every student in class, irrespective of their ability. This code also points out the importance of having a motivated PE teacher when it comes to teaching in an inclusive setting. This concern was presented in 5/12 articles.

Four (4/12) studies suggested that not every condition could be included in an inclusive setting as not every student can perform every skill in the curriculum. Thus, inclusion depends on the level of the student’s disability and condition (2/12). One teacher in Hodge et al. (2004, pg. 410) spoke about the frustration he felt when one of his students with ID could not be fully integrated due to her condition: “*I usually just have her [Julie, a student with Prader Willi Syndrome] go for a walk and that seems to be the best activity she can get.*” A teacher in Bryan, McCubbin and Van Der Mars (2013, pg. 174) stated that inclusion becomes “*hard because sometimes you forget what their limitations are and you want to be able to show them more than they can really take on.*”

One (1/12) study stated that motivated teachers look forward to teaching mixed ability classes as they like the challenge and are willing to repeat instructions and tasks when requested and keep students active during class. Six teachers in Hodge et al. (2004, pg. 403) underlined the importance of having students on task as an effective behaviour management strategy. Three (3/12) studies discussed the assessment procedure in mixed ability classes. PE teachers find it difficult to assess all of the students in class against the criteria set and many only grade mainstream students. Teachers create a positive inclusive environment by matching students with disability with students without disability to promote peer learning and peer assistance (1/12).

Lastly, LSEs feel that their students are being discriminated against by both the PE teachers and the students in class as the environment is unwelcoming and hostile (1/12). As noted by an LSE in Bryan, McCubbin and Van Der Mars (2013, pg. 175): *"Sometimes I have some frustrations with regular teachers not being open and willing to kind of have their kids welcome my kids in their classroom"*. Furthermore, LSEs noted that, although students with ID are included in class, they still work alone. This implies that inclusion is not occurring (1/10).

Appendix 6: Rationale for using Qualitative Research

Qualitative Research

Qualitative research is very complex to define as it means different things to different researchers (Smith and Caddick, 2012; Smith and Sparkes, 2019) but all agree that the main aim of qualitative research is to explore and interpret individuals' experiences, feelings and emotions using non-numerical data (Gratton and Jones, 2004; Smith, 2008; Willig, 2008). It produces factual data (Taylor, Bogdan and DeVault, 2015) by interpreting meaning (Chesebro and Borisoff, 2007; Smith, 2008; Smith and Sparkes, 2019) and "social experiences" (Smith, 2008, pg. 2). The qualitative research approach encompasses a range of methodologies and tools (Smith and Sparkes, 2019) that are used to obtain a deeper understanding of the phenomena being investigated (Denzin and Lincoln, 2011). To fully understand qualitative research, one must first understand the mechanisms and key characteristics of different methodological approaches (Smith and Caddick 2012; Taylor, Bogdan and DeVault, 2015). Taylor, Bogdan and DeVault (2015) present eight common tenets of qualitative research which are presented below.

First, according to Taylor, Bogdan and DeVault's (2015) list, qualitative research should represent the participants' thoughts from their own perspective. As Smith and Caddick (2012, pg. 61) state, qualitative research focuses "on subjective meanings" that are developed through the participants' complex societal and cultural habitat. Thus, qualitative researchers should be unprejudiced and empathetic to truly understand the participants' experiences (Jackson, Drummond and Camara, 2007; Taylor, Bogdan and DeVault, 2015).

Second, qualitative researchers should not limit themselves to describing participants' meanings but should delve to uncover complex meanings and interpretations (Smith and Caddick, 2012). Thus, a central tenant of qualitative research is to develop "concepts, insights, and understanding from patterns in the data rather than collecting data to assess preconceived models, hypotheses, or theories" (Taylor, Bogdan and DeVault, 2015, pg. 8). The researcher embarks on a journey to explore the participant holistically in the context of their community (Smith and Caddick, 2012). Researchers adopting a qualitative approach should network and connect with their participants in

an open and natural fashion were nothing is overseen or taken-for-granted (Taylor, Bogdan and DeVault, 2015).

Third, the authors suggest that the qualitative researcher embark on a journey with the participant to help them achieve a thorough understanding of an individual's emotions and feelings, struggles and challenges. When collecting numerical data, the researcher may fail to identify and weigh certain aspects of the study participants' life experiences (Taylor, Bogdan and DeVault, 2015). To make it possible to achieve this holistic experience, a small participant sample is required (discussed later in this chapter) (Willig, 2008; Smith and Caddick 2012).

Fourth, Taylor, Bogdan and DeVault (2015) state that the qualitative researcher should investigate the participant in their natural setting to explore their "lived social realities" (Jackson, Drummond and Camara, 2007, pg.21). Fifth, it is imperative that the researcher explores every aspect of the field being investigated. For example, in this research study, it was important to investigate the perceptions of the PE teacher and LSEs and stakeholders as well as students with ID. Every member and stakeholder of the community should be examined to truly understand the participants' social reality (Taylor, Bogdan and DeVault, 2015).

Sixth, the authors stress the importance of keeping the connection between the data gathered and the community and of witnessing knowledge through an "unfiltered" lens in a "systematic" but flexible manner (Taylor, Bogdan and DeVault, 2015, pg.10). Seventh, Taylor, Bogdan and DeVault (2015) emphasise the fact that it is important to keep the aim and objective of a research study in mind and to acknowledge that everyone within the social setting under investigation is valuable. Rahman (2017, pg.103) states that qualitative research has "multiple aspects". Thus, in this study, it was essential to give students with ID, PE teachers, LSEs and educational and government stakeholders space to discuss their perceptions. Eight, the authors suggest that a researcher embarking on qualitative research should be rigorous but adaptable, adhere to particular guidelines but not rules and be autonomous (Taylor, Bogdan and DeVault, 2015). For the purposes of this research, although I had a preset list of interview questions, I adapted the questions and prompted the interviewees, when necessary, especially when interviewing students with ID. Also, since students

with ID dislike sitting down, I made sure to give them frequent breaks during the interview to make them feel comfortable.

Advantages of using qualitative research

My choice of adopting a qualitative approach for my study led to a number of advantages. Qualitative research gave me the possibility to understand and explore the students with ID's experiences in PE, PA and sports during and after school activities. The use of flexible and open-ended questions during the semi-structured interviews (discussed later in the chapter) gave students with ID the space and opportunity to explain and discuss their social realities from their own perspective, thus giving this vulnerable population a voice. Throughout our conversations, I was able to delve into complex and fruitful discussions that helped me understand what students with ID go through and how they are viewed by the wider community.

To gain a fuller picture of the current situation relating to inclusive PE, PA, and sports, both PE teachers and LSEs as well as educational and government stakeholders were interviewed. This gave me the opportunity to take a holistic approach and look at various aspects that make up the community under investigation. Another advantage of using the qualitative research approach was that, during the interviews, I could take note of the participants' tone of voice and facial expressions, which gave a deeper meaning to the data being collected. Lastly, on the basis of the rich data gathered from the students with ID (Phase 1) and the PE teachers and LSEs (Phase 2), I was able to discuss the inclusive PE, PA, and sport situation with educational and government stakeholders (Phase 3) to identify loopholes and be able to put forward recommendations.

Appendix 7: A Pragmatic Paradigm

A Pragmatic Paradigm

After carefully considering the purpose of my research study, I decided that a pragmatic philosophical paradigm with an inductive research approach would assist me best in achieving my goals and answering my research questions. The American philosophers who founded and developed the pragmatic research philosophy in the 20th Century, including Pierce, James, Dewey, Mead and Green (Patton, 2014), initiated their doctrine with a stance that rejected the “traditional assumptions about the nature of reality, knowledge and inquiry” used in social and educational research (Kaushik and Walsh, 2019, pg.3). Although each philosopher put forward different theories and knowledge, a central aspect of their work was an emphasis on the fact that the “truth is verified and confirmed by testing ideas and theories in practice” (Patton, 2014, pg. 243).

Derived from the Greek word “pragma”, meaning action or practice (Kalolo, 2015, pg.155; Kaushik and Walsh, 2019; Rosenthal and Thayer, 2020), pragmatism suggest that an individual’s behaviour and actions reflect previous experiences (Morgan, 2014a; Kaushik and Walsh, 2019). According to the pragmatist academics, no external factor will affect action or progression, as an individual’s action stems from the individual’s knowledge and understanding (Morgan, 2014a). Thus, adopting a goal-oriented approach, pragmatism uses a practical stance to investigate and resolve current issues through personal experiences (Kalolo, 2015). Adopting Dewey’s philosophy, Morgan (2014a) states that an individual starts to acquire knowledge through action from a young age. The results of their actions will be reflected upon for future decisions and future actions. Furthermore, pragmatists believe that reality and the world are “not static” (Kaushik and Walsh, 2019, pg.3); reality is constantly changing according to the situation one is in and the actions adopted (Goldkuhl, 2012; Kaushik and Walsh, 2019). However, although reality is volatile and affected by the environment, pragmatists believe that an individual’s reality still depends on the individual’s experiences which are portrayed in actions (Kaushik and Walsh, 2019). Hence, action in the philosophy of pragmatism, plays a central role as “action is the way to change existence” (Goldkuhl, 2012, pg. 139).

Kivunja and Kuyini (2017) suggest that the pragmatic paradigm supports a more flexible epistemological perspective which moves away from the “metaphysical” perceptions related to “truth and reality” (Kelly and Cordeiro, 2020, pg. 1) and adopts a more practical investigation in exploring and addressing factual and specific issues (Patton, 2014). Therefore, pragmatism, as opposed to other research philosophies, moves away from specific tenets, notions, and theories, but provides the researcher with a “working point of view and a specific way to understand and address problems” (Kalolo, 2015, pg. 155). Thus, for pragmatists, reality and the truth are only positive if they match individuals’ previous experiences and help them achieve their goals (James, 2004). For this reason, researchers using this paradigm are free to choose any methodology they deem best for their study (Creswell, 2013) as pragmatists believe that there is no one best way to do research (Creswell, 2013; Morgan, 2014b). The pragmatist is free to explore the phenomenon being investigated without being forced to use a specific methodology (Creswell, 2013; Kaushik and Walsh, 2019). This is achieved through knowledge, reasoning based on previous experience and a deep analysis of the current situation (Morgan, 2014b; Kalolo, 2015) to identify the ideal tool to reach the researcher’s goal (Kaushik and Walsh, 2019). Thus, for a pragmatist, the truth is not certain, as our lives and experiences change and what is positive today may be negative tomorrow (Kalolo, 2015). This highlights another key characteristic of pragmatism, which is that this paradigm adjusts according to current needs (Kaushik and Walsh, 2019) and focuses “on the outcomes of the research – the actions, situations, and consequences of inquiry – rather than antecedent conditions” unlike post-positivism (Creswell, 2013, pg. 28).

Dewey’s idea of pragmatism was to embark on an inquiry which explores “some part of reality”, with the aim of “creating knowledge for a controlled change of this part of the reality” (Goldkuhl, 2012, pg. 139). Dewey defines this inquiry as a form of “self-conscious decision making” which requires “thoughtful reflection” (Morgan, 2014b, pg. 2). Using Dewey’s philosophical roots and the key concepts of pragmatism enshrined in the “theory of inquiry” (Dewey, 1938, pg. 97), in Phase 1 I explored students with ID’s experiences of inclusive PE, PA, and sports (reality) to establish new knowledge and understanding for a better inclusive PE, PA, and sports community. My goal was to understand how to improve students with ID’s sports experiences in and outside

schools by also understanding the community (PE teachers and LSEs - Phase 2 and educational and government stakeholders - Phase 3). Also, my study adopted a community-based action research approach (discussed later in the chapter) to provide a platform through which participants could voice their concerns regarding inclusion in PE, PA, and sports, with the main goal being to generate action. Kalolo (2015, pg. 157) believes that the pragmatists' aim is to "find solutions that make the most sense in the simplest way possible". For these reasons, I felt that the pragmatic philosophical approach would best suit my research as it allows room for inquiry in a way which permits the exploration of the topic using a holistic approach.

Dewey (1983) highlights the importance of embarking on this journey of inquiry without prejudice and with an open mind to generate knowledge which represents the now. Although our future might be the reflection of our past, Dewey (1983) believes that inquiry can create a different outcome from the past, as life is continuously changing through different experiences. Morgan (2014a), keeping Dewey's philosophy at the core of his work, suggests three characteristics which are shared by pragmatists (see Table 5 below).

