CHS 301: Work Based Research Project

"PE as a core subject in primary education; exploring practitioner's perspectives on primary physical education."

Study submitted in partial fulfilment of the requirements for

BA (Hons) Childhood and Society Studies - May 2022

Module Tutor: Julie Ovington

Dissertation Supervisor: Michael Elsy

Word Count: 10,985 words

Student Name: Ben Smith

Student ID Number: 199168457

School of Social Sciences - Faculty of Education and Society

Declaration

I, Ben William Smith, hereby declare that this dissertation and the work presented in it is entirely my own. Where I have consulted the work of others, this is always clearly stated.

Ben William Smith

Acknowledgements

Firstly, I would like to thank those closest to me. Without the support of my brilliant family and amazing girlfriend, I couldn't have done this. They have supported me, guided me and above all, put up with the 'rants' about this topic during family time, the nights spent listening to my laptop keyboard clicking away and the countless times I have asked the question "can you quickly read through this for me please?" I've sacrificed a lot of time away from them to follow my passion and complete this degree, I can not thank them enough. They have all made sure I had everything I needed and they always make me feel on top of the world. They are all the best.

I'd also like to express my gratitude to my setting, who because are involved in this study, I can not name. Whenever I had needed time to work on my own studies, it was given. Whenever I needed to reduce my hours to support my work-life balance, it was done. But my biggest appreciation goes to the opportunity I was given at their school; being a PE teacher. Without this opportunity and experience I would never have come this far. It has given me a sense of purpose and has helped me find my passion in life; allowing me to take the next step of my life and career, becoming a qualified teacher. My setting has consistently believed in me, supported me and challenged me; they have been invaluable. I'd also like to give a special mention to my colleagues who a) gave up their time to take part in my research and b) believe in me, trust me and support me. They all know who they are.

Finally, the staff of The University of Sunderland; more specifically, Julie Ovington and Michael Elsy, my module leader and supervisor respectively. Julie and Michael have been

nothing short of amazing. Their expertise has been instrumental in my development in such a short space of time. Whilst Julie and Michaels knowledge has played a crucial part in my gratitude to them, I have appreciated more how approachable they are, how much time they have made for me and simply how they have both went above and beyond to help me. From my first day it has been obvious that Julie and Michael didn't help me because they had to, they helped me because they wanted to.

Table of Contents

Abbreviations and Definitions

PE: Physical Education.

The planned, progressive learning that takes place in curriculum time. All children receive physical education by law, as it is part of their curriculum.

SS: School sport.

The learning that takes place outside of school, usually in the form of competitions against other schools or extra-curricular clubs. All children should be given the opportunity to take part in school sport, although it is not compulsory.

PA: Physical activity.

This refers to the general bodily movement that uses energy. This could range from walking, running, gardening or tidying.

ITT: Initial teacher training.

Training that potential teachers will go through to ensure teaching standards are met before being offered any teaching roles or responsibilities. All teachers must go through ITT.

AfPE: Association for PE.

The representative subject association for PE in the UK.

CPD: Continuous, professional, development

Learning activities professionals engage in to develop and enhance their abilities.

PESSPA: Physical Education, School Sport and Physical Activity

Acronym used to combine PE, SS and PA into one collective term.

Abstract

Abstract

Aims:

This study looks to discover current primary education practitioners' thoughts and ideas regarding the status of PE in the United Kingdom and ultimately, whether it should be a core subject alongside English, Maths and Science. This study will use appropriate research, theories and policies to aid the research.

Background:

There is a physical and mental health crisis that has been accelerated by COVID-19. Physical activity has been identified as a way to improve both of these health areas and primary schools can help children develop positive experiences of physical activity that hopefully will stay with them for life, producing healthier adults. Research is showing that lifestyle habits formed in childhood can follow through to adulthood, it is crucial that positive and healthy habits are formed in early ages.

Methods:

A qualitative research method was adopted through the use of semi-structured interviews to gain an insight into practitioners' viewpoints, attitudes and experiences of PE.

Results:

Participants outlined how they do not feel confident in teaching PE and that it should be valued more within school. They also expressed how PE has the potential to be more than just playing sports.

Conclusion:

Whilst PE is the most prioritised foundation subject and one of the most heavily funded subjects, it still requires more attention in order to increase the status and value. PE is still being dropped for other subject areas and teachers do not feel confident teaching PE to a high standard. This, in the researcher's opinion, is implicitly telling children that PE is not important. Action must be taken to place PE at the forefront of schools.

Chapter 1

Introduction

Chapter 1 - Introduction

1.1: Context of the Study

This research follows proposals from the House of Lords (2021), calling for PE to a core subject in response to the COVID-19 pandemic, where both children and adults physical and mental health has plummeted. AfPE also created a task force, using research with similar intentions to this research as ammunition to fight for more importance placed on PE in primary schools. Edward Timpson (2022) also lead a Westminster Hall debate suggesting that PE should be a core subject.

This research project was undertaken within a primary school setting, where all participants are employed alongside the researcher. The research question was produced as the researcher works as a PE teacher within an outstanding primary school; directly seeing the benefits PE can bring to children and is passionate about sharing the benefits with others. The researcher implemented a four-week PE club in two differing year groups taking place on two days of the week each (in addition to current PE lessons), to investigate the effects of daily PE, replicating what it may be like if it were to become a core subject.

Whilst the development of the national PE curriculum in the UK has evolved, from focuses being shifted from producing stronger men ready for war in the mid nineteen hundreds (O'Hanlon, 1982), to a post-war concern for physical fitness (Bailey et al., 2009) and finally, our current ‘twenty-first century offer’ of providing opportunities to participate in sports and becoming physically confident (Department for Education, 2013); there have been a

plethora of studies highlighted that have provoked thoughts for another shift in emphasis in PE.

1.2: Rationale

Sinek (2009) states *"people don't buy what you do, they buy why you do it."* (p. 41). If PE were to become a core subject, educational professionals would need persuading and it is crucial that the 'why' is established before potential change is sprung upon them.

Recent studies imply a crisis is approaching, if not here already; a global physical health crisis. Some of the latest figures from the World Health Organisation (WHO) (2020) state that more than 80% of adults worldwide are insufficiently active. The Health and Social Information Centre (2015) also add that nearly a third of children aged two to fifteen are regarded as either overweight or obese. Public Health England (2021) highlight how insufficient physical activity is associated with 1 in 6 deaths in the UK, costing the UK more than £7.1 billion a year (£900,000,000 directly to the NHS). Cancer Research UK (2021) adds how obesity causes more cases of some cancers than smoking. To add to this, people who are insufficiently active have a 20% to 30% increased risk of death than those who are sufficiently active (WHO, 2020). Furthermore, WHO (2020) claim that up to five million deaths a year could be prevented if the population was more active.

Whilst the physical health figures are worrying; the relationship between physical activity and mental health can also be noticed. Especially post COVID-19, the children of our world are suffering. The Royal College of Psychiatrics (2021) state a record number (190,271) of children and young people have been referred to mental health services; an increase of

134% from the previous year. Of this number, 8,552 children were referred to urgent or emergency crisis care; an increase of 80% compared to the previous year. Huzar (2019) found that those with low levels of fitness and strength had 98% higher odds of experiencing depression and 60% higher odds of experiencing anxiety.

House of Lords (2021) state: "*Attitudes towards sport and physical activity develop when we are children and often track into adulthood… whether they return to sport and physical activity can often depend on the attitudes developed earlier in life… providing a positive, inclusive and fun environment for children and young people will equip them with the skills, motivation, and confidence to become active adults*". Additionally, Sallis et al. (1996) claim that children who do not participate in physical activity are more likely to have health complications through adulthood.

Hedley et al (2004) outlines how the percentage of children who are overweight has more than doubled since the 1970's as well as Ebbeling, Pawlak and Ludwig (2002) highlighting how there is an extensiveness of worldwide childhood obesity. Donnelly and Lambourne (2011) highlight how physical activity in schools has declined since the 1970's; considering this, MacFadyen and Bailey (2001) suggest that schools should encourage children to intrinsically enjoy movement and should nurture a passion for physical activity that leads into participation for life. Armstrong et al. (1990) outlines how physical activity levels naturally decrease as children move into adulthood. Thus, schools must play a fundamental role in teaching children to maintain an active lifestyle (USDHHS, 2000).

Green (2002) outlines how the role of PE promoting lifelong physical activity has become widely accepted. Kelder et al. (1994) states there is evidence to support the notion that

health-related behaviours learned during youth are often maintained into adulthood. Hands (1999) suggests that PE provides opportunities for children to develop the skills needed to have a physically active lifestyle; as well as this, fundamental movement skills developed in PE support the abilities needed for physical activities in later life (Gallahue and Ozmun, 1998). Evidence suggests that those who establish strong fundamental movement skills in childhood are increasingly likely to be active later in life (Okely, Booth and Patterson, 2001).

1.3: Aims of the Research

This research aims to understand practitioners' viewpoints and attitudes towards primary PE and if change is needed. Related literature will be used alongside interviews to establish a general answer to the question: should PE be a core subject? The study will look to discuss the following areas of research:

- What are the physical and mental health benefits of PE?
- What are the holistic benefits of PE?
- What and who defines high quality PE?

The following chapters will look to address current literature, research approaches and methodologies, the findings of the interviews and a conclusion, respectively.

Chapter 2

Literature Review

Chapter 2 - Literature Review

2.1: Introduction

This literature review will explore the theories, policies and studies surrounding the three main research questions of the study. First, the physical and mental health benefits of PE will be explored and why they should be prioritised, with links to obesity and other ill-health that can develop in later life. Then, holistic education is discussed and how this applies to PE, focusing on how PE can develop the 'whole child', rather than exclusively developing them physically. Finally, this review considers what high quality PE is and how it can be achieved, with increased emphasis on teacher training.

2.2: Research Question One: What are the physical and mental health benefits of PE?

Harris (2018) outlines how the primary focus of PE is developing physically; an abundance of studies have proven the benefits of being physically active. Sallis (1999) explains how regular participation in physical activity correlates with longer and improved quality of life, as well as reduced risk of diseases. Evidence is also circulating suggesting an affiliation with physical activity and diabetes, blood pressure (Malina and Bar-Or, 1991), bone health (Bailey and Martin, 1994) and obesity (Gutin, Barbeau and Yin, 2004). To add to this, Bass and Myburgh (2000) and MacKelvie et al. (2002) found a link involving childhood physical activity and bone strength, impacting the likelihood of osteoporosis in later life. Steinbeck (2001) found that physical inactivity is concurrent with obesity development whereas Biddle et al. (2004) states that studies investigating this link are uninspiring. To add to this, Tolfrey

et al. (2000) claims physical activity has minimal impact on children's blood pressure, however Biddle et al. (2004) challenges this viewpoint, stating it is because most diseases appear later in life. Additionally, Kim (2012) found that PE did not have a major impact on boys' physical activity levels. Regardless, physical benefits of physical activity have been clearly recognised; reducing obesity, increased length and quality of life, improved bone health, to name a few.

As well as the physical benefits physical activity can provide and considering the concerning mental health figures in the UK, Sport England (2021) evidence a positive relationship between being active and mental wellbeing, as well as Shvedko et al. (2018) and Vancampfort et al. (2017) finding that physical activity reduces stress, cognitive decline and depressive symptoms. They also outline how physical activity improves social cognition, social interaction, quality of life, self-esteem and sleep. Additionally, physical activity has been found to be synonymous with positive mood (Biddle, 2000) and reduced anxiety (Taylor, 2003). Whilst the benefits can be appreciated, it is important to consider how it links to children. Fox (2000) stated that there is a strong link between physical activity and self-esteem particularly with children. Gruber (1986) supports this, determining that participation in PE supports the improvement of self-esteem of primary aged children. As well as this, Talbot (2001) outlines how PE enhances self-confidence and social development. Ultimately, PE can contribute to the enhancement of psychological health in children (Bailey, 2006).

2.3: Research Question Two: What are the holistic benefits on PE?

Before considering what holistic benefits of PE can be, it is important to comprehend what holistic education is or looks like. Mahmoudi et al. (2012) suggests that a holistic approach to education cultivates the relationship between different aspects of the learner; intellectual, physical, spiritual, emotional, social and aesthetic. Whilst Marshman (2011) outlines how holistic education focuses on the fullest possible development of the person by addressing more than just the intellectual domain. DeCorby et al (2005) determined that teachers viewed PE as important to the development of the whole child. Stolz (2015) recognises the importance of holistic development, theorising how we engage with the world in an emotional and practical way for instance, not exclusively cognitive. Harris (2018) highlights how although the primary focus of PE is on the physical body; it also makes a large contribution to the spiritual, moral, social and cultural growth of young people (Bailey et al., 2009). Bailey (2006) found that PE develops children in five domains; physical, lifestyle, affective, social and cognitive. Svoboda (1994) explains how PE can be holistic by providing opportunities to meet and communicate with others, offering new social roles and delivers experiences of emotions that aren't available in the rest of life.

PE enhances academic performance by increasing the flow of blood to the brain, improving mood and improving mental alertness (Hills, 1998). Donnelly and Lambourne (2011) highlight the evidence showing the correlation between physical activity, cognitive function and academic achievement. Dowling (2021) also believes PE should be a core subject alongside English and Maths; outlining the evidence backed arguments that regular physical activity improves brain function; in turn supporting children in achieving positive academic results. On the contrary, Packham and Street (2018) found that daily PE did not

have any positive impact on health or educational outcomes. They determined it had detrimental effects, correlating with an increase in discipline and absence rates, as attitudes towards PE had already been formed. Whilst research in Switzerland (Yangüez et al., 2021) found that there is a positive relationship between a child's cardio-respiratory health and their academic success. In an educational society where academic results determine a schools' reputation (Leckie and Goldstein, 2009), it would seem PE could be further down the 'pecking order' in comparison to English and Maths for instance, with precious time utilised for 'boosters' or 'interventions' to improve results. Donnelly and Lambourne (2011) state that physical activity improved academic performance through self-regulatory methods consisting of planning, organising, problem-solving, effective memory, motor control, and inhibitory control.

Furthermore, eleven out of fourteen studies of physical activity during the school day demonstrated a positive relationship to academic performance (Rasberry et al., 2011). As well as this, Trudeau and Shephard (2008) found that additional time dedicated to PE did not inhibit academic performance. On the contrary, von Hippel and Bradbury (2015) found that daily PE had little improvements on fitness and made no impact on academic achievement. However, regular physical activity can also improve 'desirable' behaviours when learning in the classroom. Hillman et al. (2009) found that physical activity can improve the allocation of attention to a specific cognitive task. Additionally, physical activity showed that children increased their 'on-task' behaviours by more than 20% during a study by Mahar et al. (2006). Grieco et al. (2009) also adds that active students are able to return to the same level of on task behaviour after being active. Research from Sibley and Etnier (2003) suggested that a positive correlation was found between physical activity and academic readiness in children. Conversely, Kristjansson et al. (2008) highlights a negative correlation between BMI and academic achievement. Additionally, Gunstad et al. (2008)

found no link between BMI and test performance in children and adolescents. Beller and Stoll (1995) highlight evidence that involvement in PE actually worsened classroom behaviour. To argue this, Bailey (2006) provides evidence of research that reduced ‘academic’ curriculum time and replaced it with PE, finding academic results did not worsen; as well as having better concentration, less truancy and reduced discipline issues. Shephard (1997) supports this, finding that students’ learning abilities improved as a result of receiving extra PE lessons.

Whilst the physical and mental health benefits have been clearly outlined, Stryer, Tofler and Lapchick (1998) suggest that sports fosters skills such as cooperation, self-discipline, competitiveness and leadership. Brown and Payne (2009) outline a need to develop meaningful experiences in PE and should involve more than a purely cognitive, technical or ‘fitness-as-an-outcome' approach; they suggest that meaningful PE will encourage greater physical activity throughout an individual’s life. Harris and Cale (2018) state that high quality physical education has been shown to: contribute to children’s confidence; self-esteem; improve social development; develop a sense of fairness; reduce symptoms of anxiety and depression; benefit cognitive function and academic achievement; and encourage school attendance and engagement. Considering this social context, Bailey (2006) suggests that PE is an appealing context as social interactions frequently emerge naturally. Sullivan (2021) discusses in the changes he has made to his own PE curriculum, with an increased focus on developing concepts such as communication and resilience, using PE as the vehicle to achieve this, in a bid to improve employability and future life success; something which Sullivan stresses the importance of, also highlighting how this makes PE meaningful for his students. Youth Employment UK (2017) recognised the core competencies most valued by employers as communication, teamwork, problem solving, self-management and self-belief; suggesting that high quality PE can play a role in improving young people’s

employability. Sport England (2021) also found a positive correlation between being active and individual development; such as resilience. Whilst there is an appreciation that PE's main focus is physical development, there is certainly a compelling case that PE can develop the child holistically.

Considering the positive aspects engaging in physical activity can bring to individual development; 56% of primary schools said that they had reduced hours for certain subjects, particularly PE, as part of 'COVID catch up' (Department for Education, 2022). Boyle and Bragg (2006) highlight how this can be a direct conflict when compared to Ofsted's idea of a 'broad and balanced curriculum'. Even though schools have admitted to removing PE to focus on other core subjects, Ofsted (2012) say that "*PE involves teaching and learning. It is part of every child's entitlement to a good education."* Youth Sport Trust (2018) also revealed that PE time has been cut in over a third of schools across the UK due to exam pressure and increasing curriculum time for other subjects; suggesting that those in senior leadership positions either do not see the value of PE or value academic results over holistic development.

2.4: Research Question Three: What and who defines high quality PE?

When considering whether PE should be a core subject, it is also important to review what makes high quality teaching and learning within PE and how it is assessed and monitored. "*Quality PE… should help them acquire the psychomotor skills, cognitive understanding, and social and emotional skills they need to lead a physically active life."* AfPE (2008). The Department for Education and Skills (2005) define high quality PE as: *"enabling all young people, whatever their circumstances or ability, to take part in and enjoy PE and sport;*

promoting young people's health, safety and well-being; and enabling all young people to improve and achieve". Revisiting the ideas of Harris (2018) regarding the primary focus of PE being physical; it can be fair to assume that high quality PE lessons must spend the majority of time being active. Stratton, Fairclough and Ridgers (2008) found that on average, just 37% of PE lesson time was spent being active due to time used for teacher input and moving to a hall or outdoor space for example. Donnelly and Lambourne (2011) explain how PE time has been reduced because of this, however they suggest physical activity can take place without the need of specialist facilities or clothing.

On a separate note, Dyson (2014) believes that since the introduction of 'The Primary PE and Sport Premium' in 2013 the UK has resulted in a large amount of spending on sports coaching organisations working in primary schools; therefore measuring the quality of PE provisions by how many activities children are offered, rather than assessing children holistically. Dyson (2014) hints at how the subject of PE is devalued because of this; to teach any other subject within schools in the UK you must have 'Qualified Teacher Status'. Quennerstedt (2019) outlines how education always involves teaching; and how being a teacher is a position of power. Whilst we can recognise that teaching is a position of both influence and authority, underpinned by 'Qualified Teacher Status', it is worth considering this certain level of standard is not required when delivering PE. On the contrary, Fleet (2021) outlines how PE is receiving an increased focus from the Government; as no other subject obtains such vast amounts of funding with the aim to support teacher competence and pupil outcomes. Rainer and Jarvis (2019) highlight how schools have received this significant amount of funding yet significant numbers of children are leaving primary school without fundamental movement skill proficiency; questioning the impact of this funding. Smith (2020) adds that schools are seemingly using the vast amounts of funding to

increase physical activity, rather than improve PE provision. As well as this, Smith (2020) believes that headteachers often do not have the time or knowledge to correctly manage the funding, therefore spending the funding on sports coaches; who Smith believes generally have good skills and knowledge of sports, but do not possess the critical pedagogical knowledge and understanding that would be associated with high quality teaching and learning.

Fleet (2021) also explains how in some instances, the funding negatively impacts the subject status by employing sports coaches who lack suitable qualifications and tend to focus on sporting objectives over educational benefits. Additionally, Griggs (2010; 2016), Jones and Green (2017) and Smith (2015) highlight how non-qualified teachers lack knowledge of pupils as well as areas such as inclusion, progression and assessment. Concerns have also been expressed that schools have become over-reliant on sports coaches delivering PE, in turn resulting in school staff becoming progressively deskilled from the subject. On that note, Garratt and Kumar (2019) also reported a trend towards competitive sports being offered; sacrificing a broader educational experience in primary PE. In addition to this, Durden-Myers et al (2018) questioned why there is a growth of 'coaches' in curricular PE in primary schools, paid for by the 'Primary PE and School Sport Premium Fund' if we are to accept the value of PE. Whilst the employment of coaches is promoted as a productive strategy to maximise the quality of PE (Flintoff, 2003), Macdonald, (2002, p. 215) adds "*school-community links may not always see educational agendas remaining intact*".

Some inhibitors for PE include the lack of expertise, training and resources (Faucette and Patterson, 1989). The House of Lords (2021) expresses the call for more emphasis on PE

delivery in teacher training. Durden-Myers and Keegan (2019) highlights how primary teachers are getting as little as six hours of PE training. Rhymer (2021) echoes this; outlining how trainees received one hour of PE specific training; this in turn having a negative effect on attitudes towards PE. Faucette and Hilidge (1989) evidence this, finding that classroom teachers believe PE does not provide any benefits to students. The Youth Sport Trust (2021) called for a professional development programme to help teachers "*better develop physical literacy and educate through physical activity and sport*." Sucuoglu and Atamturk (2020) found a positive correlation between the professional qualifications of teachers and learners' attitudes towards PE lessons. This supports the case that teachers need access to high quality training and CPD in order to deliver high quality PE; in turn improving children and young people's attitudes towards and experiences of PE. Harris et al. (2012) found that primary school teachers are not adequately trained to teach physical education and consequently many lack the confidence and competence to teach the subject well. For any subject to be taught to the highest quality, it must be fully inclusive for all children. *"If physical education is to be embraced by all and regarded as a site for inclusive, lifelong and life wide learning, then the meaning and values attached to movement by students are worthy of attention"* (O'Connor, 2019, p.2). To add to this, Brophy (1983) outlines how PE is product orientated and thus encourages children to focus on performance rather than development. The use of extrinsic prizes rewarding performance in PE can undermine the intrinsic motivation to learn (Ames, 1992). As a consequence, students who are not as skilled as others in the group lose interest (Ames, 1992). PE is not solely concerned with physical development, as previously discussed. High quality PE can allow students to accumulate personal and social skills which acts as social capital to allow young people to function in a range of social situations in later life (Bailey, 2005). Griggs and Fleet (2021) highlight that high quality PE should instigate and support

all learners to develop into a lifelong participant of activity. Bailey (2006) emphasises how the quality of PE was a determining factor in the receiving of the benefits it can bring. Morgan and Hansen (2008) describe how many PE lessons placed importance on the objective being movement; explaining how these PE lessons resembled fitness sessions and put children off physical activity.

Considering teachers attitudes towards PE and how these can transmit to their students, Morgan and Hansen (2008) symbolise how little teachers view PE, deeming it a 'break' from the formal curriculum; not recognising the academic benefits it can bring. Lau et al. (2004) claims that PE should not interfere with 'real' schooling. Kirk (1989) claims PE is promoted to benefit other academic areas; stating the subject of PE should be viewed of equal importance. He adds how by justifying PE on the basis of physical benefits, there may be an implicit viewpoint that PE has no educational benefit and only gets children active. Bailey and Dismore (2004) outline how many educators use PE and Sport synonymously, not making the significant differences clear. Contemporary PE continues to be arranged in short units of work, consisting of team games which Fairclough et al. (2002) state are not necessarily life-long activities. Griffin (1985) found that PE teachers almost always used a command style of teaching; potentially neglecting the social benefits that are associated with high quality PE as the focus would be on fitness development or skill performance.

Chapter 3

Research Methodology

Chapter 3 - Research Methodology

3.1: Introduction

This section will rationalise the reasoning for the paradigm used for this research project, as well as the methodical approach taken throughout; in turn explaining the practitioners' viewpoints surrounding the research title. Key methodical approaches will be analysed and once more, the practitioner will outline the reasoning for their methodology. A thorough analysis of the data collection method that has been selected will outline key strengths and restrictions of the method. Ethical considerations, validity, reliability will also be justified and debated.

3.2: Research Paradigms

Humphrey (2013) suggested that researchers disregard their research paradigm; explaining how this neglects theoretical reasoning, focusing on how data is collected in relation to the topic. Thus, the philosophical '*paradigm*' surrounding this research will be considered to confront this issue.

This study was conducted with a 'constructivist' (or 'interpretivist'), research paradigm. The constructivist paradigm concerns understanding the world from personalised experiences of individuals (Sparkes and Smith, 2014). This was important to the practitioner as one of the main research areas was surrounding developing positive attitudes towards sport and how early experiences can help shape this. Thomas (2003, p.6) outlines that qualitative

research methods are usually used by constructivists, because the constructive paradigm "*portrays a world in which reality is socially constructed"*. Thus, the constructivist paradigm often uses methods such as 'interviews' to gain an understanding of the individual's thoughts and opinions. Porter (1996) describes successful research as being founded on four different levels of understanding: ontology, epistemology, methodology and methods. All four will be discussed by the practitioner.

3.3: Ontology

O'Hara et al. (2011) state that ontology is the study of being. They believe that there are three traditions when practising ontology. The first, is the objective approach, involving the search for the truth. The next approach is the 'idealist' approach, arguing that ideas, thoughts and social interactions are real and have meaning. Finally, there is an approach which is completely subjective and claims that knowledge is generated from the mind with no external contributors. O'Hara et al (2011) believe the subjective approach is difficult to adhere in research as it suggests that any claim that is made is simply reflecting someone's state of mind at the time.

For this research, the practitioner has used an 'idealist' ontological approach, placing emphasis on ideas, thoughts and social interactions of others. This research outlines the different viewpoints, or realities, of primary PE.

3.4: Epistemology

Crotty (2003) states that epistemology involves how we can know things and what counts as knowledge. Similarly to ontology, there is more than one epistemological approach. O'Hara et al. (2011) states that a positivist approach offers trustworthy and scientific explanations. However, Crotty (2003) explains the main problem with positivism is that there is more than one approach within it. As well as this, positivism suggests that every researcher will see something the same way.

The next approach to epistemology is interpretivism. O'Hara et al. (2011) explains how interpretivists look for human views; recognising that everyone is different and each individual sees the world in different ways. Schwandt (2001) claims that human action is meaningful whilst natural science is not; suggesting that human views are more valuable than scientific results. However, Schwandt (2001) outlines the potential drawbacks of this approach, explaining how social context is key to understand actions.

The practitioner used an interpretivist approach to epistemology; using interviews to gain different viewpoints and experiences surrounding a subject.

3.5: Methodology

A range of methodological approaches can be adopted by researchers and have been considered for this research by the practitioner, for instance: experimental research, grounded theory, action research, narrative research and case studies. Although there are

certain characteristics typically associated with an approach, boundaries between these approaches can become blurred and many approaches can in turn be employed.

One approach is ethnographic methodology; focusing on describing a culture (O'Hara et al., 2011) and is achieved through observations and interviews. Whilst the practitioner did not conduct observations themselves, interviews were conducted to find opinions based on informal observations from staff in the setting. Another key feature of ethnographic research is the researcher immersing oneself in the culture they are researching; the practitioner already works in the setting in which the research has taken place; thus, meaning they were fully aware of cultures and norms before the research took place. O'Hara et al. (2011) outlines some drawbacks of an ethnographic methodology; it is time consuming and the authenticity can be questioned.

The research also used elements of phenomenological research. Groenwald (2004) outlines phenology as the study of experience, whilst understanding perspectives of individuals. However, O'Hara et al. (2011) highlight it can be difficult for a researcher and participants to put aside all preconceptions and prejudices when adopting this research mythology style; aiming to view results from a completely neutral standpoint. Phenomenological approaches can produce large amounts of data through transcripts etc., whilst also not resulting in findings that are definitive from a statistical perspective; results require the researcher to interpret them. Rapport and trust are crucial to this methodology; allowing the participant to share their experiences openly and honestly with the researcher. As mentioned previously, the researcher has worked alongside the participants and has built this rapport and trust; in turn providing more honest and therefore reliable results.

For the purpose of this research, the practitioner used a combination of the aforementioned approaches; seeking to understand particular experiences and opinions, rather than statistical data.

3.6: Methods and Approach

Considering the epistemological, ontological and methodological research standpoint this research has taken; the researcher opted for a qualitative data collection approach. Holliday (2007) defines qualitative research methods as looking at social behaviours that provide the researcher with data about the views and opinions of the participants. This in turn can result in the researcher making new findings or developing on previous concepts and ideas surrounding PE as a core subject in primary schools. Therefore, the use of qualitative research was deemed more beneficial data than a quantitative approach, which aims to source a definitive result using measurements, numbers and statistics (Robert-Holmes, 2011).

Using questionnaires to gain qualitative data was considered as a method for this research, with the benefit of it being quick. However, the use of questionnaires requires little interaction with participants and often does not encourage elaborated responses; therefore the researcher may not gain sufficient data to build a deeper understanding of the participants' opinions (Clough and Nutbrown, 2007). As this was a small-scale study, the researcher opted for one strand of qualitative research: semi-structured interviews. Had this have been a large-scale piece of research, the researcher would use other methods such as observations and document analysis. Qualitative interviews provide researchers with an opportunity to go 'in-depth' with participants emotions and experiences; in turn helping the

researcher develop their understanding of others' perspectives of a social concept (Rubin and Rubin, 2012).

Robert-Holmes (2011) outlines three main types of interviews. Semi-structured interviews were seen as the most appropriate method as this provided the researcher with an opportunity to encourage participants to develop their answers. The use of open-ended questions were used, as it allowed the researcher to gain a more detailed response from the participants than if questions were closed (Naughton, Rolfe and Siraj-Blatchford, 2010). Pickard (2013) states that quality interviewing is dependent on the rapport between interviewer and interviewee; placing responsibility on the interviewer to ensure the interviewee is comfortable and relaxed. Typically, 'ice-breaking' questions would be used to ensure the interviewee is comfortable, however the researcher chose participants who work in the same setting as them; where the participants already have a relationship with the researcher.