Table 5: Shared Characteristics of Pragmatists (Morgan, 2014a, pg26-27)

Characteristic	Definition	Implication
"Actions cannot be separated from the situations and context in which they occur"	This reflects on the experiences we live, which are not the truth, but provide us with a "warranted assertion" (Dewey, 1938, pg. 9) that is projected by repeated actions in known territory, resulting in "predicted outcomes" (Morgan, 2014a, pg. 26).	Understanding the lived experiences of the participants making up the three phases is essential to understanding their actions and behaviour towards inclusive PE, PA, and sports.
"Actions are linked to consequences in ways that are open to change"	Since the world is constantly changing, it is difficult to experience something more than once; therefore, our "warranted assertion" (Dewey, 1938, pg. 9) about the predicted outcome is	Students with ID process instructions and information differently. So, understanding the strategies used by PE teachers and LSEs in inclusive PE, PA, and

	temporary. Thus, our knowledge (beliefs) are constantly changing due to the constant change in experience (Morgan, 2014a).	sports is essential to determine different pedagogical tools and styles to use for a positive inclusive learning environment.
“Actions depend on worldviews that are socially shared sets of beliefs”	Everybody is unique; thus, experiences vary from one individual to another. However, as individuals, we can still share similar experiences with others, hence actions will be similar with similar predicated outcomes (Morgan, 2014). Therefore, for actions to be similar in a given situation, our beliefs should be similar as well (Kaushik and Walsh, 2019).	Students with ID will share views and experiences which contain similar elements, as will PE teachers and LSEs, educational and government stakeholders, so understanding these shared set of beliefs is important to determine the action needed to change.

It is evident that these characteristics are not encompassed in other philosophical paradigms as they focus on the human experience rather than the “nature of reality” (Kaushik and Walsh, 2019, pg.3). These are the characteristics which were adopted and used as a reference point for my research study.

For a pragmatist, one of the key elements is to identify “what works”, as this provides the framework to come up with a valid research question and “focus inquiry processes at the onset according to how and what respondents identify as working or not working” (Kelly and Cordeiro, 2020, pg. 3).

Appendix 8: Rationale on Sampling Technique and Participants

Sampling Technique and Participants

In qualitative research researchers must delve into the participants' lives to understand their emotions, their life experiences, and the positive and negative aspects of their community (Smith and Caddick, 2012). Qualitative studies often use a small sample size to make it possible to collect rich and deep data (Sparkes and Smith, 2014; Palinkas et al. 2015). Malterud, Siersma and Guassora (2015, p.2) advise choosing the sample size according to "shared methodological principles for estimating an adequate sample" not on the basis of a specific analysis method. From the pragmatists' view point, sample size is not important as long as the chosen participants generate useful knowledge for action (Kelly and Cordeiro, 2020). This is similar to what is noted by information power which was considered a reliable tool to use when determining this study's sample size. The sample techniques adopted by a study should reflect the purpose of the research study (Smith and Caddick, 2012; Leavy, 2017). With this regard information power suggests that, if the study aim is broad, more participants are needed, and if the study aim is narrow, fewer participants are needed (Malterud, Siersma and Guassora, 2015). Furthermore, the stronger and the more detailed the information the selected participants bring to the table, the lower the number of participants needed (Malterud, Siersma and Guassora, 2015). Thus, since my study had a narrow purpose, only a small segment of the desired population needed to be interviewed.

Lastly, a small sample size was deemed to be adequate for this study since the idea behind this CBPR was to explore the lived experiences of underrepresented individuals. This is why, apart from students with ID, I also interviewed PE teachers, LSEs and educational and government stakeholders to capture the students with ID's world through "participants from diverse populations" (NcHugh, 2019).

Appendix 9a: Information sheet phase 1 – Guardians/ Parents

Information Sheet for Participants – Parents/Guardians (Students)

Research Title

Promoting Physical Activity and Sports Participation with Individuals with Intellectual Disability in an Inclusive Setting.

You are being invited together with your daughter/son to participate in an interview as part of a research study related to my PhD studies. Before you decide whether you and your daughter/son will be part of this study, I would like you to understand the purpose of this study what your involvement would entail. Please take time to read and understand the following information carefully. Should you require any further information or clarification, please do not hesitate to contact me on AXD774@student.bham.ac.uk.

About the Researcher

I am Amanda Dimech, a Senior Sport Lecturer 1 working at the Malta College of Arts Science and Technology reading a PhD with the University of Birmingham, UK, under the supervision of Dr Andrew Soundy.

Understanding the Purpose of the Study

The purpose of this study is to enhance understanding and fill in gaps in literature with regards to the area of Intellectual Disability physical activity and sports participation.

The aim of this study is to explore how physical activity and sport participation could be promoted and more inclusive amongst students with an intellectual disability attending mainstream schools (Government, church and independent schools) in Malta, highlighting both psychological and physiological benefits.

The objective is to give students with ID the opportunity to voice out their opinions and desires on the subject matter to reach this population better and create an environment that meets their needs.

Interviews will also be conducted with Teachers, LSEs and physical activity Stakeholders in Malta, however at a later stage.

The data gathered within this study will enhance social awareness in Malta and were possible improve the Physical Activity and Sports industry in Malta, therefore shifting to a more integrated community. Moreover, data is expected to provide a comprehensive understanding of Intellectual Disability and Physical Activity and Sport in the local scene.

Your participation and daughter's/son's input. Can you withdraw?

Participation is on a voluntary basis. Thus, it is entirely up to you as a parent/guardian and daughter/son whether or not to participate. If your daughter/son or yourself will not feel comfortable throughout the process or before starting any data collection, he/she (and yourselves) may choose to withdraw your participation without giving any reason. However, this should be done before any form of data analysis takes place. Withdrawing is simple, all you will need to do is email me on the email provided at the end of this document or speak to me in person. If you choose to withdraw from the study all data collected from your end will be destroyed.

Taking part? What do you and your daughter/son need to do?

For your daughter/son to feel part of the entire process, they will be invited to attend together with yourselves an information meeting. This will be done before signing any consent form. After understanding your participation, you together with your daughter/son will be able to choose whether or not to take part obviously with your signed consent. In order to be able to participate, your daughter/son need to fit the following criteria:

1. Are 12 – 16 years old;
2. Have an intellectual disability;
3. Does not have any physical disability;

If all of the above are ticked and your daughter/son are willing to participate, then you will be requested to sign the consent form. Without this form neither you or your daughter/son will not be able to partake in this research. Please note that siblings will not be able to participate together, thus only one of the siblings will be allowed in this study.

Confidentiality

Rest assured that any data collected will be confidential. Names will be replaced by a participation code (ex. Gov s1). Details provided about your daughter/son will be kept by myself and no other person will have access to this information. Contact with the participants will be done through the school so no personal contact details from your end will be required. Please note that the focus group will be audio recorded to assist me during transcription. All recordings will be destroyed once transcripts are completed.

All data will be stored in accordance with the procedures outlined by University of Birmingham Ethical Review Committee and in accordance with GDPR (2018) (EU General Data Protection Regulation) and the University's Code of Practice for Research. Data gathered throughout this study will be stored in 3 different places. On my personal laptop, external hard disc and the University of Birmingham's BEAR facility for security purposes. Rest assured that data will be secured by a security code to access them for further protection and will only be accessed by myself and my supervisor, Dr A Soundy. This data will be kept for 10 years.

Utilising the data collected

The aim of this research study is to fill in gaps in the existing literature and provide a more comprehensive understanding of Physical Activity and Sports participation of youths with an Intellectual Disability. Results from this study will be published in academic journals, in order to equip educators and stakeholders working within this field with useful tools to promote Physical Activity and Sports in an inclusive and an integrated community.

Any risks related to your daughter's/son's participation

To safeguard students, interviews will be held at their schools so that they will be familiar with the environment and their parents/guardians will be present. To reduce possibilities of discomfort I will be visiting the school and meeting the participants before during the information meeting. Frequent breaks will be given during the interview so that participants would be able to relax and walk around. Moreover, I will follow the school's pastoral, safeguarding and child protection protocols. Parents will

be offered debriefing information, to direct them to school-based and community-based support.

Queries and Results

If at any given time you would like to clarify, ask or complain about anything related to the study, please do not hesitate to contact me. Moreover, you will be receiving a copy of the results obtained from this study through a newsletter. Please be aware that even the school will be given a copy of the results.

Further information and contact details

Dr Andrew Soundy (supervisor)

Email: a.a.soundy@bham.ac.uk

Ms Amanda Dimech

Email: AXD774@student.bham.ac.uk

Thank you for taking your time in reading this information sheet and for considering your daughter's/son participation. Your daughter's/son's participation in this research project is of utmost importance and I am sure that she/he will be able to provide me with valuable data.

Should you wish to participate, please attend the information meeting together with your daughter/son and bring along the signed consent form.

Appendix 9b: Information sheet phase 1 – Students

Information Sheet for Participants and Assent – Students (Students Interviews)

Research Title

Promoting Physical Activity and Sports Participation with Individuals with Intellectual Disability in an Inclusive Setting.

You are being invited to take part in an interview where you will be talking about your experiences in sports and physical activity. Please read and understand the following information.

Who am I?

My name is Amanda Dimech and I would like to learn more from you. At the moment I'm studying at a University in England and I need your help. I like to coach special Olympic athletes and play basketball and football 😊

Why do I need your help?

You are a very important population in Malta and therefore I would like to see how I can make sports and physical activity more fun for you students.

To do so I will need to ask you some questions so that I understand what u like and dislike from the current setting of Sports and Physical Activity in Malta. Do not worry, you can refuse to answer any question and if you do not understand any of the questions, do not worry as I will be more than happy to help you. This is your time to just say what you feel about Sports and Physical Activity.



Confidentiality

Rest assured that any data collected from you will be confidential. You will be given nicknames (ex. Gov s1) so that no one will know who you are.



All data will be stored in accordance with the procedures outlined by University of Birmingham Ethical Review Committee and in accordance with GDPR (2018) (EU General Data Protection Regulation) and the University's Code of Practice for Research. Data gathered throughout this study will be stored in 3 different places. On my personal laptop, external hard disc and the University of Birmingham's BEAR facility for security purposes. Don't worry they all have a secret code, so all your information will be safe. The only people who will be able to see the information will be myself and my supervisors, Dr A Soundy. This data will be kept for 10 years.

Further information and contact details

Dr Andrew Soundy (supervisor)

Email: a.a.soundy@bham.ac.uk

Ms Amanda Dimech

Email: AXD774@student.bham.ac.uk

Thank you for taking your time in reading this information sheet and for considering your participation. Your participation in this research project is of utmost importance and I am sure that you will be able to provide me with valuable data.

Should you wish to participate, please attend the information meeting together with your parents/guardian and bring along the signed consent form.



Assent

Would you like to be part of it?

Now that you know what this study is all about and what you will be doing, would you like to be part of it? If yes please write your full name below, if you don't feel up to it, don't worry thanks just the same.

I _____, agree to be part of this study entitled Promoting Physical Activity and Sports Participation with Individuals with Intellectual Disability in an Inclusive Setting. Date:

Appendix 10: Consent Form

Informed Consent Form (Semi-Structured Interviews)

☐ I have read and understood the purpose of the study presented to me via the Email sent to me.

☐ I understand that this study is designed to gather information regarding promotion of physical activity with students with intellectual disability in an inclusive and integrated environment.

☐ I understand that the only people who will have access to the data collected are the lead researcher and Dr A Soundy (main supervisor)

☐ I understand that my interview will be audio recorded to make a typed transcript for later analysis and reference

☐ I understand that all research procedures have been approved by the University of Birmingham Ethical Review Committee

☐ I was given the opportunity to ask questions about my participation and understand that I can do so at any time throughout the research process by emailing the researcher.

☐ I understand that my participation is voluntary.

☐ I understand that I am free to withdraw from this study without giving any reason as long as data analysis has not been conducted. Notification of my withdrawal should be done to the Researcher via email.

☐

I understand that all the information provided by myself will be kept confidential, and only the Researcher will have access to the data.

☐

I would like to receive a summary of the results at the end of the project

☐

I understand the information I provide could be used in academic publications/conference presentations.

☐

I agree to participate in this study

By entering your full name into the box below, this will indicate to us that you consent to participating in this research

Date _____

Email address _____

Appendix 11: Information sheet Teachers and LSEs

Research Title

Promoting Physical Activity and Sports Participation with Individuals with Intellectual Disability in an Inclusive Setting.