Due to time-constraints, four class teachers across two year groups were chosen for interviews. Having a larger sample would have increased the credibility of this study; although, four participants ensured the research was manageable for the researcher and allowed an opportunity for data to be analysed in more detail (Naughton, Rolfe and Siraj-Blatchford, 2010). Within an interview, Rubin and Rubin (2012) highlight the importance of 'probing' in a semi-structured interview to develop the participants answer further, this was used by the practitioner through verbal and non-verbal communications. Clough and Nutbrown (2007) discuss the importance of carrying out a pilot interview in order to develop effective interviewing skills (Blaxter, Hughes and Tight, 2010). The researcher arranged two pilot interviews with non-participants to gain feedback.

Audio recordings of the interviews were taken to allow the researcher to focus on effective interviewing, then being able to transcribe interviews after completion. However, Pickard (2013) states that interviewees may feel uncomfortable when they know they are being recorded. This was seen as the most appropriate option as it would not be manageable to be an effective interviewer and transcribe during the interview. Interviewees may also feel anxious if notes are being taken whilst they speak.

3.7: Ethical Considerations

3.7a: An Introduction to Ethics

Ethics are "*a set of moral principles that aim to prevent researchers from harming those they research*" (Dickson-Swift, in Liamputtong, 2007, p.21), as well as protecting the researcher. It is hoped that this piece of research can inform future policy because of the potential benefit it can bring to children and young people; making this research project worthwhile. Whilst the intentions of the research may be positive, this cannot overwhelm ethical responsibilities to protect any individuals or groups involved in the research (Walliman, 2004). There was no potential harm to participants in this research.

Ethical approval was gained in line with The University of Sunderland Research Ethics Policy (2022) prior to the research project beginning; the study adhered to the University's policies; for example by providing participants with a participant information sheet and a participant consent form. All participants were treated impartially, sensitively and with respect.

This research was completed in an ‘outstanding’ primary school; the process of looking to implement daily PE with select groups proved to be more difficult than first anticipated, due to the lasting impact of COVID-19 on schools, staffing and an already busy timetable. This resulted in a compromise and a morning PE club being offered to two year groups. With it being a club, attendance was optional. Robson (2002) discusses how research can be adapted to benefit a setting.

3.7b: Informed Consent

Informed consent is “*the condition in which participants understand and agree to their participation without duress”* (BERA, 2004, p.6). Initial consent was gained from the ‘gatekeepers’, in this piece of research, by delivering a presentation (appendix one) and sending a letter (appendix two) to the headteacher and board of governors of the setting, also highlighting how timetables would change for that week (appendix three). Once information was sent, there was a period of reflection. Hart and Bond (1995) outline the importance of allowing potential participants to read information for themselves at their own pace. Both contained information about the researcher, the main purpose of the research, clarification of the level of involvement required, confidentiality assurances and a summary of the benefits to the setting. Denzin and Lincoln (2005, p.144) highlight the expectation for a researcher to present participants with *“full and open information”*. When considering the direct participants, they were presented with a participant information sheet (appendix four), participant consent form (appendix five), as well as the interview questions (appendix six) that were used. The right to withdraw from the study was outlined in these participant forms, as well as clarifying that participation is voluntary. The researcher chose to interview staff

as the children and young people of the setting are identified as a vulnerable group and more ethical considerations would need to be made, which was deemed unmanageable for the researcher. As the research is related to children's attitudes towards PE, the thoughts of children were expressed through interviews with teachers; which Robert-Holmes (2011) refers to as children's voice 'by proxy'.

3.7c: Confidentiality and Anonymity

Confidentiality was ensured by the researcher using a variety of methods. Firstly, no names of settings, staff or groups involved are evidenced in this study; providing no way of establishing the identity of anyone who took part in the study. The researcher assigned participants, the setting and groups with titles such as 'participant A', 'setting A' or 'group 1' (Frankfort-Nachmias and Nachmias, 1992) to maintain anonymity. Participants may be comfortable with names being used initially; however they may change their stance in the future; strengthening the case to protect all identities from the offset. Non-gender specific pronouns were used to further protect participants. Data was only used by the researcher and shared with the research supervisor (Cohen et al., 2007). If the research is used for publication, participants will be asked for further consent.

Any data collected was stored on a password protected and encrypted folder that only the researcher is able to access and will be deleted after this research paper is submitted. If a participant would like to withdraw from the study, the researcher will destroy all data obtained from them and their data will not be used in the study, ensuring GDPR laws are followed. Fine and Sandstorm (1988) support this, stating that right to withdrawal should not be questioned and all data associated with that participant must be destroyed.

3.7d: Validity and Reliability

By simply following ethical guidelines, this ensured that this research will have integrity and credibility (Bryman, 2008). Additionally, in qualitative research, the validity of the results depends on the credibility of the data (Hesse-Biber and Leavy, 2011). To improve the validity of this research, the researcher would have liked to have directly interviewed children and young people but was unable to due to time constraints regarding receiving ethical approval. As well as this, quantitative data would add another data source to improve the credibility of results, however this would not be manageable for one researcher during a small-scale research project. Adding additional data collection methods would have resulted in triangulation, thus increasing the reliability of the data.

3.7e: Positionality

The researcher is a practitioner working in a primary school setting alongside the research participants.

3.7f: Data Analysis

As previously mentioned, data was gathered using semi-structured interviews to gain an insight into understanding experiences. Carter (2018, p.12) defines data analysis as being "*summarising and interpreting findings"*. Meanwhile, Merriam and Tisdell (2016) view data analysis as where the researcher finds an underlying meaning related to the research questions. To summarise, data analysis is the process the researcher will take where the raw data is interpreted and meaning is discovered. Blaxter et al. (2010) suggests data

collection a ‘messy’ process, outlining how the answer to research questions is to be found in the data. Denscombe (2017) highlights how there are five stages to qualitative data research: preparation, exploration, analysis, presentation and validation.

Much like methodological approaches, qualitative data analysis typically follows characteristics of certain approaches. For the purpose of this research, the researcher used a combination of phenomenological data analysis, with a thematic lens.

As discussed previously, phenomenology concerns itself around participants subjective views of experiences; Shaw (2001) outlines how the role of the researcher is to interpret this data whilst maintaining the original meaning. With the researcher being an advocate of PE, having had positive experiences of it, Moustakas (1994) emphasises the importance of the researcher being able to ‘bracket’ or put to one side their own views to ensure participants views are centralised. Ethnographic data analysis focuses on lifestyles of participants, however further analysis in this area would require more sources, such as interviews or questionnaires (Hammersley and Atkinson, 1995).

Corbin and Strauss (2008) claim an effective researcher is said to be one who can identify patterns which are relevant to the research questions. Thus, a thematic approach was used to analyse the data produced. Fereday and Muir-Cochrane (2006) present that thematic analysis leads to categorisation of themes. A method that the researcher has used to categorise findings from the data is by ‘colour coding’ words, phrases or paragraphs that refer to the literature review. The researcher found colour coding beneficial when constructing findings, as this coding technique allowed the researcher to compare the data quickly as well as in more detail (Lewins and Silver, 2007).

Interviews were completed, recorded and later transcribed. This proved to benefit the researcher as it allowed them to listen back to the interview at any time, as well as avoiding live transcription mistakes. Denscombe (2017) maintains this, highlighting how qualitative data is irreplaceable and it is good practice to make a copy of any recordings. Once data was transcribed, the researcher then coded and categorised the data (Cohen et al., 2007). Once data was coded and categorised into themes, the researcher interpreted the data, generating the findings into a summary. Modern technology makes data analysis an easier and quicker process. The researcher did consider using a transcribing or coding software to achieve this; whilst they are beneficial when there are large amounts of data to process (Robson, 2002), it would take an increased amount of time for the researcher to become confident in the use of said software. The researcher also wanted to ensure they were fully aware of data and was prepared to spend time re-reading transcripts to better understand the data.

An audit trail will also be kept during this research, for example annotated transcripts and any other notes made, to explain the process from data collection to conclusion.

If this were a larger scale study, the researcher would aim to locate themes that were raised during interviews in observations and document studies, to triangulate the data; in turn making it more reliable and trustworthy. Further research would be required to necessary to gain more confidence in the findings.

Chapter 4

Findings and Discussion

Chapter 4 - Findings and Discussion

4.1: Introduction

Upon completion of data analysis, four predominant themes materialised during interview discussions: teacher training and the emphasis of PE; noticing changes in children as a result of PE; how previous experiences of PE translates to feelings towards the subject now; and the overall value and status of PE in comparison to the rest of the curriculum.

The themes outlined above and their respective findings will be scrutinised throughout this chapter in comparison with key literature that was raised in chapter two to ultimately establish primary practitioners attitudes towards PE.

The participants are all class-based teachers in an outstanding primary school, who are involved in the delivery of PE to their respective year groups; the four participants span across Key Stage One and Key Stage Two.

4.2: Teacher training and the emphasis on PE

The first theme that emerged from discussions were the levels of teacher training and the amount of importance given to PE whilst teachers were undertaking their ITT. Harris et al (2012) found that primary teachers are not trained to teach PE and thus are not confident in it. When Participant A was asked about their confidence teaching PE, it reaffirmed these suggestions:

"I would say not extremely confident based off my training… however it did get its due course (discussing the amount of training)"

Whilst Participant A supports the notions of Harris et al. (2012), they highlight how PE was no different to other foundation subjects. Participant C and D support this:

"We probably had as much training as the other foundation subjects." – Participant C

"PE was given a similar amount of time as the rest of the foundation subjects." – Participant D

Meanwhile, Faucette and Patterson (1989) suggested that one inhibitor of PE is the lack of expertise and training. Participants added:

"I didn't have lectures… I found it can be quite generic" – Participant B

"I don't have a bank of resources for PE like I do for other subjects." – Participant D

Revisiting the ideas of Harris et al. (2012) regarding teachers not being adequately trained to teach PE, Participant D suggests their training did not prepare them for the reality of teaching PE:

"We had some really strong training sessions but for me I still felt like it wasn't my strongest subject to teach… the training sessions we had in different schools were quite isolated."

Participant D adds further points, aligning with the ideas of Rhymer (2021), suggesting trainees received very little PE training and in turn potentially having a negative perception of PE, which will be further looked at in chapter 4.4 and 4.5.

"There is definitely more emphasis… on the core subjects."

4.3: Noticing the impact of PE

As part of this research, the practitioner implemented a morning PE club to provide opportunities for practitioners to see the potential impacts of having PE every day, as if it

were a core subject. The challenges of implementing this will be addressed in chapter five. During the interview process, discussions and themes around the select children that participated in the activities emerged.

Hillman et al. (2009) found that physical activity was able to improve attention to a specific task. When Participant A was asked about the children who they taught, some of which were involved in the morning PE club:

"I would say (I've seen) a little bit more attention with them… my teaching assistant has reported they've been quite impressed with their work… the children have been much more mature... a lot more calm on the carpet."

Participant A touches on children appearing more mature, linking to Sibley and Etnier's (2003) discovery of a correlation between physical activity and school readiness. As mentioned in chapter two, Grieco et al. (2009) proposes that active students can return to the same level of on task behaviour after being physically active. Participant D states:

"I would say there was one pupil on there who seems to come in and settle a little better than usual but it wouldn't say it was consistent."

The PE club was for two days of the week; this may be one of the reasons why this teachers' observations were not consistent. In a stark comparison, Beller and Stoll (1995), evidence a relationship in involvement in PE and poorer classroom behaviour. Participant C noticed this:

"They have come in more energetic but that hasn't translated well with their behaviour in the classroom."

Whilst also adding when asked if a prolonged period for the PE club would have been more beneficial to notice the impact:

"I think it would have been a good opportunity because I often find after PE they are unsettled because they are really excited so I think it would have been a good opportunity to normalise it… so that they can settle quicker after it."

Overall, all participants were not overwhelmed with positive results after children attended the PE club, however negatives were also not outlined. The general consensus was summarised by Participant B:

"Nothing really stands out."

Leckie and Goldstein (2009) summarised how in the educational society, academic results determine a school's reputation. Participant A was asked about the benefits and if PE should be something to include in a typical school day, like English and Maths:

"I think that would be quite a demanding amount of time to take away from a day"

This idea that PE is taking away from education is something to be explored in chapter 4.5. Hallahan (2022) outlines concerns that the primary curriculum is already oversaturated; and finding time for more hours of compulsory PE would be a struggle.

With regards to the impact noticed from the morning PE club, Participant A adds:

"Also that helps with their mental health… developing skills such as communication, teamwork, resilience to losing"

Participant A refers closely here to the mental health benefits outlined by Biddle (2000), Taylor (2003) and Fox (2000); as well as the ideas surrounding physical activity improving skills such as cooperation, self-discipline, competitiveness and leadership (Stryer, Tofler and Lapchick, 1998).

4.4: Previous experiences of PE translating to feelings towards PE now

The next topic of discussion that arose from the interviews was regarding the participants' previous experiences of PE and if, at all, it has any relation to the viewpoints of PE as an adult today.

Considering the idea of PE developing cooperation with others, Svoboda (1994) suggests PE is holistic; providing opportunities to meet and communicate with others. Bailey (2006) echoes this, explaining that in PE, social interactions frequently emerge naturally. This was evidenced when Participant B was asked about their experiences of PE when they were younger:

"I loved PE as a child… it was my social life… my friendship groups."

Participant D also expresses their enjoyment of PE following them through to adulthood:

"I enjoyed it and again because of the success of it, it stayed with me throughout."

Meanwhile, Participant A outlines how they are aware of the benefits PE can bring, but do not have the motivation or time to participate regularly. However, they do express how they enjoy the social aspect of participation, mainly in team games:

"Yeah, it's social, I know I need to get more fit, I'm aware of that – but I don't have the motivation to go for a run at home but when it is in a social setting where it's a bit more competitive, I know I will attend every week."

In a stark contrast, Participant C expresses how they would never participate in team games, due to previous experiences; potentially limiting their options to be active as well as their attitudes or willingness to teach them (Luke and Sinclair, 1991; Rhymer, 2021). This also reaffirms The House of Lords (2021) suggestion that attitudes towards physical activity follow into adulthood.

"I did not like PE… the anxiety I would get would just be horrendous… feeling like I'm letting the team down because I'm not very good… that fosters on to feeling that I'm not good… and all these negative thoughts… I would never do like team sports now… I hate the thought of being rubbish and letting people down… (PE should be) less competition and more fun" – Participant C

Thus, reaffirming Rhymer's (2021) suggestion regarding teachers having a negative attitude towards PE. Considering the idea proposed by Participant C that PE should be less competitive, Participant A shared their experience of competitive PE as a child:

"celebrating the best and you know, the best being put forward and the best were picked for things… it was very much the case if you weren't the very best of something then you didn't get opportunities."

This links closely to the work of Brophy (1983), who suggested that PE is 'product orientated' and encourages children to concentrate on performance rather than their personal development. With regards to focusing on performance, Participant B outlined how their enjoyment was a product of their achievements within the subject; reaffirming that PE is product orientated.

"So I think my enjoyment is based on how successful I felt in it."

O'Connor (2019) claims for PE to promote lifelong enjoyment and learning, it needs to be inclusive. Participant A agrees with this, stating:

"Nowadays PE is taught where it is more inclusive for all children"

Participant D adds:

"I think that it (inclusive PE) would also be good for children who don't engage with PE, you know for those who don't really enjoy PE as much as others do."

4.5: The status of PE

All of the aforementioned themes tie together to support the final theme that emerged; the overall status of the subject of PE in primary education.

Fleet (2021) outlines how PE already has increased status due to the funding it receives from the Government; Participant A compares PE with Science, a core subject:

"Science is a core subject and I don't think we do as much science as we do English, Maths and phonics… we probably spend more (money) on PE than we do on Science."

Participant B also adds to this discussion, highlighting how more time is spent in schools on PE than all other foundation subjects as well as Science:

"The time subjects were given I suppose it's English, Maths and then PE… despite the fact that Science is a core subject… PE already gets more so at the minute"

Considering this, Morgan and Hansen (2008) found that teachers still viewed PE as a break from the academic curriculum, symbolising how little school staff view the subject. This can be seen through the ideas of Participant D:

"We (children and staff) need to have the understanding that it (PE) is still a lesson and this is not just for fun, yes it's fun but there's also learning and knowledge behind that"

Participants B, C and D all summarised how they believed the children thought PE was similar to playtime. This resembles the idea of Lau et al (2004), claiming that PE should not interfere with 'real schooling'. This generates an idea that PE is not a valued or respected part of the curriculum. Participant A provides an interesting perspective:

"PE should be a core subject and it shouldn't be something that is dropped quickly… I'm guilty of it, I will potentially drop PE… When I did first teach PE, I would plan it five minutes before… staff should be made aware of the importance of PE and the benefits… it shouldn't

be a subject that is swept under the rug… PE lends itself quite nicely to pulling children out for quick interventions"

Here we observe a variety of conflicting standpoints towards PE. Whilst in one sentence Participant A believes PE should be valued, they contradict themselves by admitting they plan the lesson minutes before beginning, as well as viewing it as a prime opportunity to remove children for intervention to support English and Maths for instance or completely dropping the lesson, linking perfectly with Lau et al's (2004) ideas of PE being in the way of real schooling.

Similarly, Kirk (1989) claims that PE is only promoted because of the benefits it can bring to other academic areas, rather than having equal importance. This suggests that PE has no educational benefits and is only used to get children active, linking back to the proposal from Lau et al. (2004). Participant A adds when discussing the most important areas of school:

"Maths, English and phonics however I do believe it (PE) needs to have be a priority in school"

This also links back to the idea of PE being viewed as similar to play. When considering the importance of PE in schools and the educational value it can deliver, Stryer, Tofler and Lapchick (1998) claim that sports can nurture skills such as cooperation, self-discipline and competitiveness. Participant C believes PE should include more teaching of said skills. All participants agreed when discussing if PE can teach skills such as leadership and resilience.

"Yes you can certainly guide them and model it… they're like life skills that you want them (the children) to develop in school but also beyond" – Participant D

Dyson (2014) outlines how the quality of learning in PE is assessed by how many activities are offered, rather than assessing children holistically. Whilst the importance of skills such as resilience can be appreciated, participants expressed concerns about how they can be assessed. Discussions took place around if PE was a core subject, it may require more assessment to evidence progress and manage data.

"I don't think there's a need for it to be assessed … how can you assess if it's improved someone's wellbeing… benefits that would be hard to assess…" – Participant B

"Very difficult subject to assess… there's not a test you could say 'do that' and there's your answer… PE isn't about who can run the quickest or jump the highest, it's part of it but if they lost would they have the resilience and how do you measure resilience?" – Participant A

Participant B mentions developing a love of being active, rather than just delivering 'sports' in PE. This links closely to Griggs and Fleet (2021) highlighting how high-quality PE should support all learners becoming lifelong participants of activity. Fairclough et al. (2002) adds how PE consists mainly of team sports which aren't always lifelong activities. Multiple participants recognised the importance of providing 'alternative' activities.

"Where you can bike in and that's a normal means of transport" – Participant B

"I'd love to do Zumba in classes like how fun would that be?" – Participant C

Considering this, Swaithes (2015) highlights the importance of remembering that learning goes beyond sporting performance so that PE can be made meaningful for all students. Not every child enjoys football, dance, or gymnastics. Garrat and Kumar (2019) noticed a trend of competitive sports being offered, sacrificing a broader experience of PE. This links closely to the ideas of Participant C:

"It shouldn't be focused on just competition… also need to focus on the other things like well-being…"

This highlights a lack of training as to what PE actually is; it appears most general practitioners view PE and Sport synonymously. Fleet (2021) signifies how many practitioners are unable to distinguish the difference between PE, School Sport, and Physical Activity (PESSPA).

Ames (1992) highlights how the use of extrinsic prizes rewarding performance undermines the motivation to learn.

"Love of being active and not just sport… it's more about it being intrinsically beneficial" – Participant B

Participant B also highlights a culture change is needed, suggesting a culture similar to private schools; where Participant B claims there is a whole school approach to dedicating time to playing and valuing the love sport in order to reap the benefits.

Finally, Participant A mentions the mental health benefits physical activity can bring. Sport England (2021) highlight a positive correlation between physical activity and mental well-being.

"We can see children enjoy PE" – Participant A

Whilst Shvedko et al. (2018) and Vancampfort et al. (2017) found physical activity to reduce stress and depressive symptoms, Participant C adds:

"It would be good for kids everyday, but you've also got to think of the mental health of those children who hear you're going to do PE every day and thinking 'that's horrendous'"

This supports the ideas mentioned by Collins (2014), highlighting how PE can contribute to social exclusion and thus, decreasing the value of the subject.

Chapter 5

Conclusion and Recommendations

Chapter 5 - Conclusion and Recommendations

5.1: Introduction

This chapter will highlight the findings that have been concluded as a result of the discussions with practitioners, in relation to the three key research questions outlined in chapter two. When gathered, the findings have provided the researcher with an awareness of practitioners' perspectives on primary physical education. The limitations of this research project will also be discussed, as well as recommendations for further research and change.

5.2: Conclusions

With regards to the first research question in chapter two, key literature outlined the benefits that physical activity provides and how it can address the current physical and mental health crisis. Practitioners agreed when recognising the physical value that PE brings to both children, young people and staff; potentially creating a positive health trajectory from the earliest of ages. It was found that participants overall did not feel confident with the delivery of PE, which in turn caused PE to be sacrificed for other subject areas and ultimately, decreasing the amount of physical activity children receive. The mental health benefits of physical activity were also highlighted and again, all practitioners were able to understand the importance of prioritising mental health through increasing activity in schools. Whilst the benefits of physical and mental health were understood, participants still

viewed other academic areas more important; in some instances, subconsciously decreasing the importance and value of PE by using the PE time for interventions.

Research question two focused on the holistic development of children, using PE as the vehicle to achieve this. A lack of behaviour management training for PE delivery caused teachers to admit using a style of teaching, such as ‘command’, that did not promote the holistic development of children through the restriction of social interactions for instance. However, practitioners summarised that they recognise how PE can help the child develop socially, affectively and physically for instance. Practitioners also outlined how their own experiences of PE supplemented their social lives and capabilities. Participants also commented on the maturity and on task behaviours improving as a result of the morning PE club; reaffirming the claims that PE can improve this domain.

The third research question posed the task of defining what high quality PE is. Overall, participants said that although they had received training at the same level as other foundation subjects, they did not feel confident planning, delivering or assessing PE lessons; suggesting that they would not be able to identify high quality PE. Participants also recognised how PE is already more of a focus in primary education than a large amount of the curriculum, which raises question marks as to why teachers do not feel confident or why it is not seen as a valuable part of the curriculum. Both the literature and participants outlined how high-quality PE needs to be inclusive for all children and young people that take part; suggesting a move away from traditional team sports and more of a focus of physical literacy; developing the fundamental skills needed to access any physical activity. Participants also added how high-quality PE is able to develop the child socially and should be holistic, not just based on performance and success.

5.3: Limitations and Challenges

This research project faced many limitations that prevented the study from gaining additional data and viewpoints to add new perspectives and therefore increase the validity of the findings. Firstly, in alignment with the University ethical guidelines, interviews with children could not be carried out, thus limiting data to teaching staff perspectives. Ideally, the practitioner would have interviewed children to gain their thoughts and opinions of PE to compare it with the viewpoints of practitioners to increase validity. All participants were from the same setting so naturally, general thoughts of PE may have been similar as they may subconsciously share the vision of PE as 'the school' rather than their own personal ideas; interviewing practitioners from a variety of settings would have been beneficial to the research. The small sample size of participants may reduce the validity of findings as they work together daily. As well as this, one of the main challenges was aiming to implement daily PE into a variety of year groups timetable, whilst also not disturbing routines for the children and young people involved. Governors and management were keen to introduce a week per year group of daily PE, however some were sceptical and did not want to sacrifice time in other subject areas. The setting is an outstanding primary school and initially starting was a challenge, due to the busy nature of school without external needs; suggesting that PE is not a priority. The practitioner often had to compromise to make the research appealing for the setting.

5.4: Recommendations

As this was a small-scale research project, further studies would be required to establish more detailed and bespoke recommendations to address the issues raised in this paper.

From studying the literature, understanding the view of participants and being a practitioner, the researcher suggests the following recommendations.

The overarching recommendation would need to be implemented at a national level by the Government to ensure all professionals are delivering an equal curriculum. Ultimately, the researcher suggests PE should be given the core status and should receive further attention and funding to revamp the curriculum. The current curriculum is too broad and whilst it allows practitioners opportunities to tailor the curriculum to their school, too often we are seeing coaches coming into school and delivering 'football', 'dodgeball' and 'that' is some children's experience of PE. Meanwhile, other children experience bike riding, paddleboarding and trampolining.

The Government would increase the funding for the 'Primary PE Premium' to allow them to provide a broad, balanced and most importantly 'equal for all' PE curriculum. As part of this curriculum overhaul, the practitioner is suggesting that 'PE' is rebranded as 'PESSPA'. Whilst PE gets more time than some foundation subjects, the core title would be given and primary aged children should have three separate lessons of 'PESSPA' per week. Their 'PE' lesson will focus on activities emphasising strategies to being resilient, communicating effectively and dealing with adversity, using physical activity as a vehicle to achieve this; developing life skills that students can apply in all areas of life. The second lesson, 'School Sport', allows students the opportunity to take part in a variety of sports, not just traditional team games that are offered today. The third and final lesson of the students' week will be about being physically active. Their teacher will deliver a 'Physical Activity' based session; for instance, going for a walk, practising yoga or going for a bike ride. The emphasis on this lesson is valuing the benefits of being active and finding an activity that children enjoy.

Whilst three ‘lessons’ is a vast amount of time to use during a week, most schools currently offer two hours of PE currently. This two-hour slot could be broken into three sessions, creating shorter bursts of PESSPA for children to enjoy.

As part of this, the ITT teachers would receive would be evaluated and overhauled. Training would be on a similar level and amount to English and Maths for instance, ITT providers would ensure that staff understood the differences between PE, School Sport and Physical Activity. Prospective teachers would be educated on the holistic benefits of PESSPA to ensure they understood its place in child development. Teaching assistants would also receive extra training on how to support high quality teaching and learning in PE, just as they do for English and Maths. As well as this, training would be delivered on holistic assessment.

Through prospective increased funding, accountability and evidencing would need to be increased. Teaching staff would be trusted with their professional judgement to assess children holistically, but evidence would need to be provided, possibly through the use of videos or photos. Just as the way handwriting is assessed, teachers will observe children and have multiple learning conversations to understand the level they are at.

All recommendations, in the researcher’s opinion, would increase the value and status of PE in primary aged children and in turn, ensure more children associate positive memories and experiences with physical activity and develop healthy lifestyle habits that follow them through to adulthood and provide them with all of the benefits physical activity can.

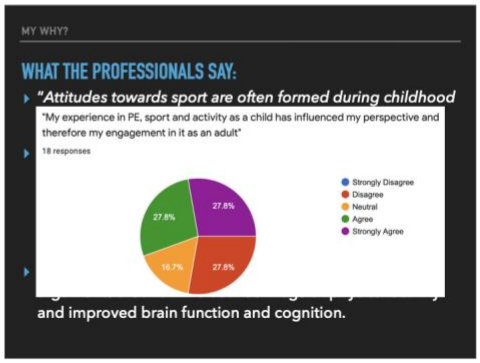
Appendices

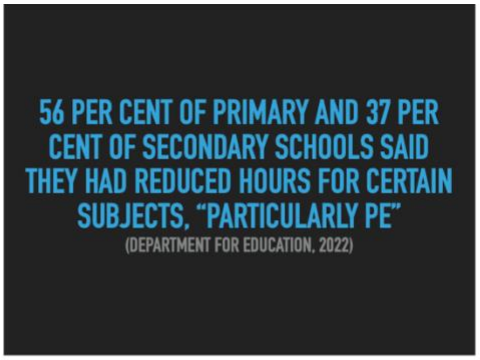
Appendix One: Presentation delivered to the board of governors of the setting.