You are being invited to participate in an interview as part of a research study related to my PhD studies. Before you decide whether you would like to be part of this study, I would like you to understand the purpose of this study and what your involvement would entail. Please take time to read and understand the following information carefully. Should you require any further information or clarification, please do not hesitate to contact me on the email provided at the end of this document.

About the Researcher

I am Amanda Dimech, a Senior Sport Lecturer 1 working at the Malta College of Arts Science and Technology reading a PhD with the University of Birmingham, UK, under the supervision of Dr Andrew Soundy.

Understanding the Purpose of the Study

The purpose of this study is to enhance understanding and fill in gaps in literature with regards to the area of intellectual disability and physical activity and sports participation.

The aim of this study is to explore how physical activity and sport participation could be promoted and more inclusive amongst students with intellectual disability attending mainstream schools (Government, church and independent schools) in Malta, highlighting both psychological and physiological benefits.

The objective is to give student with ID the opportunity to voice out their opinions and desires on the subject matter to reach this population better and create an environment that meets their needs. Moreover, to clearly identify barriers and challenges teachers and LSEs face when teaching in an inclusive environment, highlighting the tools used for differentiated learning and requirements for a better teaching/learning experience.

The data gathered within this study will enhance social awareness in Malta and were possible improve the Physical Activity and Sports industry in Malta, therefore shifting to a more integrated community. Moreover, data is expected to provide a comprehensive understanding of Intellectual Disability and Physical Activity and Sport in the local scene.

Your participation. Can they withdraw?

Your participation is on a voluntary basis. Thus, it is entirely up to you whether or not to participate. Rest assured that if you will not feel comfortable throughout the process or before starting any data collection, you may choose to withdraw your participation without giving any reason. However, this should be done before any form of data analysis takes place. Withdrawing is simple, all you will need to do is email me on the email provided at the end of this document. If you choose to withdraw from the study all your data and information will be destroyed.

Taking part? What do you need to do?

I will be contacting you via telephone (due to the COVID-19 pandemic) to give you all the necessary information before signing any consent form. After understanding your participation, you will be able to choose whether or not to take part. In order to be able to participate, you should fit the following criteria (according to your category i.e. teacher, LSE or parent/guardian):

Criteria for Physical Education Teachers
• Teach in government, church or independent school • At least 5 years of experience • Teach in Secondary school only • Teach physical education only • Fully Qualified PE teachers
Criteria for Learning Support Educators
• LSE in government, church or independent school • LSE of participating student • Shared or individual LSE

- In possession of the LSE Diploma
- At least 5 years of experience

If you fit the criteria mentioned above and you are willing to participate, then you will be requested to sign the consent form. Without this form you will not be able to partake in this research.

Confidentiality

Rest assured that any data collected will be confidential. Names will be replaced by a participation code (ex. Gov peteacher1). Details provided from your end will be kept by myself and no other person will have access to this information, making this study confidential but not anonymous as I will require your contact details. Please note that the interview will be audio recorded to assist me during transcription. All recordings will be destroyed once transcripts are completed.

All data will be stored in accordance with the procedures outlined by University of Birmingham Ethical Review Committee and in accordance with GDPR (2018) (EU General Data Protection Regulation) and the University's Code of Practice for Research. Data gathered throughout this study will be stored in 3 different places. On my personal laptop, external hard disc and the University of Birmingham's BEAR facility for security purposes. Rest assured that data will be secured by a security code to access them for further protection and will only be accessed by myself and my supervisor, Dr A Soundy. This data will be kept for 10 years.

Utilising the data collected

The aim of this research study is to fill in gaps in the existing literature and provide a more comprehensive understanding of Physical Activity and Sports participation with youths with Intellectual Disability. Results from this study will be published in academic journals, in order to equip educators and stakeholders working within this field with useful tools to promote Physical Activity and Sports in an inclusive and an integrated community.

Any risks related to your participation

There are no known psychological or physiological risks associated with this research study.

Queries and Results

If at any given time you would like to clarify, ask or complain about anything related to the study, please do not hesitate to contact me. Moreover, you will be receiving a copy of the results obtained from this study through a newsletter. Please be aware that even the school will be given a copy of the results.

Further information and contact details

Dr Andrew Soundy (supervisor)

Email: a.a.soundy@bham.ac.uk

Ms Amanda Dimech

Email: AXD774@student.bham.ac.uk

Thank you for taking your time in reading this information sheet and for considering your participation. Your participation in this research project is of utmost importance and I am sure that you will be able to provide me with valuable data. Should you wish to participate, please accept my telephone call and bring along the signed consent form.

Appendix 12: Consent Form

Informed Consent Form (Semi-Structured Interviews)

- ☐ I have read and understood the purpose of the study presented to me via the Email sent to me.
- ☐ I understand that this study is designed to gather information regarding promotion of physical activity with students with intellectual disability in an inclusive and integrated environment.
- ☐ I understand that the only people who will have access to the data collected are the lead researcher and Dr A Soundy (main supervisor)
- ☐ I understand that my interview will be audio recorded to make a typed transcript for later analysis and reference
- ☐ I understand that all research procedures have been approved by the University of Birmingham Ethical Review Committee
- ☐ I was given the opportunity to ask questions about my participation and understand that I can do so at any time throughout the research process by emailing the researcher.
- ☐ I understand that my participation is voluntary.

☐ I understand that I am free to withdraw from this study without giving any reason as long as data analysis has not been conducted. Notification of my withdrawal should be done to the Researcher via email.

☐ I understand that all the information provided by myself will be kept confidential, and only the Researcher will have access to the data.

☐ I would like to receive a summary of the results at the end of the project

☐ I understand the information I provide could be used in academic publications/conference presentations.

☐ I agree to participate in this study

By entering your full name into the box below, this will indicate to us that you consent to participating in this research

Date _____

Email address _____

Appendix 13: Information sheet Stakeholders/E-mail Recruitment

Dear _____

My name is Amanda Dimech, currently a PhD researcher at the School of Sport, Exercise and Rehabilitation Sciences, University of Birmingham. My research focus is on students with Intellectual Disability and Physical Activity. Mainly on how physical activity can be promoted in an inclusive community integrating every member of the society.

As part of my study, I am seeking to speak with key stakeholders within the field of physical activity, sport, and intellectual disability. Therefore, I would like to ask you whether you would like to contribute by sharing your knowledge and insights on intellectual disability and physical activity and sports participation in the local scene.

Data collection will be done through an interview which will be audio recording. Moreover, should you wish to participate and take the interview, you will be asked to choose day, time and location convenient to you. The interview should not take longer than 60mins.

Rest assured that any data collected will be confidential. Names will be replaced by a participation code (ex. SH1). Details provided will be kept by myself and no other person will have access to this information.

All data will be stored in accordance with the procedures outlined by University of Birmingham Ethical Review Committee and in accordance with GDPR (2018) (EU General Data Protection Regulation) and the University's Code of Practice for Research. Data gathered throughout this study will be stored in 3 different places. On my personal laptop, external hard disc and the University of Birmingham's BEAR facility for security purposes. Rest assured that data will be secured by a security code to access them for further protection and will only be accessed by myself and my supervisor, Dr A Soundy. This data will be kept for 10 years.

Should you require any further information or any clarification, please do not hesitate to contact me on +356 79465741 or via email.

Whilst waiting for your reply I thank you in advance.

Kind Regards,

Amanda Dimech

Appendix 14: Consent Form

Informed Consent Form (Semi-Structured Interviews)

- ☐ I have read and understood the purpose of the study presented to me via the Email sent to me.
- ☐ I understand that this study is designed to gather information regarding promotion of physical activity with students with intellectual disability in an inclusive and integrated environment.
- ☐ I understand that the only people who will have access to the data collected are the lead researcher and Dr A Soundy (main supervisor)
- ☐ I understand that my interview will be audio recorded to make a typed transcript for later analysis and reference
- ☐ I understand that all research procedures have been approved by the University of Birmingham Ethical Review Committee
- ☐ I was given the opportunity to ask questions about my participation and understand that I can do so at any time throughout the research process by emailing the researcher.
- ☐ I understand that my participation is voluntary.
- ☐ I understand that I am free to withdraw from this study without giving any reason as long as data analysis has not been conducted. Notification of my withdrawal should be done to the Researcher via email.

☐ I understand that all the information provided by myself will be kept confidential, and only the Researcher will have access to the data.

☐ I would like to receive a summary of the results at the end of the project

☐ I understand the information I provide could be used in academic publications/conference presentations.

☐ I agree to participate in this study

By entering your full name into the box below, this will indicate to us that you consent to participating in this research

Date _____

Email address _____

Appendix 15a: Pilot Students interview guide with highlighted changes

Interview Guide for Students with ID

1. What are your hobbies?
2. Let's talk about physical activity... what is physical activity for you?
3. What physical activity do you do at school?
4. Do you enjoy physical education?
5. Which is your favourite activity? – This had to be changed to Why do you enjoy PE?
6. Can you identify what you like and dislike in your PE lessons? -This had to change to what is something that you would like to keep in your lesson and what is something that you would do without?
7. Is every student in class included in the same activities during PE lessons?
8. If you had to be a PE teacher, what would you do in your lesson which is different from your present situation?
9. Do you take part in any physical activity besides physical education? – This was changed to Apart from PE lesson, do you do PA out of school? If yes what?
10. Are there any other physical activities you would like to participate in?
11. Do you have any physical activity or sport opportunities in your community or after school?
12. Do you think physical activity is important? If yes, why do you think so?
13. Describe the environment you would like in physical activities. (participants will be given a blank paper and drawing colours to draw their perception of physical activity environment) – Changed due to covid -19 – if you had to be the minister of sports or someone important in charge of sport in Malta what would you change.
14. Do you like participating in physical activity? If not what's keeping you from being physically active?
15. Are you happy with the present situation? If no, what would you change?

Appendix 15b: Pilot PE teachers/ LSEs interview guide with highlighted changes

Interview Guide for PE Teachers:

1. How long have you been teaching Physical Education?
2. What do you believe are the benefits of Physical Education?
3. How large are your classes? Are you comfortable in teaching such numbers?
4. Do you have students with intellectual disability in your classes? If yes, what are the conditions of your students? Do you feel comfortable teaching students with ID?
5. What teaching tools or pedagogical strategies do you use to reach every student in your class?
6. Can you provide an example of a typical PE lesson?
7. How do you interact with your students with ID?
8. What measures do you take when it comes to grouping students in teams?
9. How do students without disability behave around students with disability? How is their attitude?
10. Do you feel that you are knowledgeable enough to teach students of different abilities?
11. What resources/facilities do you use or perhaps require to teach Quality PE?
12. What are your views on inclusion in Physical Education?
13. What are your views on integration in Physical Education?
14. What are the LSEs duties during the Physical Education lesson?
15. What are your views on the Physical Education Curriculum with regards to mixed ability learning?
16. If you were given the possibility to change anything from the curriculum, what would it be?

Interview guide for LSEs:

1. How long have you been a Learning Support Educator?
2. What do you believe are the benefits of Physical Education?
3. Are you placed as a one-on-one basis or a group shared LSE? Do you have any preference? If yes explain
4. What type of ID students do you assist? Are you comfortable in assisting such students?
5. What teaching tools or strategies do you use to reach every student you assist?
6. Do you attend every subject with your student/students?
7. What physical activity exercises do you do with your student/students? – Changed to what PA exercises do you plan or do for your student/s
8. How do you interact and communicate with your student/students?
9. What measures do you take when it comes to grouping students in teams?
10. Do you feel that you are knowledgeable enough to assist students of different abilities? – Changed to do you feel you are prepared to assist students with difference conditions and abilities?
11. What resources/facilities do you use or perhaps require in assisting students in becoming more active during school hours together with their mainstream peers?
12. What are your views on inclusion in Physical Education?
13. What are your views on integration in Physical Education? - Asked these questions together – what are your views on inclusion and integration in PE.
14. What are the LSEs duties during the Physical Education lesson?
15. What are your views on the Physical Education Curriculum with regards to mixed ability learning?
16. If you were given the possibility to change anything from the curriculum, what would it be?