MY WHY?
WHAT THE STATISTICS SAY:
NEARLY A THIRD OF CHILDREN AGED TWO TO FIFTEEN ARE REGARDED AS EITHER OVERWEIGHT OR OBESE (HEALTH AND SOCIAL INFORMATION CENTRE, 2015)
PEOPLE WHO ARE INSUFFICIENTLY ACTIVE HAVE A 20% TO 30% INCREASED RISK OF DEATH COMPARED TO PEOPLE WHO ARE SUFFICIENTLY ACTIVE (WHO, 2020)
UK GOVERNMENT STATED THAT THEY SPEND £5.1 BILLION PER YEAR ON OBESITY RELATED ILL HEALTH (SCARBOROUGH, 2011)
PHYSICAL INACTIVITY IS THE 4TH LEADING RISK FACTOR FOR GLOBAL MORTALITY, ACCOUNTING FOR 6% OF DEATHS GLOBALLY (OFFICE FOR HEALTH IMPROVEMENT & DISPARITIES (GOV), 2022)
MORE THAN 80% OF ADULTS ARE INSUFFICIENTLY ACTIVE (WHO, 2020)
UP TO 5 MILLION DEATHS A YEAR COULD BE AVERTED IF THE GLOBAL POPULATION WAS MORE ACTIVE (WHO, 2020)


MY WHY?
WHAT THE STATISTICS SAY:
POSITIVE ASSOCIATION BETWEEN BEING ACTIVE AND LEVELS OF MENTAL WELLBEING AND INDIVIDUAL DEVELOPMENT (SPORT ENGLAND, 2021)
THOSE WITH LOW LEVELS OF FITNESS AND STRENGTH HAD 98% HIGHER ODDS OF EXPERIENCING DEPRESSION AND 60% HIGHER ODDS OF EXPERIENCING ANXIETY (HUZAR, 2017)
IF WE ARE NOT LIVING THROUGH IT ALREADY, WE WILL VERY QUICKLY BE APPROACHING A GLOBAL PHYSICAL AND MENTAL HEALTH PANDEMIC
REDUCED STRESS, COGNITIVE DECLINE AND DEPRESSIVE SYMPTOMS (SHIVENDO ET AL. 2018, VANCAMPFORT ET AL. 2017)
(ROYAL COLLEGE OF PSYCHIATRISTS, 2021)


MY WHY?
WHAT THE STATISTICS SAY:
ADDITIONAL TIME DEDICATED TO PHYSICAL EDUCATION DID NOT INHIBIT ACADEMIC PERFORMANCE (TRUDEAU AND SHEPHARD, 2008)
ACTIVE STUDENTS ARE ABLE TO RETURN TO THE SAME LEVEL OF ON-TASK BEHAVIOUR AFTER AN ACTIVE LEARNING TASK (GRIECO ET AL., 2009)
PHYSICAL ACTIVITY HAS BEEN FOUND TO IMPROVE THE ALLOCATION OF ATTENTION TO A SPECIFIC COGNITIVE TASK (HILLMAN ET AL., 2009)
11 OF 14 CORRELATIONAL STUDIES OF PHYSICAL ACTIVITY DURING THE SCHOOL DAY DEMONSTRATE A POSITIVE RELATIONSHIP TO ACADEMIC PERFORMANCE (RASBERRY ET AL., 2011)
PHYSICAL ACTIVITY SHOWED THAT CHILDREN INCREASED THEIR ON-TASK BEHAVIOURS BY MORE THAN 20 PERCENT (MAHAR ET AL., 2006)
PHYSICAL ACTIVITY IMPROVES ACADEMIC PERFORMANCE (DONNELLY AND LAMBOURNE, 2011)

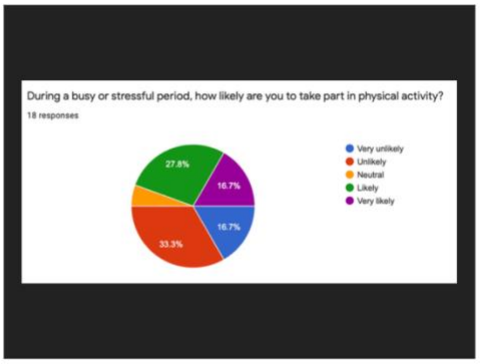

MY WHY?
WHAT THE PROFESSIONALS SAY:
"Attitudes towards sport are often formed during childhood
"My experience in PE, sport and activity as a child has influenced my perspective and therefore my engagement in it as an adult"
18 responses
Strongly Disagree
Disagree
Neutral
Agree
Strongly Agree
27.8%
27.8%
16.7%
27.8%
and improved brain function and cognition.

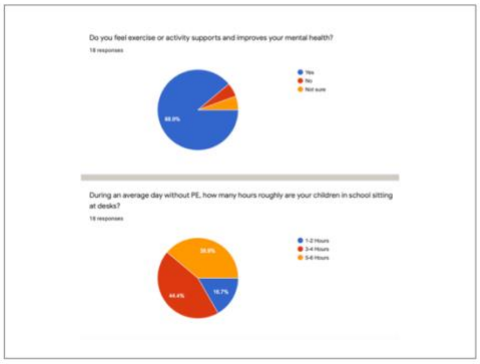

56 PER CENT OF PRIMARY AND 37 PER CENT OF SECONDARY SCHOOLS SAID THEY HAD REDUCED HOURS FOR CERTAIN SUBJECTS, "PARTICULARLY PE"
(DEPARTMENT FOR EDUCATION, 2022)

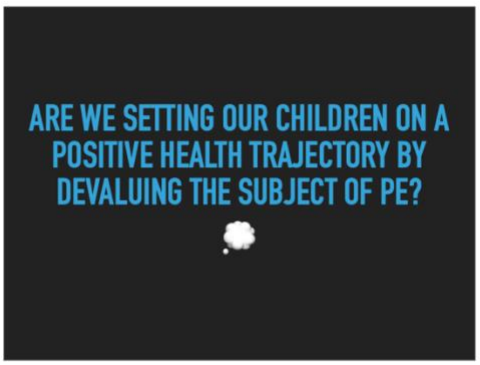

WHAT YOUR STAFF SAID:

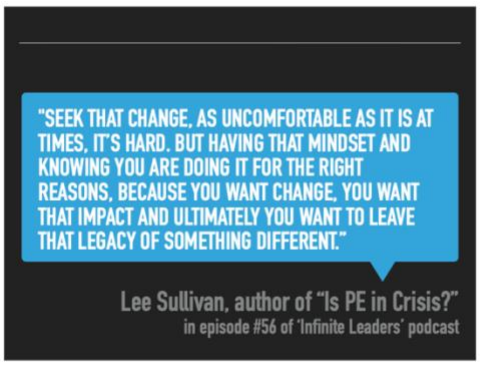

anxious
lethargic
tired
Lazy
Stressed
Restlessness


energetic
achievement
enjoyment
happy
Positive
Energised

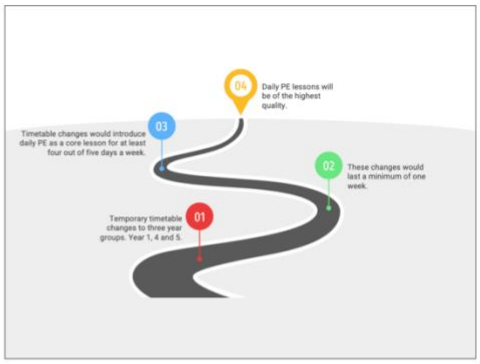

During a busy or stressful period, how likely are you to take part in physical activity?
18 responses
27.8%
16.7%
16.7%
33.3%
Very unlikely
Unlikely
Neutral
Likely
Very likely


Do you feel exercise or activity supports and improves your mental health?
18 responses
Yes
No
Not sure
During an average day without PE, how many hours roughly are your children in school sitting at desks?
18 responses
1-2 Hours
3-4 Hours
5-6 Hours


ARE WE SETTING OUR CHILDREN ON A POSITIVE HEALTH TRAJECTORY BY DEVALUING THE SUBJECT OF PE?

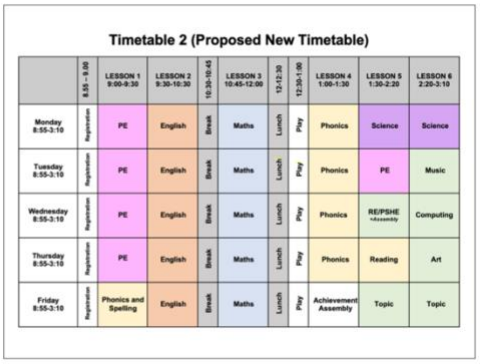

"SEEK THAT CHANGE, AS UNCOMFORTABLE AS IT IS AT TIMES, IT'S HARD. BUT HAVING THAT MINDSET AND KNOWING YOU ARE DOING IT FOR THE RIGHT REASONS, BECAUSE YOU WANT CHANGE, YOU WANT THAT IMPACT AND ULTIMATELY YOU WANT TO LEAVE THAT LEGACY OF SOMETHING DIFFERENT."
Lee Sullivan, author of "Is PE in Crisis?"
in episode #56 of 'Infinite Leaders' podcast


WHAT I'D LIKE TO IMPLEMENT


04
Daily PE lessons will be of the highest quality.
03
Timetable changes would introduce daily PE as a core lesson for at least four out of five days a week.
02
These changes would last a minimum of one week.
01
Temporary timetable changes to three year groups. Year 1, 4 and 5.


WHAT I'D LIKE TO IMPLEMENT
WHAT DOES HIGH QUALITY PE LOOK LIKE?
It doesn't look like:
Waiting in queues for a turn
'One size fits all' approach
Playing 'tag' or throwing dodgeballs at each other for an hour
Sport dominated
Repetitive drills to 'develop skill'
Teacher led. "I say, you do"
Boring
Culture of embarrassment or shame
Fitness activities
It does look like:
Mental health development opportunities
Developing autonomy
Differentiated and inclusive activities
High % of activity time
Enjoyable and exciting
Holistic development
Metacognition opportunities
Cross curricular links to develop other core subject knowledge
Rewarding progress, not perfection


HOW IT CAN BE IMPLEMENTED



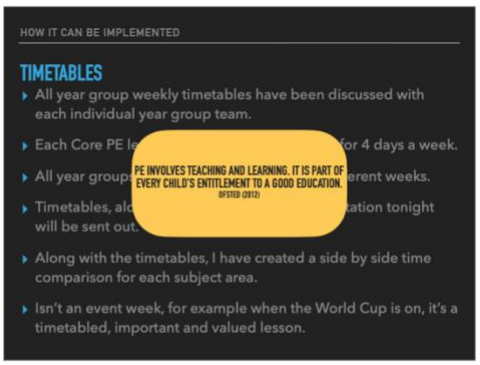
Timetable 2 (Proposed New Timetable)

	8.55 – 9.00	LESSON 1 9:00-9:30	LESSON 2 9:30-10:30	10:30-10.45	LESSON 3 10:45-12:00	12-12:30	12:30-1:00	LESSON 4 1:00-1:30	LESSON 5 1:30-2:20	LESSON 6 2:20-3:10
Monday 8:55-3:10	Registration	PE	English	Break	Maths	Lunch	Play	Phonics	Science	Science
Tuesday 8:55-3:10	Registration	PE	English	Break	Maths	Lunch	Play	Phonics	PE	Music
Wednesday 8:55-3:10	Registration	PE	English	Break	Maths	Lunch	Play	Phonics	RE/PSHE +Assembly	Computing
Thursday 8:55-3:10	Registration	PE	English	Break	Maths	Lunch	Play	Phonics	Reading	Art
Friday 8:55-3:10	Registration	Phonics and Spelling	English	Break	Maths	Lunch	Play	Achievement Assembly	Topic	Topic

Year 1

Lesson	Time
English	5 hours
Maths	5 hours
Science	1 hour 30 minutes
PE	1 hour 30 minutes
Phonics	2 hours 30 minutes
Music	50 minutes
Computing	50 minutes
Art	50 minutes
Topic	1 hour 30 minutes
Reading	2 hours
RE/PSHE	50 minutes

Lesson	Time
English	5 hours
Maths	5 hours
Science	1 hour 30 minutes
PE	2 hours 50 minutes
Phonics	2 hours 30 minutes
Music	50 minutes
Computing	50 minutes
Art	50 minutes
Topic	1 hour 30 minutes
Reading	30 minutes
RE/PSHE	50 minutes

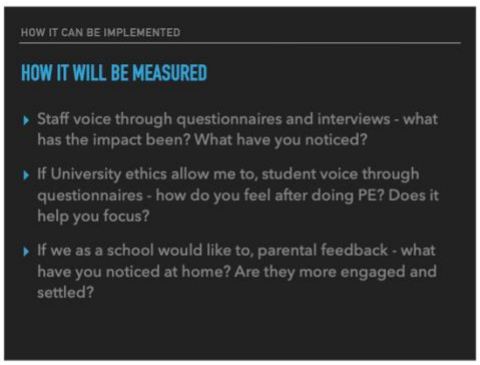


HOW IT CAN BE IMPLEMENTED

TIMETABLES

- All year group weekly timetables have been discussed with each individual year group team.
- Each Core PE l… for 4 days a week.
- All year group… erent weeks.
- Timetables, al… ation tonight will be sent out.
- Along with the timetables, I have created a side by side time comparison for each subject area.
- Isn't an event week, for example when the World Cup is on, it's a timetabled, important and valued lesson.

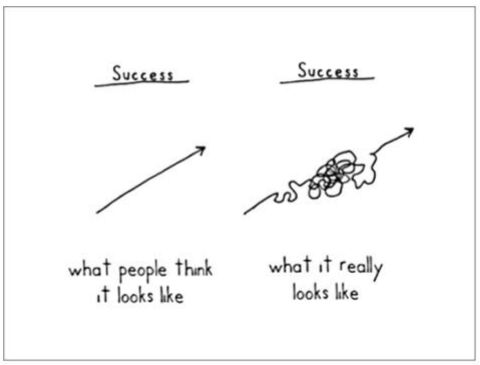
PE INVOLVES TEACHING AND LEARNING. IT IS PART OF EVERY CHILD'S ENTITLEMENT TO A GOOD EDUCATION.
OFSTED (2012)



HOW IT CAN BE IMPLEMENTED

HOW IT WILL BE MEASURED

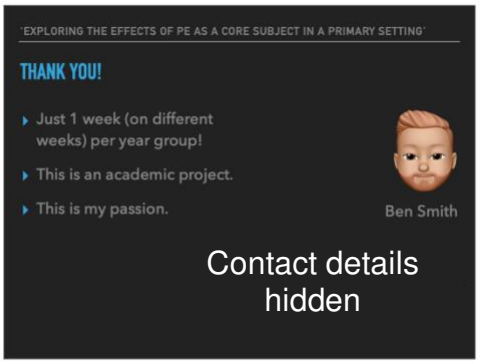
- Staff voice through questionnaires and interviews - what has the impact been? What have you noticed?
- If University ethics allow me to, student voice through questionnaires - how do you feel after doing PE? Does it help you focus?
- If we as a school would like to, parental feedback - what have you noticed at home? Are they more engaged and settled?



association for Physical Education

"PE IS THE FOUNDATION STONE, OUT OF WHICH EMANATES SCHOOL SPORT AND A LIFE LONG LOVE OF PHYSICAL ACTIVITY. IN ADDITION, ITS CONTRIBUTION TO A WIDE RANGE OF OTHER OUTCOMES THAT UNDERPIN WHOLE SCHOOL IMPROVEMENT ARE UNQUESTIONABLE."

SUE WILKINSON, CEO OF AFPE



'EXPLORING THE EFFECTS OF PE AS A CORE SUBJECT IN A PRIMARY SETTING'

THANK YOU!

- Just 1 week (on different weeks) per year group!
- This is an academic project.
- This is my passion.