Appendix 15c: Pilot Educational/ Government interview guide with highlighted changes

Interview Guide Educational Stakeholders:

1. How long have you been working as [job title]?
2. Where you always located in the same school?
3. What is your perception of PE and inclusion when it comes to students with ID?
4. What is your relationship with the school's PE teacher?
5. How important is your relationship with the student's parents? Explain.
6. During the interviews with PE teachers, teachers expressed the desire to be included during the IEP. What is your perception on this? What can stakeholders do to assist teachers and LSEs in acquiring more training and knowledge? – This question was asked separately including how can anyone from the government or from the Education Department assist and LSEs and PE teachers?
7. During the interviews with PE teachers, teachers expressed the need and desire for better training in the field of disability sport. – This question can only be asked to particular educational stakeholders.
8. During the interviews with students with ID, students pointed out that their classmates tend to exclude them when it comes to team sports and competition. What in your opinion can be done to improve this in the school community? Including - so during PE and breaktime
9. Same concern was pointed out by students when it comes to sports outside of school. What in your opinion can be done to improve inclusivity in sport clubs and the general community? – added mainstream sport clubs
10. What is your perception of inclusion in PE? – Removed as Q12. Was similar
11. What is your perception of resource centres?
12. What is your perception of the educational system with regards to inclusive quality PE?
13. Who do you feel should be the main promoters for inclusive PE and inclusive Sports/PA?

Interview Guide for Government Stakeholders

1. How long have you been in this role?
2. Can you recall any changes that you witnessed with regards to inclusion in sports and physical education/activity?
3. What is your perception of sports and inclusion when it comes to kids with ID?
4. During the interviews with PE teachers, teachers expressed the desire to be included during the IEP. What is your perception on this? What can stakeholders do to assist teachers and LSEs in acquiring more training and knowledge? What can stakeholders do to assist teachers and LSEs in acquiring more training and knowledge? – This question was asked separately including how can anyone from the government or from the Education Department assist and LSEs and PE teachers?
5. During the interviews with students with ID, students pointed out that their classmates tend to exclude them when it comes to team sports and competition. What in your opinion can be done to improve this in the school community?
6. During the interviews with PE teachers and LSEs, some highlighted the lack of facilities and equipment for the number of students in class. How can this be improved? – Added- What can the government do to improve the situation?
7. During the interviews with students with ID, some mentioned that they struggle mostly when it comes to joining a team sports club rather than individual sports club (football, basketball etc...). Do you feel that kids with ID should be given the opportunity to join clubs? If yes, what can be done to improve the system?
8. What in your opinion can be done to improve inclusivity in sport clubs and the general community? – Removed as it's similar to Q7.
9. What is your perception of inclusion in PE?
10. What is your perception of the inclusion policy in Malta?
11. What is your perception of the educational system with regards to inclusive quality PE?
12. Do you think that the general community is aware of inclusion and actually implements it? If no, how can it improve? – changed to What is your perception on the social awareness of the general community of inclusion and implementing inclusion?

13. Who do you feel should be the main promoters for inclusive PE and inclusive Sports/PA?

Appendix 16: Students interview guide

Interview Guide for Students with ID

1. What are your hobbies?
2. Let's talk about physical activity... what is physical activity for you?
3. What physical activity do you do at school?
4. Do you enjoy physical education?
5. Why do you enjoy PE?
6. what is something that you would like to keep in your lesson and what is something that you would do without?
7. Is every student in class included in the same activities during PE lessons?
8. If you had to be a PE teacher, what would you do in your lesson which is different from your present situation?
9. Apart from PE lesson, do you do PA out of school? If yes what?
10. Are there any other physical activities you would like to participate in?
11. Do you have any physical activity or sport opportunities in your community or after school?
12. Do you think physical activity is important? If yes, why do you think so?
13. If you had to be the minister of sports or someone important in charge of sport in Malta what would you change.
14. Do you like participating in physical activity? If not what's keeping you from being physically active?
15. Are you happy with the present situation? If no, what would you change?

Appendix 17: PE teachers/ LSEs interview guide

Interview Guide for PE Teachers:

1. How long have you been teaching Physical Education?
2. What do you believe are the benefits of Physical Education?
3. How large are your classes? Are you comfortable in teaching such numbers?
4. Do you have students with intellectual disability in your classes? If yes, what are the conditions of your students? Do you feel comfortable teaching students with ID?
5. What teaching tools or pedagogical strategies do you use to reach every student in your class?
6. Can you provide an example of a typical PE lesson?
7. How do you interact with your students with ID?
8. What measures do you take when it comes to grouping students in teams?
9. How do students without disability behave around students with disability? How is their attitude?
10. Do you feel that you are knowledgeable enough to teach students of different abilities?
11. What resources/facilities do you use or perhaps require to teach Quality PE?
12. What are your views on inclusion in Physical Education?
13. What are your views on integration in Physical Education?
14. What are the LSEs duties during the Physical Education lesson?
15. What are your views on the Physical Education Curriculum with regards to mixed ability learning?
16. If you were given the possibility to change anything from the curriculum, what would it be?

Interview guide for LSEs:

1. How long have you been a Learning Support Educator?
2. What do you believe are the benefits of Physical Education?
3. Are you placed as a one-on-one basis or shared LSE? Do you have any preference? If yes explain
4. What type of ID students do you assist? Are you comfortable in assisting such students?
5. What teaching tools or strategies do you use to reach every student you assist ?
6. Do you attend every subject with your student/students?
7. What PA exercises do you plan or do for your student/s?
8. How do you interact and communicate with your student/students?
9. What measures do you take when it comes to grouping students in teams?
10. Do you feel you are prepared to assist students with difference conditions and abilities?
11. What resources/facilities do you use or perhaps require in assisting students in becoming more active during school hours together with their mainstream peers?
12. What are your views on inclusion and integration in PE?
13. What are the LSEs duties during the Physical Education lesson?
14. What are your views on the Physical Education Curriculum with regards to mixed ability learning?
15. If you were given the possibility to change anything from the curriculum, what would it be?

Appendix 18: Educational Stakeholders interview guide

Interview Guide Educational Stakeholders:

1. How long have you been working as [job title]?
2. Where you always located in the same school?
3. What is your perception of PE and inclusion when it comes to students with ID?
4. What is your relationship with the school's PE teacher?
5. How important is your relationship with the student's parents? Explain.
6. During the interviews with PE teachers, teachers expressed the desire to be included during the IEP. What is your perception on this?
7. What can stakeholders do to assist teachers and LSEs in acquiring more training and knowledge? How can anyone from the government or from the Education Department assist and LSEs and PE teachers?
8. During the interviews with PE teachers, teachers expressed the need and desire for better training in the field of disability sport. – **asked to particular educational stakeholders.**
9. During the interviews with students with ID, students pointed out that their classmates tend to exclude them when it comes to team sports and competition. What in your opinion can be done to during PE and breaktime to improve this in the school community?
10. Same concern was pointed out by students when it comes to sports outside of school. What in your opinion can be done to improve inclusivity in mainstream sport clubs and the general community?
11. What is your perception of resource centres?
12. What is your perception of the educational system with regards to inclusive quality PE?
13. Who do you feel should be the main promoters for inclusive PE and inclusive Sports/PA?

Appendix 19: Government Stakeholders interview guide

Interview Guide for Government Stakeholders

1. How long have you been in this role?
2. Can you recall any changes that you witnessed with regards to inclusion in sports and physical education/activity?
3. What is your perception of sports and inclusion when it comes to kids with ID?
4. During the interviews with PE teachers, teachers expressed the desire to be included during the IEP. What is your perception on this? What can stakeholders do to assist teachers and LSEs in acquiring more training and knowledge?
5. What can stakeholders do to assist teachers and LSEs in acquiring more training and knowledge? How can anyone from the government or from the Education Department assist and LSEs and PE teachers?
6. During the interviews with students with ID, students pointed out that their classmates tend to exclude them when it comes to team sports and competition. What in your opinion can be done to improve this in the school community?
7. During the interviews with PE teachers and LSEs, some highlighted the lack of facilities and equipment for the number of students in class. How can this be improved? What can the government do to improve the situation?
8. During the interviews with students with ID, some mentioned that they struggle mostly when it comes to joining a team sports club rather than individual sports club (football, basketball etc...). Do you feel that kids with ID should be given the opportunity to join clubs? If yes, what can be done to improve the system?
9. What is your perception of inclusion in PE?
10. What is your perception of the inclusion policy in Malta?

11. What is your perception of the educational system with regards to inclusive quality PE?
12. What is your perception on the social awareness of the general community of inclusion and implementing inclusion?
13. Who do you feel should be the main promoters for inclusive PE and inclusive Sports/PA?

Appendix 20: Reflexive Thematic Analysis Audit Trail and Processes

Phase 1: "Familiarisation with Data"

In Phase 1 every interview was transcribed (n=59) verbatim to get acquainted with the data collected. Although transcribing every interview was a lengthy process, I decided to follow this procedure rather than use online services as it gave me the opportunity to familiarise myself with the data, which assisted me in Phase 2. Once the transcripts were completed, I began to read through the datasets and note down some potential "coding categories" (Riger and Sigurvinsdottir, 2016, pg.34).

Phase 2: "Generating Initial Codes"

This consisted of an inductive and rigorous reading process of the dataset to initiate a list of multiple codes which described interesting aspects of the data collected. As noted in Bruan, Clarke and Weate (2019, pg. 197), this phase is crucial as it scrutinises the data collected and uses labels to "code each piece that has some relevance" to the research questions under investigation. Figure 6 provides an example of how the codes were generated.

Figure 6: Example of Phase 2 - Generating of Codes

	I had to repeat my academic year... I had more friends in my original class... when I had to repeat the year and was placed in another class with different students I didn't feel welcomed as they had been together for a long period of time and their friendship was solid that it was difficult for me to make friends. They are one group and I felt left out. Mother: Her original class so the ones of her same age group, she used to feel more comfortable with them as they knew her, they knew her weaknesses, they knew her behaviour and they used to accept her just the way she is... and she felt good around them. Her present classmates are harder to break... they do not accept her so easily. But she still has that one friend that she can turn to. They knew each other so well that it was difficult for me to become part of them. So, if you had to describe a PE lesson with your initial class and a PE lesson with your present class... which one would you prefer and why? My initial class as they know me better... I grew up with them since primary school... and I feel more accepted with them. They know what I have... they know about my condition. What about their choice? Would you still be chosen last? No, they would not... they would choose me irrespectively. 7. Is every student in class included in the same activities during PE lessons? Yes, everyone will be included, even though sometimes students are reluctant to participate... however they are forced to participate. 8. If you had to be a PE teacher what would you do in your lesson which is different from your present situation? Mother: is it activity you would like? Anything from activities to the environment...	Barriers to inclusion – difficult to be part of groups Feeling left out Benefit of long-term inclusion? Easier inclusion at a young age? Acceptance/ why inclusion is successful Barriers of inclusion – reason for isolation Belongingness – feeling part of a group – inclusion Respect in inclusion Issues in PE – forcing students to participate?
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Phase 3: "Searching for Themes"

Once every interview was coded (each phase was done separately), each code was critically examined to identify similarities with other codes, creating a cluster of codes that led to the creation of themes. In this phase, the researcher looks at how “different codes may fit together into broader themes” (Riger and Sigurvinsdottir, 2016, pg.34). I started creating a hierarchy of different themes and sub-themes to create a structure to use as a visual aid for the phases to follow. I also started using “in vivo coding” (Johnson, 2017, pg.123) to capture the participants’ phrases in relation to the emergent themes and sub-themes. This is an essential aspect in a CBPR. Through “in vivo coding”, the researcher will be able to identify and define “local knowledge and community meanings” (Johnson, 2017, pg.124). Figure 7 represents the “in vivo coding” process together with the themes, whereas figure 8 illustrates an example of the initial themes and sub-themes.