Ben Smith

Contact details hidden

REFERENCES

- Department for Education, 2022. School RecoveryStrategies: Year 1 findings. Available at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1045471/School_Recovery_Strategies_year_1_findings.pdf
- Dowling, S., 2021. Pivot, Flex, Adapt: Physical Education through the 2020 Pandemic.
- GOV.UK. 2022. Physical activity data tool: January 2022 update. [online] Available at: <https://www.gov.uk/government/statistics/physical-activity-data-tool-january-2022-update> [Accessed 19 January 2022].
- Grieco LA, Jowers EM, Bartholomew JB., 2009. Physically active academic lessons and time on task: The moderating effect of body mass index. Medicine and Science in Sports and Exercise.
- Health and Social Care Information Centre, 2015. Health Survey for England 2014
- Hillman CH, Pontifex MB, Raine LB, Castelli DM, Hall EE, Kramer AF. 2009. The effect of acute treadmill walking on cognitive control and academic achievement in preadolescent children. Neuroscience.
- House of Lords, 2021. National Plan for Sport and Recreation Committee.
- Huser, T., 2019. Large study finds clear association between fitness and mental health. [online] Medicalnewstoday.com. Available at: <https://www.medicalnewstoday.com/articles/large-study-finds-clear-association-between-fitness-and-mental-health#A-clear-correlation> [Accessed 17 January 2022].
- Macfadyen, T and Bailey, R., 2002. Teaching physical education 11-18. London: Continuum.
- Mahar MT, Murphy SK, Rowe DA, Golden J, Shields AT, Raedeke TD., 2006 Effects of a classroom-based program on physical activity and on-task behavior. Medicine and Science in Sports and Exercise.
- Ofsted, 2012. Beyond 2012 - Outstanding physical education for all.
- Rasberry CN, Lee SM, Robin L, Laris BA, Russell LA, Coyle KK, Nihiser AJ., 2011. The association between school-based physical activity, including physical education, and academic performance: A systematic review of the literature. Preventive Medicine.
- Royal College of Psychiatrists, 2021. Record number of children and young people referred to mental health services as pandemic takes its toll. [online] Available at: <https://www.rcpsych.ac.uk/news-and-features/latest-news/detail/2021/09/23/record-number-of-children-and-young-people-referred-to-mental-health-services-as-pandemic-takes-its-toll> [Accessed 19 January 2022].
- Scarborough, P., 2011. The economic burden of ill health due to diet, physical inactivity, smoking, alcohol and obesity in the UK: an update to 2006-07 NHS costs. Journal of Public Health
- Sheetka, A.V., Thompson, J.L., Greig, C.A., & Whittaker, A.C., 2018. Physical Activity Intervention for Loneliness (PALi) in community-dwelling older adults: protocol for a feasibility study. Pilot & Feasibility Studies, 4(187), 1-21.
- Sport England, 2021. Active Lives Children and Young People Survey.
- Trudeau F, Shephard RJ., 2008. Physical education, school physical activity, school sports and academic performance. International Journal of Behavioral Nutrition and Physical Activity.
- Vancampfort, D., Firth, J., Schuch, F.B., Rosenbaum, S., Mugisha, J., Hallgren, M.,... Stubbs, B., 2017. Sedentary behavior and physical activity levels in people with schizophrenia, bipolar disorder and major depressive disorder: a global systematic review and meta-analysis. World Psychiatry, 16(3), 308-315.
- WHO (2020) Physical activity. [online] Available at: <https://www.who.int/news-room/fact-sheets/detail/physical-activity> [Accessed 17 January 2022].

Appendix Two: Letter sent to the board of governors of the setting.

Details hidden

Ben Smith - Dissertation Proposal

'Exploring the effects of PE as a core subject within a primary setting'

Dear Board of Governors of [redacted]

I am writing to you to outline a proposal I would like to present to lead my dissertation research project. I am currently in my last year of study at the University of Sunderland, completing my BA (Hons) Childhood and Society Studies degree. As you will be aware, I have a strong passion for PESSPA, therefore I would like to focus my dissertation on how having PE as a core subject in a primary setting would effect children and young people. My key research questions I am looking to answer are:

- What is high quality PE and how can it be achieved?
- Does PE enhance holistic development and therefore support the academic abilities of the child?
- If there is further priority given to PE in primary settings, will this consequently promote the profile of sport and ultimately improve overall well-being through increased physical activity time?

"PE is the foundation stone, out of which emanates school sport and a life long love of physical activity. In addition, its contribution to a wide range of other outcomes that underpin whole school improvement are unquestionable." Sue Wilkinson MBE, AfPE CEO.

PE, as you are aware, also develops health outcomes, decreases symptoms of depression, strengthens focus and improves quality of sleep. Within the 'COVID-19 climate' we are in, I believe it can be argued that these factors should be encouraged within our workforce to enhance the lives of children and young people. Whilst my dissertation title and research questions may change; the emphasis on the importance and significance of PE in education will remain paramount.

Ultimately, I am writing to you to seek permission to implement the following temporary changes to the timetables of:

- Year 1 - This year group is transitioning from a play-based learning environment in EYFS to a structured, more stationary timetable in KS1.
- Year 4 - Studies show that activity levels across the UK are lowest for the 7-9 age range. Activity levels drop from 52% in Years 1 and 2 to 38% in Years 3 and 4.
- Year 5 - This year group has a high percentage of SEN, I am hoping to prove that PE can be accessible and beneficial to all learners across the full curriculum.

**Avoiding disruption to Year 2 and Year 6 timetables due to SATs.*

- One school week of having PE as a daily, core subject at differing points in the day. These daily lessons will have a cross curricular emphasis to support English and Maths objectives. The focus of lessons will also be shifted, to concepts such as learning from failure and resilience; skills which learners can transfer into all areas of life.
- This timetable would contain 4 days of daily PE, in turn sacrificing one of the two current PE slots to compensate for taken time. This would ensure we would achieve at least 60 minutes of active time per day as well as exceeding the 2 hour PE time per week.

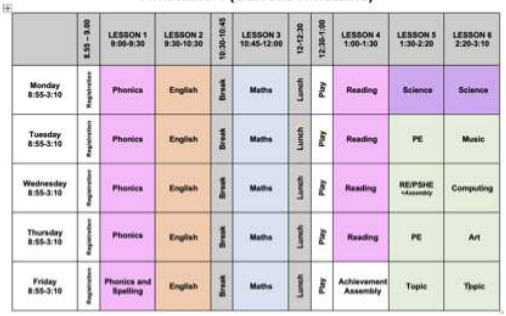
University of Sunderland [redacted] association for Physical Education

- I am happy to write to, liaise and present to parents to inform them. I will also teach all PE lessons.

Example Timetable Change:

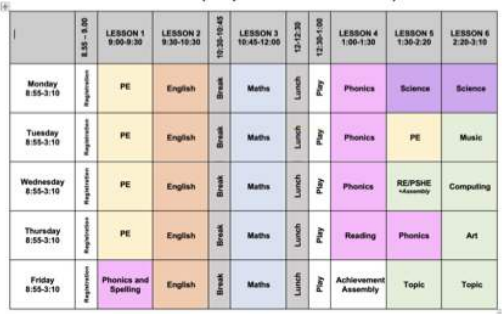
Year 1

Timetable 1 (Current Timetable)



	8.50 – 9.00	LESSON 1 9:00-9:30	LESSON 2 9:30-10:30	10:30-10:45	LESSON 3 10:45-12:00	12-12:30	12:30-1:00	LESSON 4 1:00-1:30	LESSON 5 1:30-2:20	LESSON 6 2:20-3:10
Monday 8:55-3:10	Registration	Phonics	English	Break	Maths	Lunch	Play	Reading	Science	Science
Tuesday 8:55-3:10	Registration	Phonics	English	Break	Maths	Lunch	Play	Reading	PE	Music
Wednesday 8:55-3:10	Registration	Phonics	English	Break	Maths	Lunch	Play	Reading	RE/PSHE +Assembly	Computing
Thursday 8:55-3:10	Registration	Phonics	English	Break	Maths	Lunch	Play	Reading	PE	Art
Friday 8:55-3:10	Registration	Phonics and Spelling	English	Break	Maths	Lunch	Play	Achievement Assembly	Topic	Topic

Timetable 2 (Proposed New Timetable)



	8.50 – 9.00	LESSON 1 9:00-9:30	LESSON 2 9:30-10:30	10:30-10:45	LESSON 3 10:45-12:00	12-12:30	12:30-1:00	LESSON 4 1:00-1:30	LESSON 5 1:30-2:20	LESSON 6 2:20-3:10
Monday 8:55-3:10	Registration	PE	English	Break	Maths	Lunch	Play	Phonics	Science	Science
Tuesday 8:55-3:10	Registration	PE	English	Break	Maths	Lunch	Play	Phonics	PE	Music
Wednesday 8:55-3:10	Registration	PE	English	Break	Maths	Lunch	Play	Phonics	RE/PSHE +Assembly	Computing
Thursday 8:55-3:10	Registration	PE	English	Break	Maths	Lunch	Play	Reading	Phonics	Art
Friday 8:55-3:10	Registration	Phonics and Spelling	English	Break	Maths	Lunch	Play	Achievement Assembly	Topic	Topic

Lesson	Time
English	5 hours
Maths	5 hours
Science	1 hour 40 minutes
PE	1 hour 40 minutes
Phonics	2 hours 30 minutes
Music	50 minutes
Computing	50 minutes
Art	50 minutes
Topic	1 hour 40 minutes
Reading	2 hours
RE/PSHE	50 minutes

Lesson	Time
English	5 hours
Maths	5 hours
Science	1 hour 40 minutes
PE	2 hours 50 minutes
Phonics	2 hours 50 minutes
Music	50 minutes
Computing	50 minutes
Art	50 minutes
Topic	1 hour 40 minutes
Reading	30 minutes
RE/PSHE	50 minutes

An exciting opportunity has also presented itself from The Association for PE. This organisation is also investigating how PE could be implemented as a core subject; meaning that [redacted] could have the opportunity to collaborate with a national governing body and be one of the leading schools across the nation in this exciting new research area. After being in initial contact, I am yet to arrange formalities and next steps with Sue Wilkinson, AfPE CEO. The whole process that I propose will be approved by the University of Sunderland's ethical approval process, however I am more than happy to take extra measures if necessary.

Thank you for taking the time to read my letter, I would greatly appreciate if you could provide feedback or general thoughts to this proposition so that I can 'get the ball rolling' with this. I am also happy to arrange a time to present my idea if that is more beneficial as well.

[redacted]

Yours sincerely,

Ben Smith

Appendix Three: Timetable breakdown and example timetable changes proposed to governors.

Year 1

Lesson	Time
English	5 hours
Maths	5 hours
Science	1 hour 30 minutes
PE	1 hour 30 minutes
Phonics	2 hours 30 minutes
Music	50 minutes
Computing	50 minutes
Art	50 minutes
Topic	1 hour 30 minutes
Reading	2 hours
RE/PSHE	50 minutes

Lesson	Time
English	5 hours
Maths	5 hours
Science	1 hour 30 minutes
PE	2 hours 50 minutes
Phonics	2 hours 30 minutes
Music	50 minutes
Computing	50 minutes
Art	50 minutes
Topic	1 hour 30 minutes
Reading	30 minutes
RE/PSHE	50 minutes

Year 4

Lesson	Time
English	5 hours
Maths	4 hours
Science	2 hours
PE	2 hours 30 minutes
Reading/Times Tables	2 hours 15 minutes
Music	1 hour
Computing	1 hour
Art	1 hour
Topic	1 hour 30 minutes
French	30 minutes
RE/PSHE	1 hour 30 minutes

Lesson	Time
English	5 hours
Maths	5 hours
Science	2 hours
PE	4 hours
Reading/Times Tables	2 hours
Music	1 hour
Computing	1 hour
Art	1 hour
Topic	1 hour 30 minutes
French	30 minutes
RE/PSHE	1 hour 30 minutes

Year 5

Lesson	Time
English	3 hours
Maths	4 hours
Science	1 hour 55 minutes
PE	1 hour 45 minutes
Spelling/Reading Plus	5 hours
Music	55 minutes
Computing	55 minutes
Art	55 minutes
Topic	1 hour 20 minutes
Reading	2 hours 5 minutes
RE/PSHE	1 hour 50 minutes
French	45 minutes

Lesson	Time
English	3 hours 45 minutes
Maths	4 hours
Science	1 hour 55 minutes
PE	3 hours 25 minutes
Spelling/Reading Plus	2 hours 30 minutes
Music	55 minutes
Computing	55 minutes
Art	55 minutes
Topic	1 hour 20 minutes
Reading	2 hours 5 minutes
RE/PSHE	1 hour 50 minutes
French	30 minutes

Timetable 1 (Current Timetable)

	8.55 – 9.00	LESSON 1 9:00-9:30	LESSON 2 9:30-10:30	10:30-10:45	LESSON 3 10:45-12:00	12-12:30	12:30-1:00	LESSON 4 1:00-1:30	LESSON 5 1:30-2:20	LESSON 6 2:20-3:10
Monday 8:55-3:10	Registration	Phonics	English	Break	Maths	Lunch	Play	Reading	Science	Science
Tuesday 8:55-3:10	Registration	Phonics	English	Break	Maths	Lunch	Play	Reading	PE	Music
Wednesday 8:55-3:10	Registration	Phonics	English	Break	Maths	Lunch	Play	Reading	RE/PSHE *+Assembly*	Computing
Thursday 8:55-3:10	Registration	Phonics	English	Break	Maths	Lunch	Play	Reading	PE	Art
Friday 8:55-3:10	Registration	Phonics and Spelling	English	Break	Maths	Lunch	Play	Achievement Assembly	Topic	Topic

Timetable 2 (Proposed New Timetable)

	8.55 – 9.00	LESSON 1 9:00-9:30	LESSON 2 9:30-10:30	10:30-10:45	LESSON 3 10:45-12:00	12-12:30	12:30-1:00	LESSON 4 1:00-1:30	LESSON 5 1:30-2:20	LESSON 6 2:20-3:10
Monday 8:55-3:10	Registration	PE	English	Break	Maths	Lunch	Play	Phonics	Science	Science
Tuesday 8:55-3:10	Registration	PE	English	Break	Maths	Lunch	Play	Phonics	PE	Music
Wednesday 8:55-3:10	Registration	PE	English	Break	Maths	Lunch	Play	Phonics	RE/PSHE *+Assembly*	Computing
Thursday 8:55-3:10	Registration	PE	English	Break	Maths	Lunch	Play	Phonics	Reading	Art
Friday 8:55-3:10	Registration	Phonics and Spelling	English	Break	Maths	Lunch	Play	Achievement Assembly	Topic	Topic

Y4 - Timetable 1 (Current Timetable)

	8.45 – 9.15	LESSON 1 9:15-9:30	LESSON 2 9:30-10:45	10:45-11:00	LESSON 3 11:00-12:00	12-12:30	12:30-1:00	LESSON 4 1:00-1:30	LESSON 5 1:30-2:30	LESSON 6 2:20-3:30
Monday 8:45-3:30	Registration	Reading	English	Break	Maths	Lunch	Play	Reading or Times Tables	Science	Science
Tuesday 8:45-3:30	Registration	Reading	English	Break	Maths	Lunch	Play	Reading or Times Tables	Topic	Topic
Wednesday 8:45-3:30	Registration	Reading	English	Break	Maths	Lunch	Play	Reading or Times Tables	Music	RE
Thursday 8:45-3:30	Registration	Reading	English	Break	Maths	Lunch	Play	Reading or Times Tables	Computing	Art
Friday 8:45-3:30	Registration	Reading	PE	Break	Topic French PSHCE	Lunch	Play	Swimming	PSHCE	Swimming

Y4 - Timetable 2 (Proposed New Timetable)

	8.45 – 9.15	LESSON 1 9:15-9:45	LESSON 2 9:45-10:45	10:45-11:00	LESSON 3 11:00-12:00	12-12:30	12:30-1:00	LESSON 4 1:00-1:30	LESSON 5 1:30-2:30	LESSON 6 2:20-3:30
Monday 8:45-3:30	Registration	Reading or Times Tables	English	Break	Maths	Lunch	Play	PE	Science	Science
Tuesday 8:45-3:30	Registration	PE	English	Break	Maths	Lunch	Play	Reading or Times Tables	Topic	Topic
Wednesday 8:45-3:30	Registration	PE	English	Break	Maths	Lunch	Play	Reading or Times Tables	Music	RE
Thursday 8:45-3:30	Registration	PE	English	Break	Maths	Lunch	Play	Reading or Times Tables	Computing	Art
Friday 8:45-3:30	Registration	PE	Topic French PSHCE	Break	Maths	Lunch	Play	Swimming	PSHCE	Swimming

*Registration - spellings, handwriting, times tables
*Reading slot - reading, reading plus, spellings, handwriting etc.

Timetable 1 (Current Timetable)

	9.05 – 9.030	LESSON 1 9:30-10:00	LESSON 2 10:00-10:45	10:45-11:00	LESSON 3 11:00-12:00	LESSON 4 12:00-12:30	12:30-1:00	1:00-1:30	LESSON 5 1:30-2:25	LESSON 6 2:25-3:20
Monday 8:45-3:20	Registration	Spelling	English	Break	Maths	Reading Plus	Lunch	Play	Computing *+Assembly*	Art
Tuesday 8:45-3:20	Registration	Spelling	English	Break	Maths	Reading Plus	Lunch	Play	PE	Music
Wednesday 8:45-3:20	Registration	Spelling	English	Break	Maths	Reading Plus	Lunch	Play	Science	Science
Thursday 8:45-3:20	Registration	Spelling	English	Break	Maths	Reading Plus	Lunch	Play	Topic	Topic
Friday 8:45-3:20	Registration	Spelling	French	Break	PE	Reading Plus	Lunch	Play	RE	PSHCE *+Assembly*

Timetable 2 (Proposed New Timetable)

	9.05 – 9.30	LESSON 1 9:30-10:00	LESSON 2 10:00-10:45	10:45-11:00	LESSON 3 11:00-12:00	LESSON 4 12:00-12:30	12:30-1:00	1:00-1:30	LESSON 5 1:30-2:25	LESSON 6 2:25-3:20
Monday 8:45-3:20	Registration	PE	English	Break	Maths	Reading Plus + Spellings	Lunch	Play	Computing *+Assembly*	Art
Tuesday 8:45-3:20	Registration	Spellings / Handwriting	English	Break	Maths	Reading Plus + Spellings	Lunch	Play	PE	Music
Wednesday 8:45-3:20	Registration	PE	English	Break	Maths	Reading Plus + Spellings	Lunch	Play	Science	Science
Thursday 8:45-3:20	Registration	PE	English	Break	Maths	Reading Plus + Spellings	Lunch	Play	Topic	Topic
Friday 8:45-3:20	Registration	French	English *(Class)*	Break	PE	Reading Plus + Spellings	Lunch	Play	RE	PSHCE *+Assembly*

* Registration - Reading, spelling etc
* Handwriting and spellings (differentiated) compensation

Appendix Four: Participant Information Sheet

University of Sunderland

Participant Information Sheet

Study Title:

"PE as a core subject in primary education; practitioner's perspectives on primary physical education."

What is the purpose of this study?

The overall purpose of this study is to explore the benefits that PE, if delivered effectively, can bring to children physically, socially, mentally and emotionally. The study will also outline how having PE as a 'core subject' and studied daily will change the way it is looked at across the nation. It will also highlight any potential negatives or problems of delivering PE daily in a busy school day.

Do I have to take part?

You, as a participant, have no legal obligation to take part in this study. Participation is completely voluntary. If you change your mind about being involved in this study, you can withdraw at any point without giving reason and without penalty.

What will happen to me if I take part?

You will be asked to provide your feedback to the children you work with having PE as a daily subject, alongside English and Maths. PE lessons will be taught for you. You will also be asked to provide thoughts around PE in primary education as a whole, potentially giving details of how much teacher training you received on PE for example.

What are the possible disadvantages of me taking part?

Your class and/or the children you work with will have a change or routine for one week, potentially causing disruption. In cases where certain areas of the curriculum may be sacrificed for PE, this will be cleared by Governors and SLT; meaning future scrutinies of that particular area during the dates of research will be accounted for.

What are the possible benefits of taking part?

Studies have shown that regular exercise improves academic abilities of children. Therefore, a week of daily PE may help contribute to developing academic abilities of your children, as well as increasing focus, concentration and engagement in classroom based sessions. You may also use this opportunity as a form of PE CPD, learning how high quality PE is delivered successfully in primary education. Having PE as a core subject should place more importance and value on physical and mental health, hopefully creating more healthy and happy children through this increased focus.

What if something goes wrong?

If you change your mind about participation, please contact me by email to cancel your participation. If you feel unhappy about the conduct of the study, please contact me immediately or the Chair of the University of Sunderland Ethics Group, whose contact details will be outlined below.

Will my taking part in this study be confidential?

Your participation will be kept completely confidential. There will be no use of names, addresses, school names or year groups in the study. There will be no way for reader to decipher who participants are. All information and data collected will be kept on an encrypted and password protected folder, on a secure database managed by a local authority.

What will happen to the results of the research study?

If suitable, the results may also be presented at academic conferences and/or written up for publication in peer reviewed academic journals.

Who is organising and funding the research?

The organising of this study will be by myself, Ben Smith, as a student of the University of Sunderland. This piece of research requires no funding.

Who has reviewed the study?

The University of Sunderland Ethics Group has reviewed and approved the study.

Contact for further information:

Ben Smith - Researcher
ben.smith@[redacted]
07814 490369

Michael Elsy - Research Supervisor
michael.elsy@sunderland.ac.uk

Dr John Fulton - Chair of the University of Sunderland Research Ethics Group
john.fulton@sunderland.ac.uk
0191 515 2529

Appendix Five: Participant Consent Form

University of Sunderland

Participant Consent Form

Study Title:

"PE as a core subject in primary education; practitioner's perspectives on primary physical education."

Participant Code: _____

Please tick each statement.

I am over the age of 18.	
I have read and understood the attached participation information sheet, by signing below, I consent to participate in this study.	
I understand that I have the right to withdraw from the study without giving a reason at any time during the study itself.	
I understand that I also have the right to change my mind about participating in the study for a short period after the study has concluded.	

Signed: _____

Print name: _____

*Your name, along with your participant code is important to help match your data from questionnaires. It will not be used for any purpose than this.

Date: _____

Witnessed by: _____

Print name: _____

Date: _____

Appendix Six: Interview Questions

"PE as a core subject in primary education; practitioner's perspectives on primary physical education."

Interview Questions

1) What is your job title and how long have you been involved in teaching?
2) When completing your teacher training, how much emphasis was placed on delivery of PE in primary schools compared to other subjects?
3) Some children that you are involved in teaching took part in a morning sports club before school; did you notice any changes to the behaviour, level of work or general demeanor of these children throughout the day?
4) Do you think it would have been easier to notice changes of the whole class after taking part in a PE lesson, rather than an optional club?
5) Should PE be valued as much as academic subjects in primary schools? Give reasons for your answers.
6) Would you say that your experience of PE when you were younger has influenced your attitudes towards PE, sport and exercise now?
7) In your opinion, should PE be a core subject in primary schools in the UK?

Reference List

Reference List

- Ames, C., 1992. Classrooms: Goals, structures, and student motivation. Journal of educational psychology, 84(3), p.261.
- Armstrong, N., Balding, J., Gentle, P. and Kirby, B., 1990. Patterns of physical activity among 11 to 16 year old British children. British Medical Journal, 301(6745), pp.203-205.
- Association for Physical Education (afPE), 2008. Health Position Paper. Worcester, afPE.
- Bailey R.P., 2005. Evaluating the relationship between physical education, sport and social inclusion, Education Review, 57 (1), 71–90
- Bailey, D.A. and Martin, A.D., 1994. Physical activity and skeletal health in adolescents. Pediatric Exercise Science, 6(4), pp.330-347.
- Bailey, R. and Dismore, H., 2004. The Role of Physical Education and Sport in Education, Final Report. Berlin, ICSSPE.
- Bailey, R., 2006. Physical education and sport in schools: A review of benefits and outcomes. Journal of school health, 76(8), pp.397-401.
- Bailey, R., Armour, K., Kirk, D., Jess, M., Pickup, I., Sandford, R. and Education, B.P., 2009. The educational benefits claimed for physical education and school sport: an academic review. Research papers in education, 24(1), pp.1-27.
- Bass, S.L. and Myburgh, K.H., 2000. The role of exercise in the attainment of peak bone mass and bone strength. In Sports endocrinology (pp. 253-280). Humana Press, Totowa, NJ.

- Beller, J.M. and Kay Stoll, S., 1995. Moral reasoning of high school student athletes and general students: An empirical study versus personal testimony. Pediatric Exercise Science, 7, pp.352-352.
- Biddle, S., 2000. Exercise, Emotions. Emotions in sport
- Biddle, S.J., Gorely, T. and Stensel, D.J., 2004. Health-enhancing physical activity and sedentary behaviour in children and adolescents. Journal of sports sciences, 22(8), pp.679-701.
- Blaxter, L. Hughes, C and Tight, M., 2010. How to Research. 4th Ed. Maidenhead: Oxford University Press
- Blaxter, L., Hughes, C. & Tight, M., 2010. How to Research. 4th edition. Berkshire: Open University Press
- Boyle, B., & Bragg, J., 2006. A curriculum without foundation. British Educational Research Journal, 32, 4:569-582
- British Educational Research Association (BERA), 2004. Revised Ethical Guidelines for Educational Research. Southwell: British Educational Research Association. http://www.bera.ac.uk/publications/ guides.php
- Brophy, J., 1983. Conceptualizing student motivation. Educational psychologist, 18(3), pp.200-215.
- Brown TD and Payne PG., 2009. Conceptualizing the Phenomenology of Movement in Physical Education: Implications for Pedagogical Inquiry and Development. Quest 61: 418–441.
- Bryman, A., 2008. Social Research Methods. Oxford: Oxford University Press.
- Cancer Research UK, 2021. Does obesity cause cancer?. [online] Cancer Research UK. Available at: <https://www.cancerresearchuk.org/about-cancer/causes-of-

cancer/obesity-weight-and-cancer/does-obesity-cause-cancer> [Accessed 10 May 2022].

- Carter, C., 2018. Successful Dissertations: the complete guide for Education, Childhood and Early Childhood Studies Students. 2nd Ed. London: Bloomsbury Academic
- Clough, P. & Nutbrown C., 2007. A Students Guide to Methodology. 2nd edition. London: Sage
- Cohen, L., Manion, L. and Morrison, K., 2007. Research Methods in Education. London: Routledge.
- Collins, M., 2014. Sport and social exclusion. Routledge.
- Corbin, J. and Strauss, A., 2008. Basics of Qualitative Research. London: Sage
- Crotty, M., 2003. The Foundations of Social Research: Meaning and Perspective in the Research Process. London: Sage.
- DeCorby, K., Halas, J., Dixon, S., Wintrup, L. and Janzen, H., 2005. Classroom teachers and the challenges of delivering quality physical education. The Journal of Educational Research, 98(4), pp.208-221.
- Denscombe, M., 2017. The Good Research Guide. 6th Ed. London: Oxford University Press
- Denzin, N. K. and Lincoln, Y. S., 2005. The Sage Handbook of Qualitative Research. Thousand Oaks, CA: Sage.
- Department for Education, 2013. National Curriculum for England. https://www.gov.uk/government/collections/national-curriculum
- Department for Education, 2022. School RecoveryStrategies: Year 1 findings. Available at

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/fi le/1045471/School_Recovery_Strategies_year_1_findings.pdf

- Donnelly, J.E. and Lambourne, K., 2011. Classroom-based physical activity, cognition, and academic achievement. Preventive medicine, 52, pp.S36-S42.
- Dowling, S., 2021. Pivot, Flex, Adapt: Physical Education through the 2020 Pandemic.
- Durden-Myers, E.J. and Keegan, S., 2019. Physical literacy and teacher professional development. Journal of Physical Education, Recreation & Dance, 90(5), pp.30-35.
- Durden-Myers, E.J., Green, N.R. and Whitehead, M.E., 2018. Implications for promoting physical literacy. Journal of Teaching in Physical Education, 37(3), pp.262-271.
- Dyson, B., 2014. Quality Physical Education: A Commentary on Effective Physical Education Teaching. [online] Available at: <https://www.researchgate.net/publication/264636284_Quality_Physical_Education_A_Commentary_on_Effective_Physical_Education_Teaching> [Accessed 16 May 2022].
- Ebbeling, C.B., Pawlak, D.B. and Ludwig, D.S., 2002. Childhood obesity: public-health crisis, common sense cure. The lancet, 360(9331), pp.473-482.
- Fairclough, S., Stratton, G. and Baldwin, G., 2002. The contribution of secondary school physical education to lifetime physical activity, European Physical Education Review, 2002, 8 (1), 69– 84.
- Faucette, N. and Hillidge, S.B., 1989. Research findings—PE specialists and classroom teachers. Journal of Physical Education, Recreation & Dance, 60(7), pp.51-54.

- Faucette, N. and Patterson, P., 1989. Classroom teachers and physical education: What they are doing and how they feel about it. Education, 110(1).
- Fereday, J. and Muir-Cochrane, E., 2006. Demonstrating rigor using thematic analysis: A hybrid approach of inductive and deductive coding and theme development. International journal of qualitative methods, 5(1), pp.80-92.
- Fine, G. A. and Sandstrom, K. L., 1988. Knowing Children: Participant Observation with Minors. Qualitative Research Methods Series 15. Beverley Hills, CA: Sage
- Fleet M., 2021. Policy and Reform in Physical Education Over Five Decades ofChange. In: Peters M.A. (eds) Encyclopedia of Teacher Education. Soringer. Sinaapore httos://doi.ora/10. 1007/978-981-13-1179-6 424-2
- Flintoff, A., 2003. The School Sport Co-ordinator Programme: Changing the Role of the Physical Education Teacher? Sport, Education and Society, 8 (2). 231 - 250. ISSN 1470-1243 DOI: https://doi.org/10.1080/13573320309252
- Fox, K., 2000. Physical activity and mental health promotion: the natural partnership. Journal of Public Mental Health.
- Frankfort-Nachmias, C. and Nachmias, D., 1992. Research Methods in the Social Sciences. London: Edward Arnold.
- Gallahue DL, Ozmun JC., 1998. Understanding Motor Development: In- fants, Children, Adolescents, Adult. 5th ed. Boston, Mass: McGraw-Hill
- Garratt, D. and Kumar, S., 2019. Physical Education, Citizenship, and Social Justice: A Position Statement. Quest, 71(2), pp.188-201.
- Green, K., 2002. Lifelong participation, physical education and the work of Ken Roberts. Sport, Education and Society, 7(2), pp.167-182.

- Grieco LA, Jowers EM, Bartholomew JB., 2009. Physically active academic lessons and time on task: The moderating effect of body mass index. Medicine and Science in Sports and Exercise.
- Griffin, P., 1985. Teaching in an urban, multicultural physical education program: the power of context, Quest, 37, 154□/165.
- Griggs, G. and Fleet, M., 2021. Most people hate physical education and most drop out of physical activity: In search of credible curriculum alternatives. Education Sciences, 11(11), p.701.
- Griggs, G., 2010. 'For sale – primary physical education. £20 per hour or nearest offer', Education, 38(1), pp. 39–46. doi:10.1080/03004270903099793
- Griggs, G., 2016. 'Spending the Primary Physical Education and Sport Premium: a West Midlands case study', International Journal of Primary, Elementary and Early Years Education, 44(5) pp. 547-555.
- Groenewald, T., 2004. 'A phenomenological research design illustrated'. International Journal of Qualitative Methods, Vol.4, No.1
- Gruber, J.J., 1986. Physical activity and self-esteem development in children: A meta-analysis. American Academy of Physical Education Papers, 19, pp.30-48.
- Gunstad, J., Paul, R.H., Cohen, R.A., Tate, D.F., Spitznagel, M.B., Grieve, S. and Gordon, E., 2008. Relationship between body mass index and brain volume in healthy adults. International Journal of Neuroscience, 118(11), pp.1582-1593.
- Gutin, B., Barbeau, P. and Yin, Z., 2004. Exercise interventions for prevention of obesity and related disorders in youths. Quest, 56(1), pp.120-141.