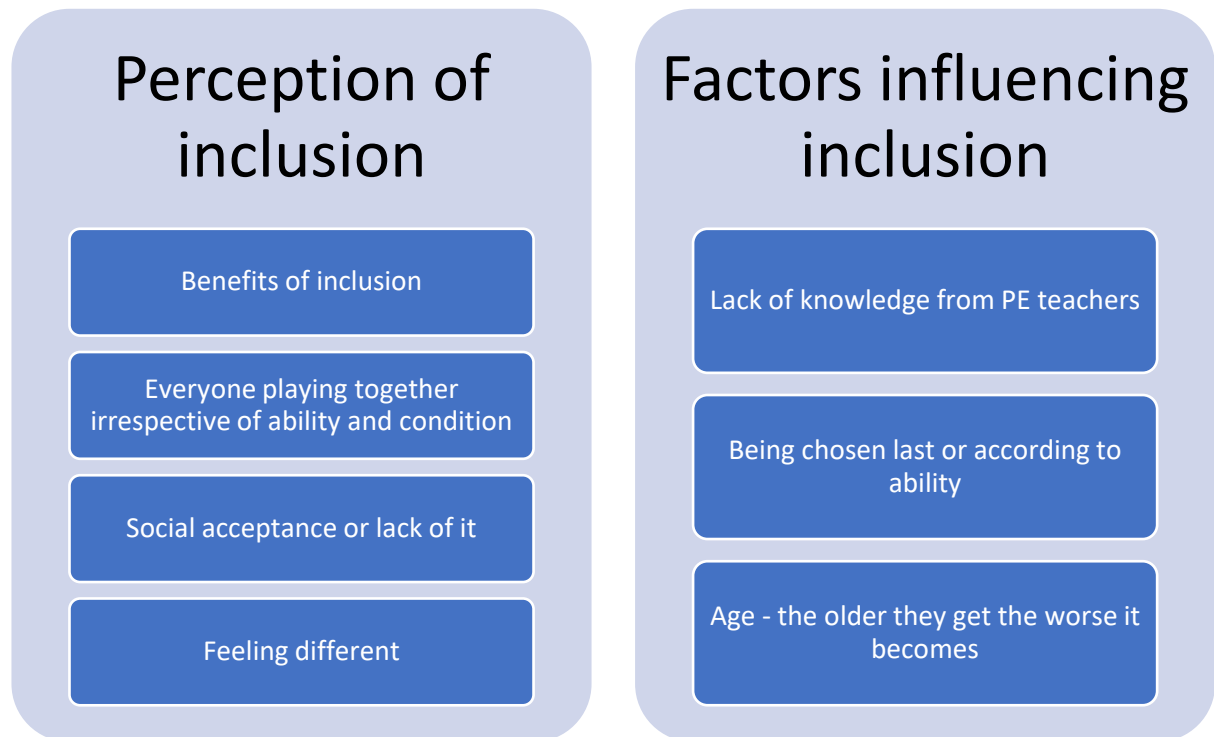
Figure 7: Example of themes with “in vivo coding”

Issues with inclusion:

- Inclusion for the wrong reason “... I am in a group and the only people that helped me fit in were people who realised that I have a disability and used to try to use me to do something wrong and pin it on me.” – P13
- No adult to support you “then I have to stay on my own cause if you make a mistake and everyone is shouting at you and there is no adult to support you...” – P13
- Training and not competing is not fair... allowed to join but benched for the game “useless joining and be asked to stay on the bench... It doesn’t mean cause I have a disability I will not work as hard” – P13
- Classmates would want to replace her during team selection as they believe that others are better than her (ability) – P14
- Not invited for time trials as he is with SOM for swimming – P15 parent
- Parents of TDP “our kids have challenging behaviour and some parents of mainstream kids just look at us with a certain look as though our kids are monsters...” – P15 parents
- Feeling different than the rest “It’s not nice to be like the black sheep”, thus prefers SOM – P16
- Inclusion depends on ability “if you have a high level of ability I’m sure that they will manage to integrate well within the community. I’m sure they will not tell us no, I’m sure they would give him the opportunity... then it all depends on how open the rest of the team is to accept him...” – P18 parent

Reason for Isolation:

Figure 8: Example of initial themes and sub-themes



Phase 4: "Reviewing Themes"

The next stage consists of refining the themes to select the ones which are most relevant to the research questions. The result is a more coherent pattern (ref figure 9) This part of the TA can be compared to a puzzle where some themes are grouped together, others rejected as they are not supported with sufficient data and others are further segmented (Braun and Clarke, 2006). This stage is characterised by the "reflexive process" which involves the re-reading of the entire data as recommended by Braun and Clarke (2006, pg.21). This process helps the researcher decide which themes fit the dataset and examine whether further codes could be elicited, thus making coding an "ongoing organic process" (Braun and Clarke, 2006, pg. 21).

Figure 9: An example of a theme which was highly discussed by participants, thus relevant.

Knowledge (LSEs interview)

Knowledge

- I believe that knowledge is never enough, and you always have aspects which you need to either work on or improve – [LSEcf2](#)
- I always worked with ADD, ADHD and autism mostly... so with regards to these conditions I feel knowledgeable but again to a certain extent, cause you always learn something new – [LSEcf2](#)
- I feel I am and to be honest I'm proud of what I have achieved throughout the years in our school – [LSEcf1](#)
- I'm pretty comfortable to deal with these students – [LSEiM1](#)
- I think so yes... I know I'm young, but I've done it already and I didn't have many problems... - [LSEiM1](#)
- you learn from others – [LSEcF6](#)
- no information is given when it comes to disability sports – [LSEgM1](#)
- if the PE teacher is not aware of how the student can be included and integrated in the lesson, the student will end up isolated... which is a pity. – [LSEgM1](#)
- Obviously in the beginning it was a bit challenging – [LSEgM1](#)
- No I wasn't prepared at all – [LSEgM1](#)
- So that training was essential and guided me to do the diploma course to become a qualified LSE – [LSEgM1](#)
- I still feel that life is a learning curve and that you never know enough – [LSEgM1](#)
- I need to keep myself informed and updated – [LSEgM2](#)
- I need to keep myself up to date and read and follow different courses. – [LSEgM2](#)
- , I can't say I'm fully knowledgeable... cause knowledge is never enough, but experience helps. – [LSEgM2](#)

Phase 5: "Defining and Naming Themes"

In this phase the themes are further clarified and pruned (figure 10). At this stage a definition of each theme is written to give a meaning and direction to each theme. Sub-themes are created to strengthen the theme and give a better structure to represent the lived experiences of the participants. Extracts from the data sets are included to provide more value to the definition surrounding each individual theme/sub-theme.

Theme	Subtheme	Code	Unit	Participant
The learning Environment	The Lesson	Lesson Delivery and Planning	This code will highlight the importance of planning the lessons beforehand and the different methods used by PE teachers and LSEs when delivering lessons.	
		Fun But Challenging Lessons	This code will discuss the pedagogy used by PE teachers and LSEs, to engage and challenge every student in class remaining mindful of the <u>students</u> ability. class is to try to make it as fun as possible – <u>CTM1</u> In my opinion the kids enjoy a sense of competition, especially boys and our school <u>is</u> very competitive so I instil a competition and make it fun at the same time – CTM1 I just start challenging them – <u>CTM1</u> will have extra time doing PE for the simple reason that we both know that it will help – <u>CTM1</u>	CTM1 CTM1 CTM1 CTM1

Figure 10: Examples of final themes and sub-themes with definition of codes

Phase 6: "Writing up, Producing the Report"

This is where all the preparatory work is pulled together to present the final report. To solidify my research study, the report included “in vivo” extracts and a critical discussion supported by the relevant literature findings. As noted in Braun, Clarke and Weate (2019, pg. 201), the write-up should maintain a balance between “data extracts and analytic commentary” for a more intriguing and interesting final report.

Appendix 21: Ethical Chain (Palmer, 2019)

First Ethical Step – Procedural Ethics

Before starting the data collection process, ethical clearance was obtained from the University of Birmingham Research Ethics Board. This step consisted of filling in the ethics application form with all the relevant details of the study and identifying all the ethical procedures and measures to be considered and followed throughout the research process. The research committee had the responsibility of ensuring that all the ethical aspects were considered and were in line with the University Code of Practice for Research. Thus, as noted in Palmer (2019, pg. 317), the Board of Ethics' main obligation is to "review the ethical integrity of a research project across the ethical chain".

At this stage, it was my duty to inform the committee about the methodology to be adopted in the study, the research aims, the participant recruitment process (through voluntary participation and withdrawal opportunities), how consent would be obtained (also indicated parental consent for minor participants) and, lastly, how confidentiality would be maintained. Since my study was a community-based participatory research (CBPR) study, I had to highlight its "ethical sensitivity", which means that I had to provide all the relevant information pertaining to the community under investigation and to all the participants and stakeholders involved and also note personal qualities including credibility and reliability (Banks et al. 2013, pg.266). Moreover, since my study was conducted in Malta and I was planning to conduct research and collect data from participants attending/working in government schools, I was obliged to apply for ethical clearance from the Directorate for Quality and Standards in Education. I also had to obtain ethical clearance from the Archdiocese of Malta, since church school participants were also involved.

Second Ethical Step – Ethical Position

The second phase of the "ethical chain" required my personal reflection on my positionality and behaviour throughout the research process. This required me to reflect on my commitment to carry out the research with integrity and honesty, shifting away from bias and on how I would make my participants feel comfortable since I was

about to embark on a sensitive research study. Palmer (2019, pg. 319) refers to this as “virtue ethics”, that is “the ethical behaviour of the researcher over and above the process and pragmatics of research”. As stated by Macfarlane (2008, pg. 42), a researcher should refrain from misconduct, embrace research with “courage, respectfulness, resoluteness, sincerity, humility and reflexivity” and maintain such discipline throughout the research process (Palmer, 2019).

Third Ethical Step – Ethics in Practice

This step refers to the daily “ethical obligations a researcher has towards a research participant” with regard to the interaction and communication between them (Guillemin and Gillam, 2004, pg. 264). This interaction should be carried out respectfully to protect the participants’ dignity and ease communication. Before data could be collected, the researcher should gain “Informed consent” from every participant (Palmer, 2019, pg. 320). This part of the ethical chain is essential as it provides the participant with all the relevant information related to the study and their involvement within the study, highlighting any possible risks, consequences or hazards and, lastly, how their information would be published (Cohen, Manion and Morrison, 2007; Palmer, 2019). At this stage participants have the power to either accept or decline their participation and ask questions for further clarification.

Each potential participant of my study was asked to consider signing the consent form only once they had read and understood what their participation entailed. The students’ consent form was also provided to their parents or guardians via their respective class teacher or LSE, since the students were minors. Moreover, to ensure that the students with intellectual disability understood what was required of them in the study, I conducted an online information session with every student and their parent/guardian to explain the process to them. An easy-to-read information sheet was also provided to the students (ref Appendix I). Any questions that the participants raised related to the study were answered and explained to reduce the risk of any misinterpretation. During the information sessions the students were asked whether they had understood the terms of their participation by discussing the aims of the study. For further confirmation I asked students to explain key parts of the study. At this stage, the participants were informed that the sessions would have to be held online due to

COVID-19 regulations and that every interview was to be voice recorded for transcription purposes. They were also informed of their right to withdraw from the study at any time and it was explained that any data collected prior to the data analysis phase would be destroyed and not used for the study.

Forth Ethical Step – Writing about Ethics

This stage refers to the actual dissemination of results to the general population. As noted in Palmer (2019), part of the ethical agreement signed by the participant and the researcher is related to confidentiality and anonymity. In this study, the only participants whose identity was possible to deduce were the participants of Phase 3 (the stakeholders). Although identification codes were used to replace their names (ref Table 18), certain arguments and information obtained through the semi-structured interviews could lead to some readers being able to identify the participants. Thus, this probability was highlighted in the stakeholders' information sheet that informed the participants that, although their professional titles would not be disclosed, the risk of identification was still high. This placed a degree of responsibility on the participants as they were aware of all the issues pertaining their participation.

Moreover, the participants of each phase were informed that the only document which would not be anonymous would be the consent form as they had to sign the document prior to data collection. Participants were reassured that any further personal data or information provided was to be kept anonymously using identification codes instead of their names.