- Gutin, B., Barbeau, P. and Yin, Z., 2004. Exercise interventions for prevention of obesity and related disorders in youths. Quest, 56(1), pp.120-141.

- Hallahan, G., 2022. Should PE be one of the core subjects?. [online] Tes Magazine. Available at: <https://www.tes.com/magazine/analysis/general/problems-push-make-pe-core-subject> [Accessed 16 May 2022].
- Hammersley, M. and Atkinson, P., 1995. Ethnography: Principles in Practice. London: Routledge.
- Hands B., 1999. The Importance of Physical Education. Perth, WA: ACHPER,
- Harris, J., & Cale, L., 2018. Promoting active lifestyles in schools. Champaign, IL: Human Kinetics
- Harris, J., Cale, L., & Musson, H., 2012. The predicament of primary physical education: a consequence of 'insufficient' ITT and 'ineffective' CPD? Physical Education and Sport Pedagogy, 17(4): 367-381
- Harris, J.P., 2018. The case for physical education becoming a core subject in the National Curriculum
- Hart, E. and Bond, M., 1995. Action Research for Health and Social Care: A Guide to Practice. Buckingham: Open University Press
- Health and Social Care Information Centre, 2015. Health Survey for England 2014
- Hedley, A.A., Ogden, C.L., Johnson, C.L., Carroll, M.D., Curtin, L.R. and Flegal, K.M., 2004. Prevalence of overweight and obesity among US children, adolescents, and adults, 1999-2002. Jama, 291(23), pp.2847-2850.
- Hesse-Biber, S, and Leavy, P., 2011. The Practice of Social Research (2nd ed). Los Angeles: Sage
- Hillman CH, Pontifex MB, Raine LB, Castelli DM, Hall EE, Kramer AF., 2009. The effect of acute treadmill walking on cognitive control and academic achievement in preadolescent children. Neuroscience.

- Hills, A., 1998. Scholastic and intellectual development and sport. Sports and children, pp.76-90.
- Holliday, A., 2007. Doing and Writing Qualitative Research 2nd Edition. London: SAGE
- House of Lords, 2021. National Plan for Sport and Recreation Committee.
- Humphrey, C., 2013. A paradigmatic map of professional education research. Social work education, 32(1), pp.3-16.
- Huzar, T., 2019. Large study finds clear association between fitness and mental health. [online] Medicalnewstoday.com. Available at: <https://www.medicalnewstoday.com/articles/large-study-finds-clear-association-between-fitness-and-mental-health#A-clear-correlation> [Accessed 17 January 2022].
- Jones, L, and Green, K., 2017. 'Who teaches primary Physical Education? Change and transformation through the eyes of subject leaders'. Chester: Sage.
- Kelder, S.H., Perry, C.L., Klepp, K.I. and Lytle, L.L., 1994. Longitudinal tracking of adolescent smoking, physical activity, and food choice behaviors. American journal of public health, 84(7), pp.1121-1126.
- Kim, J., 2012. Are physical education-related state policies and schools' physical education requirement related to children's physical activity and obesity?. Journal of school health, 82(6), pp.268-276.
- Kirk, D., 1989. Daily physical education research: a review and a critique. International Review for the Sociology of Sport, 24(1), pp.21-30.
- Kristjansson, A.L., Sigfusdottir, I.D., Allegrante, J.P., 2008. Health behavior and academic achievement among adolescents: the relative contribution of dietary

habits, physical activity, body mass index, and self-esteem. Health Educ. Behav. 274–280.

- Lau, W.C., Yu, C.W., Lee, A.M., So, R.C.H. and Sung, R., 2004. The relationship among physical fitness, physical education, conduct and academic performance of Chinese primary school children. International Journal of Physical Education, 41(1), p.17.
- Leckie, G. and Goldstein, H., 2009. The limitations of using school league tables to inform school choice. Journal of the Royal Statistical Society: Series A (Statistics in Society), 172(4), pp.835-851.
- Lewins, A. and Silver, C., 2007. Qualitative coding in software: principles and processes. Using software in qualitative research. Using Software in Qualitative Research. doi, 10, p.9780857025012.
- Liamputtong, P., 2007. Researching the Vulnerable. London: Sage
- Luke, M.D. and Sinclair, G.D., 1991. Gender differences in adolescents' attitudes toward school physical education. Journal of Teaching in physical Education, 11(1), pp.31-46.
- Macdonald, D., 2002. 12 Extending agendas: physical. Gender and physical education: Contemporary issues and future directions, p.208.
- Macfadyen, T. and Bailey, R., 2002. Teaching physical education 11-18. London: Continuum.
- MacKelvie, K.J., Khan, K.M. and McKay, H.A., 2002. Is there a critical period for bone response to weight-bearing exercise in children and adolescents? A systematic review. British journal of sports medicine, 36(4), pp.250-257.

- Mahar MT, Murphy SK, Rowe DA, Golden J, Shields AT, Raedeke TD., 2006 Effects of a classroom-based program on physical activity and on-task behavior. Medicine and Science in Sports and Exercise.
- Mahmoudi, S., Jafari, E., Nasrabadi, H.A. and Liaghatdar, M.J., 2012. Holistic education: An approach for 21 century. International Education Studies, 5(2), pp.178-186.
- Malina, R.M. and Bar-Or, O., 1991. Bouchard C.] n Growth, Maturation, and Physical Activity. Champaign (IL): Human Kinetics, pp.371-390.
- Marshman, R., 2011. Concurrency of learning in the IB diploma programme and middle years programme. Cardiff, UK. IBO. http://blogs. ibo. org/positionpapers/category/Roger.
- Merriam, S.B. and Tisdell, E.J., 2016. Designing your study and selecting a sample. Qualitative research: A guide to design and implementation, 67(1), pp.73-104.
- Morgan, P.J. and Hansen, V., 2008. Physical education in primary schools: Classroom teachers' perceptions of benefits and outcomes. Health education journal, 67(3), pp.196-207.
- Moustakas, C., 1994. Phenomenological Research Methods. London: Sage.
- Naughton, G., Rolfe, S. & Siraj-Blatchford, I., 2010. (eds) Doing Early Childhood Research. 2nd edition. Berkshire: Open University Press
- O'Connor, J., 2019. Exploring a pedagogy for meaning-making in physical education.
- O'Hanlon, T.P., 1982. School sports as social training: The case of athletics and the crisis of World War I. Journal of sport history, 9(1), pp.5-29.
- O'Hara, M., Carter, C., Dewis, P., Kay, J. and Wainwright, J., 2011. Successful Dissertations: The Complete Guide for Education and Childhood Studies Students.
- Ofsted, 2012. Beyond 2012 – Outstanding physical education for all.

- Okely, A.D., Booth, M.L. and Patterson, J.W., 2001. Relationship of physical activity to fundamental movement skills among adolescents. Medicine and science in sports and exercise, 33(11), pp.1899-1904.
- Packham, A. and Street, B., 2018. The effects of physical education on student fitness, achievement, and behavior. Economics of Education Review, 72, pp.1-18.
- Pickard, A., 2013. Research Methods in Information. 2nd edition. London: Facet Publishing
- Porter, S., 1996. Qualitative Research in the Research Process in Nursing. Oxford: Blackwell Science.
- Public Health England, 2021. Physical activity: applying All Our Health. [online] Available at: <https://www.gov.uk/government/publications/physical-activity-applying-all-our-health/physical-activity-applying-all-our-health> [Accessed 15 May 2022].
- Quennerstedt, M., 2019. Physical education and the art of teaching: transformative learning and teaching in physical education and sports pedagogy. Sport, Education and Society, 24(6), pp.611-623.
- Rainer, P. & Jarvis, S., 2019. Fundamental movement skills and their relationship with measures of health-related physical fitness of primary school children prior to secondary school transition: a Welsh perspective, Education 3-13
- Rasberry CN, Lee SM, Robin L, Laris BA, Russell LA, Coyle KK, Nihiser AJ., 2011. The association between school-based physical activity, including physical education, and academic performance: A systematic review of the literature. Preventive Medicine.
- Rhymer, 2021. Notes of the House of Lords Select Committee on a National Plan for Sport and Recreation roundtables with PE teachers https://committees.parliament.uk/publications/8064/documents/82933/default/

- Robert-Holmes, G., 2011. Doing Your Early Years Research Project: A step by step guide. 2nd edition. London: Sage
- Roberts-Holmes, G., 2011. Doing your early years research project: A step by step guide.
- Robson, C., 2002. Real World Research. Oxford: Blackwell
- Royal College of Psychiatrists, 2021. Record number of children and young people referred to mental health services as pandemic takes its toll. [online] Available at: <https://www.rcpsych.ac.uk/news-and-features/latest-news/detail/2021/09/23/record-number-of-children-and-young-people-referred-to-mental-health-services-as-pandemic-takes-its-toll> [Accessed 19 January 2022].
- Rubin, H. & Rubin, I., 2012. Qualititative Interviewing: The art of learning data. London: Sage
- Sallis, J.F., 1999. Correlates of physical activity. Physical Activity & behavioural Medicine: Sage Publications.
- Sallis, J.F., Mckenzie, T.L., Kolody, B. and Curtis, P., 1996. Assessing district administrators' perceptions of elementary school physical education. Journal of Physical Education, Recreation & Dance, 67(8), pp.25-29.
- Schwandt, T., 2001. Dictionary of Qualitative Enquiry. London: Sage
- Shaw, R. L., 2001. 'Why use interpretative phenomenological analysis in Health Psychology?'. Health Psychology Update, Vol.10, No.4, 48–52.
- Shephard, R.J., 1997. Curricular physical activity and academic performance. Pediatric exercise science, 9(2), pp.113-126.
- Shvedko, A.V., Thompson, J.L., Greig, C.A., & Whittaker, A.C., 2018. Physical Activity Intervention for Loneliness (PAIL) in community-dwelling older adults: protocol for a feasibility study. Pilot & Feasibility Studies, 4(187), 1-21

- Sibley, B.A. and Etnier, J.L., 2003. The relationship between physical activity and cognition in children: a meta-analysis. Pediatric exercise science, 15(3), pp.243-256.
- Sinek, S., 2009. Start With Why: How Great Leaders Inspire Everyone To Take Action. 1st ed. Penguin.
- Smith, A., 2015. Primary school physical education and sports coaches: evidence from a study of School Sport Partnerships in north-west England. Sport, Education and Society, 20 (7): 872-888.
- Smith, M., 2020. Collaborative teaching and learning of primary school physical education in England: a critical examination of the role and impact of external providers. [online] Available at: <https://uobrep.openrepository.com/handle/10547/624519> [Accessed 16 May 2022].
- Sparkes, A. and Smith, B., 2014. Qualitative Research Methods in Sport, Exercise and Health. London: Routledge.
- Sport England, 2021. Active Lives Children and Young People Survey
- Steinbeck, K.S., 2001. The importance of physical activity in the prevention of overweight and obesity in childhood: a review and an opinion. Obesity reviews, 2(2), pp.117-130.
- Stolz, S.A., 2015. Embodied learning. Educational philosophy and theory, 47(5), pp.474-487.
- Stratton, G., Fairclough, S.J. and Ridgers, N.D., 2008. Physical activity levels during the school day. Youth physical activity and sedentary behavior: Challenges and solutions, pp.321-350.

- Stryer, B.K., Tofler, I.R. and Lapchick, R., 1998. A developmental overview of child and youth sports in society. Child and Adolescent Psychiatric Clinics, 7(4), pp.697-724.
- Sucuoglu, E. and Atamturk, H., 2020. Correlation relation between professional qualifications of physical education teachers and students' attitudes towards Physical Education classes. Pedagogy of Physical Culture and Sports, 24(1), pp.44-47.
- Sullivan, L., 2021. Is PE in Crisis?: Leading Meaningful Change in Physical Education. Scholary.
- Svoboda, B., 1994. Sport and Physical Activity as a Socialisation Environment: Scientific Review part 1 (Strasbourg, Council of Europe).
- Swaithes, W., 2015. 10 Steps to a World Leading Physical Education Department. [Online] Accessed at: https://www.youthsporttrust.org/want-world-leading-pe-department [Accessed 24 February 2022]
- Talbot M, 2001. The case for physical education. In: Doll-Tepper G, Scoretz D, eds. World Summit on Physical Education. Berlin, Germany: ICSSPE;:39-50.
- Taylor, A.H., 2003. Physical activity, anxiety, and stress. Physical activity and psychological well-being, pp.22-52.
- The Department for Education and Skills, 2005. Departmental Report https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/272106/6522.pdf
- Thomas, R., 2003. Blending Qualitative and Quantitative: Research methods in theses and dissertations. California: Sage.
- Tolfrey, K., Jones, A.M. and Campbell, I.G., 2000. The effect of aerobic exercise training on the lipid-lipoprotein profile of children and adolescents. Sports Medicine, 29(2), pp.99-112.

- Trudeau F, Shephard RJ., 2008. Physical education, school physical activity, school sports and academic performance. International Journal of Behavioral Nutrition and Physical Activity.
- U.S. Department of Health and Human Services, 2000. Healthy people 2010 (Conference Edition, in Two Volumes) (Washington, U.S. Government Printing Office).
- Vancampfort, D., Firth, J., Schuch, F.B., Rosenbaum, S., Mugisha, J., Hallgren, M., Stubbs, B., 2017. Sedentary behavior and physical activity levels in people with schizophrenia, bipolar disorder and major depressive disorder: a global systematic review and meta-analysis. World Psychiatry, 16(3), 308-315.
- von Hippel, P.T. and Bradbury, W.K., 2015. The effects of school physical education grants on obesity, fitness, and academic achievement. Preventive Medicine, 78, pp.44-51.
- Walliman, N., 2004. Your Undergraduate Dissertation: The Essential Guide for Success. London: Sage
- Walliman, N., 2006. Social Research Methods. London: Sage.
- WHO, 2020. Physical activity. [online] Available at: <https://www.who.int/news-room/fact-sheets/detail/physical-activity> [Accessed 17 January 2022].
- Yangüez, M., Bediou, B., Hillman, C.H., Bavelier, D. and Chanal, J., 2021. The indirect role of executive functions on the relationship between cardiorespiratory fitness and school grades. Medicine and science in sports and exercise, 53(8), p.1656.
- Youth Employment UK, 2017. [online] Available at: <https://www.youthemployment.org.uk/dev/wp-content/uploads/2017/07/Youth-Employment-UK-Employability-Review-June-2017.pdf> [Accessed 15 May 2022].

- Youth Sport Trust, 2018. Survey of Secondary PE. Loughborough: Youth Sport Trust. www.youthsporttrust.org/sec-survey
- Youth Sport Trust, 2021. Youth Sport Trust – Written evidence (NPS0115) https://committees.parliament.uk/writtenevidence/22069/html/