Appendix 22: Full Version of Results phase 1

Table 35: Themes, sub-themes and codes emerging from the individual interviews

Theme	Sub-themes	Codes	Student	Guardian	Participants direct quotes
4.2 Barriers and challenges influencing inclusion in PA and sports participation	4.2.1 Students' conditions	4.2.1.1: Psychological Aspects – Perceived ability to follow instructions effectively	SM1 SM13 (2/18)	SM1P SM2P SM6P SF2P SM7P SM9P SM10P SM14P (8/18)	<i>“lacks attention ... apart from not following instructions”</i> – SM2P <i>“too hard”</i> to understand instructions – SM6P <i>“It could be because he is not understanding him [the coach] not because he is ignoring him ...[as] my son is English speaking”</i> – SM10P
		4.2.1.2: Psychological Aspects – Perceived lack of competitive spirit		<i>“As long as he does the activity, he is happy”,</i> - SM7P <i>“he would not try to steal the ball”</i> – SM10P <i>“He can attend the football nursery... however, to train only”</i> – SM1P <i>“hungry for competition”</i> – SM9P	
		4.2.1.3: Lack of physical attributes		<i>“not strong enough”</i> – SM1 <i>“if you are weak, you will struggle [to make the team]”</i> – SM7P	

					<i>"So I don't get the chance to get the ball and play" – SM13</i> <i>"My daughter is quite athletic, and her condition is mild, so we don't get a lot of issues" – SF2P</i> <i>"more ability you have the more support you will get" – SM10P</i> <i>"he lacks abilities" – SM10P</i> <i>"induces some stress on him [her son]" – SM14P</i>
	4.2.2: Beliefs and attitude of students with ID	4.2.2.1: The desire to be autonomous in PE and sports to achieve a sense of "normality"	SM2 SM3 SM4 SF2 SM7 SM11 SF3 (7/18)	SM4P SM5P SM9P (3/18)	<i>"interfere" - SM3</i> <i>"follow the PE teacher without [the LSE] assisting" – SF3</i> <i>"but just to watch me" – SM3</i> <i>"with determination and proper coaching" – SM11</i>
		4.2.2.2: Reluctance to participate due to perceived lack of physical ability			<i>"I dislike ... sitting down just listening to my teacher" – SF1</i> <i>"because every lesson [is] always the same and I get bored" – SM11</i> <i>"I didn't want to do it... so I stopped" – SM7</i> <i>"rather sit [it out]" – SM9P</i> <i>"he hates losing" – SM5P</i>

	4.2.3: Beliefs and attitude of students without ID	4.2.3.1: Being included but not integrated	SF1 SM5 SM6 SM7 SM11 SF3 SM13 (7/18)	SM1P SM3P SM4P SM9P SF3P (5/18)	<i>“pass the ball” – SM1P</i> <i>“prefer playing alone and leave [him] out” – SM6</i> <i>“feel that they are better” - SM13</i> <i>“want to win” - SM1P</i> <i>“When I play as a player, I barely have the ball ... the keeper is better I have more chance to grab the ball and play” – SM13</i>
		4.2.3.2: Attitudes and behaviour of students without ID			<i>“jealousy” – SF3</i> <i>“hate it” – SF3P</i> <i>“has a disability and can actually catch up with them with no problem” – SF3P</i> <i>“just to be cool and tease” – SM6</i> <i>“caring and understanding” – SF3</i> <i>“bully other children because they have ADHD” – SM13</i> <i>“some kind of dinosaur... someone completely different” – SM11</i> <i>“not right and normal” – SM11</i> <i>“wouldn’t want to stay” – SF3</i>
	4.2.4: Number of students/athletes in class/session	4.2.4.1: The number of students in class and people density	SM1 SM10	SM7P	<i>“struggle to be included” – SM11</i> <i>“we are limited to what activity we can do” – SM10</i>

			SM11 (3/18)	SM9P SM12P (3/18)	
		4.2.4.2: The environment of sports facilities			<i>"will only cause tantrums"</i> – SM12P <i>"more facilities to reach out"</i> – SM9P <i>"Better scheduling"</i> – SM12P <i>"better support"</i> – SM12P
	4.2.5: Lack of awareness	4.2.5.1: Experience within mainstream sports clubs	SM6 SM11 SF3 (3/18)	SM2P SM5P SM6P SM9P SM12P (5/18)	<i>"he was kept on the bench"</i> – SM6P <i>"negative effects"</i> – SM6P <i>"didn't know how to handle"</i> – SM5P <i>"learn skills and techniques of how best to deal"</i> – SM6 <i>"not everyone gets it... not everyone understands what it means to be a parent of a special needs child"</i> – SM2P <i>"not every mainstream coach will be willing to coach"</i> – SM6P <i>"not everyone is fit to coach in such an environment"</i> – SM6P <i>"aware of how to handle such conditions"</i> – SM6P <i>"result in a negative inclusive environment."</i> – SM9P

		4.2.5.2: Experience of PE teachers			<i>"We are not different than others... we just learn differently, that's all" – SM6</i> <i>"Everyone makes mistakes and by yelling you are not going to make [one] a better player". – SM11</i> <i>"It doesn't mean cause I have a disability I will not work as hard" – SM11</i> <i>"Everyone is equal... everyone needs to accept the rest with their positives and negatives" – SF3</i>
	4.2.6: Opportunities or lack of	4.2.6.1: Lack of opportunities	SF1 SM1 SM4 SM3 SM5 SM6 SM8 SM9 SM11 SF2 SM12 SM13 SF3 (9/18)	SM1P SM2P SM4P SM5P SM7P SM9P SM10P SF3P SM12P SM13P SM14P (11/18)	<i>"abilities are different and clubs want to win not develop kids" - SM2P</i> <i>"segregated during the session or games" - SM1P</i> <i>"if you do not meet the clubs' standards, you will be left on the bench" - SM1P</i> <i>"chuck[ed] out" – SM10P</i> <i>"training and not playing is not fair" – SM9P</i> <i>"focus mostly on ability and push the ones with a lot of talent" – SM14P</i> <i>"if [he is] not given the [same] opportunities as mainstream athletes"- SM11</i>

					<i>"we need to practice proper inclusion" – SM14P</i> <i>"will not be accepted" – SF1</i>
		4.2.6.2: Lack of opportunities due to lack of resources			<i>"they will not accept kids with disabilities without LSEs" – SM12P</i>
		4.2.6.3: Perceived benefits should opportunities be provided			<i>"it would make me push [myself] and keep up with them" – SM11</i> <i>"motivation for them to continue [practicing the] sport... instead of quitting" – SM8</i> <i>"make more effort" – SM1P</i>
		4.2.6.4: Current opportunities			<i>"boost [their] full potential" – SM2P</i> <i>"SO is different because they are all the time giving us feedback and pushing us to improve". - SM13</i> <i>"constantly monitoring [my] progress and telling [me] what needs to be done to improve". – SM13</i>
	4.2.7: Parental concerns	4.2.7.1: Rigidity within the educational system in Malta	0/18	SM1P SM7P SM9P SM10P	<i>"rules, positions" – SM1P</i> <i>given a "holistic grade... [based on] his ability, his behaviour, his persistence and the fact that he tries and doesn't give</i>

				SM13P SM14P (6/18)	<i>up... it shouldn't be just one grade on skills only</i> – SM7P
		4.2.7.2: Segregation in mainstream clubs			<i>"haunt him" as "he hates losing and he always wants to win"</i> – SM14P <i>"They have a lot of people in the waiting list... training sessions decreased to make space for other athletes"</i> - SM9P
	4.2.8: Facilities	4.2.8.1: Facilities in the community	SM5 SM6 SM11 (3/18)	SM3P SM12P SM14P (3/18)	<i>"facilities are overpopulated"</i> – SM12P not have any <i>"time restrictions... so that they will be more accessible for the general public"</i> – SM3P
4.3: Mental state of students with ID	4.3.1: Emotions	4.3.1.1: Fear of failure	SF1 SM2 SM3 SM4 SM11 SF3 (6/18)	SM7P SM9P SF3P SM14P (4/18)	Refer to results
		4.3.1.2: Experiencing shame			<i>"I will think that people will start to laugh at me"</i> – SM11 <i>"cause I am not different than others"</i> – SF3
	4.3.2: Sense of belonging	4.3.2.1: The school community - different scenarios in different schools	SF1 SM1 SM7 SM9 SM10 SM11 SF3 SM14	SF1P SM1P SM9P SM10P SM13P	<i>"environment [was] more welcoming"</i> – SF1 <i>"a good bond"</i> – SM7 <i>"none of his school friends ever asked him to play with my son... even</i>

			SF4 (9/18)	SM14P (6/18)	<i>recreational things... they never invite him to the cinema"- SM9P</i> <i>"during break, to be honest, I am not really included that much, but when I am we either talk or we get a ball and play" – SM11</i> <i>"they stay with this group of kids that don't like [me]" – SF3</i>
		4.3.2.2: Outside school sports community			<i>She told me 'ma, here is my group'... the first day she went for athletics with SOM" – SM1</i> <i>"feel comfortable, because he is older and bigger" – SM10P</i> <i>"with the help of the coach ... I felt included and respected and supported" – SM11</i>
	4.3.3: Psycho-social aspects	4.3.3.1: Benefits of an inclusive society	SM11 SF3 (2/18)	SF1P SM1P SM2P SM9P SF3P (5/18)	<i>"mainstream kids learn to accept others in an inclusive setting" – SM9P</i> <i>"friendship building" – SM9P</i> <i>"athlete and not an athlete with a disability" – SM11</i>
	4.4.1: School policy	4.4.1.1: Lack of human resources		SM2P SM5P	<i>"not getting the support requested" – SM2P</i>

4.4: Social assistance within schools			SM10 SM11 (2/18)	SM7P SM9P SM10P SM14P (6/18)	<i>"more LSEs where needed and more kept leaving" – SM5P</i>
		4.4.1.2: Tailormade/segregated learning			<i>"before when he was with others, the level was so high that he used to be almost wasting time... Now at least he is learning something, and he is enjoying himself... he feels good". – SM14P</i> <i>"might slow down the pace" – SM14P</i>
		4.4.1.3: Schools' responsibility			Refer to results
	4.4.2: Role of the LSE	4.4.2.1: The role of the LSE during PE	SM2 SM3 SM4 SM9 SM10 SM11 SF3 SM13 SM14 (9/18)	SM1P SM12P (2/18)	Refer to results
		4.4.2.2: LSEs' involvement and characteristics during the PE lesson			<i>"physically there, she was absent" – SF3</i> cause <i>"with a person with a disability you need to talk" – SM11</i>
	4.4.3: PE teachers' characteristics	4.4.3.1: Virtue and traits of the PE teacher	SM5 SF2 SM8 SM10 SM11 SM13 (6/18)	SF3P SM12P (2/18)	<i>"never really tried to teach him or assist him... he used to just give him low marks... which is not fair" – SM7P</i> <i>"stay on the phone" – SM11</i>
		4.4.3.2: Positive attributes of the PE teacher			<i>"the teacher tries as much as possible to choose different people as captain" – SM8</i>

					<i>"quite proactive so he includes everyone in class" – SM12P</i>
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Appendix 23: Full Version Results Phase 2

Table 36: Sub-themes and codes emerging from the individual interviews

Theme	Sub-themes	Codes	PE Teacher	LSE	Participants direct quotes
5.2: The learning environment		5.2.1.1: Fun but challenging	CTM1, CTF3, GTF2, CTF1, ITF1, CTF5, CTM4, GTM1 (7/16)	LSEgf1 (1/16)	<i>“never hate ... exercise” – ITF1</i> <i>“enjoy a sense of competition” - CTM1</i>
		5.2.1.2: Not a one size fits all pedagogy	GTM1, CTM2, GTM2, ITF1, GTF1, CTF3, CTF2, CTM3 (8/16)	LSEcf2, LSEcf6, LSEgm1, LSEcm2, LSEcm3, LSEcf3, LSEcf5 (7/16)	<i>“what is good for one [is not] necessar[ily] good for the others” – CTM2</i> <i>“learn every individual separately” – CTF2</i> <i>“structure the lesson” – CTM3</i> <i>“we cannot just put everyone under the same umbrella” – LSEcf3</i> <i>“books will not tell you certain tricks or things you can do” – LSEcf3</i> <i>“you need to be flexible” – GTF1</i> <i>“reluctant to participate” – LSEgm1</i> <i>“it difficult to follow the lesson” – LSEgm1</i>
		5.2.1.3: Lesson planning and delivery	CTF2, CTM3, CTF3, GTM1, CTM2, GTF2, CTM4, ITM2,	LSEgf1, LSEcf5 (2/16)	<i>“cooperate ... and work autonomously” – CTM3</i> <i>“more comfortable expressing themselves” – CTM3</i>

	5.2.1: lesson	The		CTF4, ITM1, GTM2, CTF1, ITF1, GTF1 (14/16)		<i>“engineer a lesson, where everyone can feel comfortable” – CTM4</i> <i>“higher and higher ... if possible reach[ing] the original height of the basket”. – LSEcF5</i>
			5.2.1.4: Strategies used by PE teachers and LSEs	CTF2, CTF5, GTM1, CTM2, GTF2, CTM4, ITM2, CTF4, CTM3, GTM2, CTF1, ITF1, GTF1, GTF1 (14/16)	LSEim1, LSEcf6, LSEcf2, LSEcm1, LSEcf4, LSEcm2, LSEgf1, LSEcm3, LSEcf3, LSEgf2 (10/16)	<i>“every student will be given the opportunity to actually do the activities” – GTM1</i> <i>“dedicate[s] some lessons to assist highly skilled students” – GTM1</i> <i>“can manage in class, [he is] not going to treat him any different[ly]... they just move on and work with the groups like anyone else” – ITM2</i> <i>“during [her] PE lesson everyone is equal” – CTF4</i> <i>“as though they have no condition” – LSEcF6</i> <i>“would feel comfortable, resulting in better behaviour” – LSEcF6</i>
			5.2.1.5: Giving students space and autonomy in class	CTF5, CTM4, CTF4, CTF1, ITF1 (5/16)	LSEcm1, LSEgm2, LSEcm3 (3/16)	<i>“helps them become responsible for their actions” – CTF1</i>

		5.2.1.6: Grouping students for group activities and team selection	CTM1, CTF2, CTF5, CTF3, CTM3, GTM1, CTM2, GTF2, CTM4, ITM2, CTF4, ITM1, GTM2, CTF1, ITF1, GTF1 (16/16)	LSEim1, LSEcf6, LSEgm2, LSEcf4, LSEcm2, LSEgf1, LSEif2, LSEcf5, LSEgf2, LSEif1 (10/16)	<i>“students with LSEs” – ITM2</i> <i>“in every group there is a responsible student that could assist the weaker student” – CTM2</i> <i>“make friends with the people who have similar physical abilities” – CTM4</i> <i>“shuffle teams around accordingly” – CTF4</i>
		5.2.1.7: The importance of having the LSE in class	CTF5, CTF3, CTM3, GTM1, CTM2, GTF2, ITM2, ITM2, CTF4, ITM1, GTM2, CTF1, ITF1, GTF1 (14/16)		<i>“motivated and really want[s] to help and comes for the lesson in proper attire to do PA” – CTF3</i> <i>“to reach the student... and enhance [the] learning” – GTM1</i>

	5.2.2: Tools for inclusion	5.2.2.1: Resources used by PE teacher	CTM1, CTF2, CTF5, CTM2, GTF2, CTM4, ITM2, CTF4, CTF1, GTF1, ITF1, CTM3 (12/16)		<i>“enhance [her] explanation” – CTF4</i> <i>“not really affected by resources” – CTM1</i>
		5.2.2.2: Resources used by LSE		LSEcf2, LSEcf1, LSEim1, LSEcf6, LSEcm1, LSEgm1, LSEgm2, LSEcf4, LSEcm2, LSEcm3, LSEcf3, LSEcf5, LSEgf2 (13/16)	<i>“visual learner” – LSEcM3</i> <i>“disservice if I don’t use the student’s preferred style of learning”. – LSEcM3</i> <i>“there are some [students with some] conditions who would not even take note of the flashcards” – LSEcF6</i> <i>“different activities ... keep[ing] students engaged and interested” – LSEgM1</i>
		5.2.2.3: Adaptation for better inclusion	CTF3, CTM4 (2/16)	LSEcf2, LSEcf4, LSEif2 (3/16)	Refer to results

		5.2.2.4: Adaptations according to students' needs	GTM2, ITF1, GTF1, CTF2, CTF1 (5/16)	LSEcf6, LSEgm1, LSEcf4, LSEcm2, LSEgf1, LSEcf3, LSEcf5, LSEgf2, LSEif1 (9/16)	<i>"adapt a number of exercises" – LSEcF6</i> <i>"you give them challenging activities so that you improve their cognitive ability" – LSEcF4</i> <i>"still follow whatever we are doing in class with the other students" – CTF2</i> <i>"adapt the lessons and assessments according to the students' needs" – LSEcF3</i>
		5.2.2.5: Buddy system – Peer support and peer learning	CTM2, ITM2, ITM1, CTF5, CTF1 (5/16)	LSEcm1, LSEgm1, LSEcf4, (3/16)	<i>"tend to learn more than when the actual teacher is helping them" – ITM2</i> <i>"it will backfire" –CTM2</i> <i>"where everyone is given the opportunity to be a buddy and students would help and learn from each other" – LSEcM1</i>
		5.2.2.6: Reward system	GTF2, CTF4 (2/16)	LSEgm1, LSEcf3, LSEcf6 (3/16)	<i>"I would ask the PE teacher to take him for another 30mins with another group" – LSEgM1</i>

	5.2.3: Roles and responsibilities	5.2.3.1: PE teachers and LSEs working in synergy for better inclusion and quality PE lessons	CTF4, CTF3, GTM2, CTF1, ITF1, GTF1, CTM4 (7/16)	LSEcf2, LSEcf1, LSEim1, LSEcf6, LSEgm1, LSEcf4, LSEgf1, LSEcf3, LSEcf5, LSEgf2, LSEif1, LSEcm1, LSEgm2, LSEif2, LSEcm3, LSEcf3 (16/16)	<i>“ultimately, [the LSE is] not the PE teacher” – LSEcF2</i> <i>“just suggest[s] things rather than impose things” – LSEgF1</i> <i>“can manage the lesson with the rest of the class” - LSEcF6</i> <i>“the lesson would be enjoyable both for students with ID and those students without” – LSEcF1</i>
		5.2.3.2: PE teachers’ willingness to work with LSEs as perceived by LSEs.		LSEcf2, LSEcf1, LSEgm1, LSEcf4 (4/16)	Refer to Results
		5.2.3.3: The perception of PE teachers on the	CTM1, CTF2, CTF5, CTF3, CTM3, GTM1,		<i>“so that the student would gain a better experience in PE lesson” - CTF3</i> <i>student 24/7, because the student needs some freedom as well” – CTM4</i>

		LSEs' roles/ duties	CTM2, GTF2, CTM4, ITM2, CTF4, ITM1, GTM2, ITF1,GTF1 (15/16)		
		5.2.3.4: The perception of LSEs of PE teachers' roles/duties		LSEgm1, LSEgf1, LSEif2, LSEcf5, LSEcf1 (5/16)	<i>"activities that could be fun and inclusive"</i> so that every student <i>"enjoy[s] the lesson"</i> - LSEgF1
		5.2.3.5: LSEs' involvement during the PE lesson depending on students' conditions	ITM2, CTF4, ITM1, CTF1, ITF1, GTF1 (6/16)		Refer to results
		5.2.3.6: The importance of involving parents in decision making and the PE/PA journey		LSEcf4, LSEgf1, LSEcf5, LSEcf3, LSEcf2 (5/16)	<i>"uniformity cause you will be working together and on the same page"</i> – LSEcF5 <i>"pulling the same rope"</i> - LSEcF5

	5.2.4: The PE teacher	5.2.4.1: PE teacher's personality traits and characteristics when dealing with students with ID	GTM1, GTF2, CTM4, GTM2, CTF1, ITF1, GTF1 (7/16)		<i>"you can't just give up... some students might take a long period to achieve something" – GTM1</i> <i>"do what it takes for kids to have a positive experience at school" - GTM2</i>
		5.2.4.2: The PE teachers' responsibilities and duties	CTM1, CTF3, CTM3, GTM1, CTM2, GTF2, CTM4, ITM2, CTF4, ITM1, GTM2, CTF1, ITF1 (13/16)		<i>"to help each and every individual" – ITM2</i> <i>"to choose wisely, educate students ... and support everyone in class" – CTM2</i>
	5.2.5: The LSE	5.2.5.1: LSEs personality traits and characteristics when dealing with students with ID	GTM1, GTF2, CTM4, GTM2 (4/16)	LSEim1, LSEgm1, LSEcf4, LSEgf1, LSEif2, LSEcm3, LSEcf3, LSEcf5, LSEgf2, LSEif1 (10/16)	<i>"I [would] not be able to give my 110% and it's not fair on the student" – LSEcf3</i> <i>"I felt I wanted to be there for other kids" – LSEgf1</i>

		5.2.5.2: The LSEs' responsibilities		LSEcf2, LSEcf1, LSEim1, LSEcf6, LSEcm1, LSEgm1, LSEgm2, LSEcf4, LSEcm2, LSEgf1, LSEif2, LSEcm3, LSEcf3, LSEgf2, LSEif1 (15/16)	<i>"assist the student and help him cooperate with the rest of the class"</i> – LSEcM1 <i>"reach the goal of that day"</i> – LSEcM2 <i>"you need to support and highlight their positive aspects"</i> – LSEcM3 <i>"throughout his life"</i> – LSEcM2
		5.2.5.3: One-to-one vs shared LSE	CTF5, CTF3, CTM3, CTM2, CTF4, ITF1 (6/16)	LSEcf2, LSEim1, LSEgf2 (3/16)	Refer to Results

	5.2.6: The challenges faced during the PE lesson	5.2.6.1: Students' conditions as perceived by PE teachers and LSEs	CTM1, CTF5, CTF2, CTF4, GTM2, CTF1 (6/16)	LSEcf2, LSEcf1, LSEcf6, LSEcm1, LSEgm1, LSEgm2, LSEcf4, LSEif2, LSEcm3, LSEcf3, LSEcf5, LSEif1 (12/16)	<i>"is the big age gap... how to adapt according to [the student's] cognitive age"</i> LSEgM1 <i>"used to find it very difficult to remember certain rules"</i> - LSEgM2
		5.2.6.2: Different abilities	CTM1, CTF2, CTF5, CTM4, ITM2, CTF3, GTM2, GTF1 (8/16)	LSEcf6, LSEcf4, LSEcm3, LSEif1 (4/16)	<i>"the opposite side of the spectrum"</i> – CTM4 <i>"it's mission impossible"</i> – GTM2 <i>"teacher is limited on what she/he can do"</i> – LSEcf6 <i>"very difficult for a teacher to adapt their scheme of work"</i> – LSEcf6 <i>"10 different conditions"</i> – LSEcm3
		5.2.6.3: Facilities and resources provided	CTM1, CTF3, CTM3, CTM2, GTF2, CTF4, GTM2, CTF1, ITF1, GTF1 (10/16)		<i>"follow the syllabus and teach properly"</i> – CTM3 <i>"classroom management and planning from before the lesson"</i> – CTM3

		5.2.6.4: Class size	CTM1, CTF2, CTM3, GTM1, CTM2, GTF2, CTM4, ITM1, GTM2, CTF1, GTF1 (11/16)		Refer to Results
5.3: The educational system in Malta	5.3.1: Structure of secondary schools in Malta	5.3.1.1: School culture	ITM1, GTM1, GTM2, CTF1, ITF1, GTF1 (6/16)	LSEcf6, LSEcm1, LSEgf1, LSEcf3, LSEif1 (5/16)	<i>“a peaceful and healthier environment, both for us and for the students” – LSEcF3</i>
		5.3.1.2: Different school settings – government, church and independent schools	ITM2, ITM1, CTF1, ITF1, CTF4, GTM2, (6/16)	LSEcf1, LSEim1, LSEgm1, LSEcf4, LSEcm2, LSEcf6 (6/16)	<i>“irrespective [of] whether [they] have a condition or not” – LSEcF1</i> <i>“fair that a student with ID is playing alone during sports day” – LSEcF1</i>
		5.3.1.3: Resource Centres vs mainstream schools	CTF3, GTF2, CTM4, ITM2, CTF1 (5/16)	LSEcf1, LSEim1, LSEcf6, LSEgm2, LSEgf1, LSEcf3 (6/16)	<i>“there are professional people who would work with them” – CTF3</i>

	5.3.2: School protocols	5.3.2.1: School procedures	CTM2, CTM4, ITM2, CTF4, ITM1, GTM2, CTF1, ITF1, GTF1 (9/16)	LSEcm1, LSEcf4, LSEgf2, (3/16)	<i>“there is a big emphasis on acceptance” – CTM2</i> <i>“so if you want to take part you can just write your name” – CTF4</i> <i>“mentally healthy, that they are interacting with each other” – ITM1</i>
		5.3.2.2: PE status in schools		LSEcf1, LSEcf4, LSEcm2, LSEgf1, LSEcf5, LSEgf2, LSEif1 (7/16)	<i>“we tend to take it lightly” – LSEcf5</i> <i>“PE is not given that much of importance” and that “it should be given more weight in the curriculum” – LSEcf2</i>
		5.3.2.3: Support and information provided	GTF2, CTM4, CTF3, CTM3, ITM2, CTF4, GTM2, CTF1, ITF1, GTF1, GTM1 (11/16)	LSEcm2, LSEcf1, LSEgm1, LSEcf4, LSEif2, LSEcm3, LSEcf3, LSEgf2, LSEif1 (9/16)	<i>“if the teacher [knows] what the condition is, she [is] able to plan accordingly and better” – ITF1</i>

	5.3.3: The curriculum	5.3.3.1: The current curriculum	CTM1, CTF2, CTF5, CTF3, CTM3, GTM1, GTF2, CTM4, ITM2, CTF4, ITM1, GTM2,CTF1, ITF1, GTF1 (15/16)	LSEcf1, LSEim1, LSEcf6, LSEcm1, LSEgm1, LSEgm2, LSEcm3, LSEcf3, LSEcf5, LSEgf2 (10/16)	<i>"time for experimental learning ... and free play"</i> – LSEcF1 <i>"not allowing students to be creative"</i> – LSEcF1 <i>"the current curriculum makes it very difficult to achieve differentiated learning"</i> – LSEgM1
		5.3.3.2: Previous curriculum vs current curriculum	CTF2, CTM3, CTM2, GTF2,CTF1 (5/16)	LSEgm1, LSEcm2 (2/16)	Refer to Results
		5.3.3.3: Perception of having a dedicated curriculum for students with ID	CTF5, GTM1, GTF2, ITM2 (4/16)		Refer to Results
		5.3.3.4: Strategies for better curriculum	CTF5, GTF2, CTM4, CTF1, (4/16)		Refer to Results
		5.3.3.5: Stakeholders	CTM1, CTF5, GTM1, CTF1	LSEgf2 (1/16)	Refer to Results

		and Policymakers	(4/16)		
5.3.4: The world of inclusion		5.3.4.1: Defining Inclusion	CTF5, GTM2, CTF1 (3/16)	LSEim1, LSEcm1, LSEgf1 (3/16)	Refer to Results
		5.3.4.2: Is inclusion really happening?	CTF5, CTF3, CTM4, CTF1 (4/16)	LSEcf2, LSEcf1, LSEcm1, LSEcf3, LSEgf2 (5/16)	<i>“when it comes to reality, it’s just a word on paper” – CTF5</i> <i>“cases where the student is segregated and left alone” – LSEcF2</i>
		5.3.4.3: Forcing the system... failing our students	CTF5, CTF3, CTM2, GTF2, CTM4, GTM2, CTF1 (7/16)	LSEcf2, LSEim1, LSEcm1, LSEgm2, LSEcf4, LSEif1 (6/16)	<i>“inclusion depends on the level of disability” – CTF3</i>
		5.3.4.4: Inclusion depends on students’ abilities	GTF2, CTM4, ITM2, ITM1, GTM2, CTF1, ITF1, GTF1 (8/16)	LSEcf2, LSEcf1, LSEim1, LSEcf6, LSEcm1, LSEgm1, LSEgm2, LSEcm2,	Refer to Results

				LSEgf1, LSEif2, LSEcf3, LSEgf2, LSEif1 (13/16)	
		5.3.4.5: Inclusion depends on students' age.	CTF1 (1/16)	LSEcf4, LSEgf1, LSEcf2, LSEcf1, LSEcf6, LSEgf1, LSEcf5 (7/16)	<i>"younger they are the easier" – LSEcF4</i> <i>"younger students are more open to accept everyone... with no discrimination" – LSEcF1</i>
		5.3.4.6: Psychological aspects brought about by inclusion	CTF5, CTF2, CTF3, CTM2, GTF2, CTM4, CTM3, ITM2, CTF4, ITM1, GTM2, CTF1, ITF1, GTF1 (14/16)	LSEcf4 (1/16)	Refer to Results
5.4: Way forward	5.4.1: Requests and requirements	5.4.1.1: Having smaller classes	CTF3, CTM3, GTM1, GTF2, CTM4, ITM2, CTF4, GTM2,	LSEgm1 (1/16)	<i>"easier to reach the aim and objective of the lesson" – CTF3</i>

			CTF1, ITF1, GTF1 (11/16)		
		5.4.1.2: Teaching about inclusion – building a community for inclusion	CTF5, CTM2, GTF2, ITM2, GTM2 (5/16)	LSEcf2, LSEcf1, LSEim1, LSEcf6, LSEcm1, LSEif2, LSEcf3, LSEif1 (8/16)	Refer to Results
		5.4.1.4: Teaching students with ID how to be autonomous		LSEcm1, LSEgm1, LSEgf2, LSEif2 (4/16)	Refer to Results

Appendix 24: Full Version Results Phase 3

Table 37: Themes, sub-themes and codes emerging from the individual interviews.

Theme	Sub-themes	Codes	Academic and educational stakeholders	Government stakeholders	Participants direct quotes
6.2: Pioneers of inclusive PE, PA and sports promotion in Malta	6.2.1: Promoters within the school community	6.2.1.1: The role of school administrators and academic staff in promoting inclusive PE, PA, and sports	ESGM1, ESCF1, ESCF2 (3/5)	SGF2(1/4)	Refer to Results
		6.2.1.2: The responsibilities of students with and without ID in promoting inclusion	ESGM1, ESGF1, ESIF1 (3/5)	SGF2, SGM1, SGM2, SGF1 (4/4)	Refer to Results

	6.2.2: The wider community	6.2.2.1: Collaboration between stakeholders. Sharing responsibilities	ESGM1, ESCF2, ESIF1 (3/5)	SGM2, SGF1, SGF2 (3/4)	Refer to Results
6.3	6.3.1: Social awareness	6.3.1.1: The general public's perception of individuals with ID		SGM1, SGM2, SGF1 (3/4)	Refer to Results
	6.3.2: The educational system	6.3.2.1: A system which is failing	ESCF1 (1/5)	SGM1, SGM2 (2/4)	<i>"the education system in Malta is not doing well"</i> – SGM1 <i>"curriculum in all subject[s] is too high"</i> – ESCF1
		6.3.2.2: Inclusion on paper not in practice	ESGM1, ESGF1, ESIF1 (3/5)	SGM1, SGF1, SGF2 (3/4)	Refer to Results
		6.3.2.3: PE not valued in schools	ESGF1, ESCF2, ESGM1 (3/5)	SGM1, SGM2, SGF2 (3/4)	<i>"its adequate importance"</i> – ESCF2
		6.3.2.4: Lack of training provided	ESGM1, ESGF1, ESCF1,	SGM1, SGM2, SGF1, SGF2,	Refer to Results

The situation of inclusion in PE, PA and sports in Malta			ESCF2, ESIF1 (5/5)		
		6.3.2.5: Training provided	ESGM1, ESCF2 (2/5)	SGM2, SGF1 (2/4)	Refer to Results
		6.3.2.6: The gap within the educational system	ESGF1, ESCF1 (2/5)	SGF1 (1/4)	Refer to Results
		6.3.2.7: New initiatives	ESGM1, ESCF2 (2/5)	SGF1, SGF2 (2/4)	Refer to Results
		6.3.2.8: The PE teacher's psychological responses	ESGF1, ESCF1, ESIF1 (3/5)	SGM2, SGF2 (2/4)	<i>"afraid to face these students and they are afraid to experiment [by changing their pedagogy and use differentiated teaching]" – SGF2</i>
	6.3.3: The academic institutions and their procedures	6.3.3.1: Mainstream schools vs resource centres	ESGM1, ESGF1, ESCF1 (3/5)		Refer to Results
		6.3.3.2: Blended environment	ESGM1, ESCF1, ESIF1 (3/5)		Refer to Results

	6.3.4: Sports in the community	6.3.4.1: Barriers posed by competitive sports environment	ESGM1, ESGF1, ESCF2, ESIF1 (4/5)	SGM1, SGF1, SGF2, SGM2 (4/4)	<i>“for the simple reason [that] they are not at the same level as their peers” – SGF2</i> <i>“are very protective of their club” – ESCF2</i> <i>“are not willing to accept people with disability” – ESCF2</i>
6.4: Recommendations	6.4.1: Academic and institutional approaches	6.4.1.1: Equal rights	ESCF1 (1/5)	SGM1, SGM2, SGF1, SGF2 (4/4)	Refer to Results
		6.4.1.2: Supporting PE teachers	ESGM1, ESCF1 (2/5)	SGM2, SGF1 (2/4)	<i>“have more communication with the PE teacher [through meetings]” – ESCF1</i>
		6.4.1.3: Training format and settings	ESGM1, ESGF1, ESCF1, ESCF2, ESIF1 (5/5)	SGM1, SGM2, SGF1 (3/4)	Refer to Results
		6.4.1.4: Training providers	ESGM1 (1/5)	SGF1, SGF2 (2/4)	Refer to Results
		6.4.1.5: Adapting the curriculum to meet every students’ needs	ESCF1, ESCF2, ESIF1 (3/5)	SGM1, SGF2 (2/4)	<i>“we should move forward from the current curriculum” – ESCF2</i>
		6.4.1.6: Subject based LSEs	ESGM1, ESGF1 (2/5)	SGM2, SGF2 (2/4)	Refer to Results

for better inclusive PE, PA and Sports in Malta		6.4.1.7: Reducing class capacity	ESCF1, ESCF2 (2/5)	SGM2, SGF1, SGF2 (3/4)	Refer to Results
		6.4.1.8: The involvement of PE teachers in the IEP sessions	ESGM1, ESGF1, ESCF1, ESCF2, ESIF1 (5/5)	SGM1, SGM2, SGF1, SGF2 (4/4)	<i>“missing part of the puzzle”</i> – ESGM1 <i>“spend a lot of time with the children”</i> – SGF1
	6.4.2: A holistic approach to change	6.4.2.1: Building a Community of Practice	ESGF1, ESCF2, ESIF1 (3/5)	SGM2 (1/4)	<i>“it’s impossible for one teacher to know everything”</i> – SGM2
		6.4.2.2: Creating more inclusive sports opportunities	ESCF2 (1/5)	SGM1, SGM2, SGF2 (3/4)	<i>“scrap other sports and let them do Special Olympics”</i> – SGM2

		6.3.2.3: Creating a correlation between school and home	ESGM1, ESCF2 (2/5)	SGF2 (1/4)	Refer to Results
	6.3.3: Suggestions directed to	6.3.3.1: More financial support	ESCF1 (1/5)	SGM1, SGM2, SGF1 (3/4)	Refer to Results

	the government				
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Appendix 25: My Personal Motivation

The desire to pursue research within this field emerged during the teaching practice that I undertook as part of my undergraduate course. As a student teacher working in different school settings across Malta, I came across various PE teachers and LSEs using different pedagogical approaches to cater for their students in class. I noted, however, that it was often a struggle to fully include students with ID in the PE lessons. The reasons behind the lack of inclusion appeared to revolve around the students' lack of physical skills and cognitive abilities, lack of social acceptance by their classmates, lack of motivation by their PE teachers and LSEs to find ways to truly include the students in the activities and lack of knowledge about inclusive approaches. These struggles presented PE teachers and LSEs with a challenge. When the challenge to include such students could not be overcome by changing the teaching approach, the students with ID would end up marginalised in class or would be sent to a different class with their LSE to work on another lesson objective. This approach is not in line with the notion of inclusion. Thus, when I started teaching PE, I always sought ways and means to include every student in my class in the lesson, irrespective of their ability. By drawing on my experience, and sharing knowledge and resources with colleagues, I was able to plan differentiated lessons and I spent a great deal of time making equipment from scratch to make sure that every student would be able to participate in class. My motivation to assist students with ID evolved further when I started coaching athletics to children with ID. Their self-discipline, commitment, perseverance, and determination to improve taught me a great deal. I realised that these inspiring children deserved to be given more importance in the field of PE, PA, and sports participation. I also realised that more opportunities, strategies, and inclusive measures were needed to make sure that these students received the recognition they deserved in Malta.

I became more and more interested in creating change and undertaking a PhD seemed to be one of the ways I could pursue to explore how inclusion could facilitate learning for all students and how inclusive approaches could help provide equal opportunities for students with ID in PE, PA, and sports, thus creating a community of sports for all, where everyone participates in PA without any discrimination or prejudice.