FROM THE SPORTS HALL INTO THE CLASSROOM:

Learning Life Skills through Sport

A thesis submitted for the degree of

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by

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ABSTRACT

This study draws upon a wide range of research to examine underachievement in UK schools. With underachievement continuing to be present within the UK's educational system, it is essential that a remedy is found. The notion that physical activity is linked to an increase in academic performance is not a new concept; however researchers are still trying to determine the scope of such a claim. There is a widespread belief that sport can be used as a vehicle to promote positive youth development. In particular, using sport to teach adolescents various life skills has become popular over the previous decade. However, little research has looked at the transfer of life skills into other academic and life domains. Therefore the overarching purpose of this study was to determine if an after-school, sports based life skills programme had any impact on male underachievement within the UK education system.

The Transfer-Ability Programme (TAP) was a multi-faceted intervention, which sought to teach twenty underachieving, male students life skills through sport. The results have been presented in three phases with Phase 1 determining the impact of TAP on academic performance in Science, Phase 2 examined the perceptions of the twelve-thirteen year old participants on whether they transferred life skills from the sports hall into the classroom during TAP, and Phase 3 explored the enablers and barriers that facilitated or prevented life transfer. Statistical results indicate that the intervention groups' academic grades significantly improved during the intervention to a level above teaching prediction. This suggests that teaching life skills through sport may reduce male underachievement. T-tests show that the participants in the intervention group perceived their learning of life skills to significantly increase pre-post TAP. Interview data also supports the notion that the intervention group participants perceived to have learnt the life skills and then transferred them into other academic domains. Phase 3 highlighted five themes that enable or prevent life skill transfer; Support from peers, Pride, Opportunities, Rewards and Transfer experience. These themes are collectively referred to as the SPORT model. The results show that young adolescent males can learn and transfer life skills if deliberately taught to do so. Finally, the findings are discussed with reference to how teachers and physical educators may teach life skills within their lessons, and how life skill transfer may be supported.

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If you can imagine it, you can achieve it. If you can dream it, you can become it.

(William Arthur Ward)

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1 INTRODUCTION

We can reach far more people through sport than we can through political or educational programmes. In that way, sport is more powerful than politics. (Nelson Mandela)

Physical activity and sport are widely used as vehicles to promote the development of young people. For over a decade UK central governments have had an interest in youth sport and physical education policy, which has resulted in sport receiving unprecedented funding from 2001-2010 (Harvey and O'Donovan, 2011). Sport has been used in an attempt to cure a range of social issues such as public health, social exclusion, and academic performance (Green, 2006). Whilst sport can have a positive effect on academic attainment, results at present remain inconclusive. This thesis sought to provide clarification through examining the impact of a sport-based life skills intervention on academic performance.

This chapter introduces the topics surrounding school sport and outlines current government policies. The role of physical education, physical educators, and the National Curriculum are introduced. The rationale for this study is outlined and the main research aims that this study will address are presented. Finally, the potential implications of this research are highlighted and the research questions this study will explore are presented.

1.1 The Importance of Sport for Youth Development

Sport has long been linked with positive youth development (Fraser-Thomas *et al*, 2005; Wells and Arthur-Banning, 2008; Wright and Li, 2009) and social inclusion (Coalter, 2007; Collins, 2004; Waring and Mason, 2010). Sport has received growing interest and support over the last forty years. It is assumed that participation in sport and physical activities can lead to social and economic regeneration, can reduce crime and positively impact on health and education (Coalter, 2007; Hoye *et al*, 2010; Sandford *et al*, 2010). It is understood that sport is far-reaching irrespective of gender, social background and ethnicity. The concept that sport builds character and promotes positive youth development are the main

reasons why a plethora of sport initiatives have been implemented in order to fix many problems in the UK (Sandford *et al,* 2010). Growing evidence suggests that sport has an immediate and sustained impact on young people who participate, which makes sport a popular choice when working with youths (Sandford *et al,* 2008; 2010).

1.1.1 Adolescents, youths, and young people

It is important at this point to discuss the terminology used when referring to youths, adolescents and young people. Although the terms are often used interchangeably, there are age guidelines available to distinguish between adolescence, youths and young people. Adolescence is typically viewed as the second decade of human life (Lerner and Steinberg, 2004), usually beginning with biological indicators such as puberty and ending with the enactment of adult roles in society such as full-time employment. However these guidelines are changeable, mainly due to changes in society. Adolescence is now viewed as a longer period than in previous decades with adolescents remaining in full time education and not acquiring adult roles until their early to mid twenties.

The United Nations (2005) also acknowledge ambiguities in chronological age as adolescence is largely a Western concept that does not exist in all cultures. As a result, United Nations rarely use the term adolescence but propose the use of labels such as young people and youths to classify individuals going through the transitional periods of their lives. United Nations use the term young people to represent individuals aged between 10-24 years and youths to represent individuals aged between 15- 24 years. The participants in the current study are aged 12-13 years and therefore the term young people will be used in relation to the sample.

1.1.2 Positive youth development

Positive youth development (PYD) has become a popular term in research and is increasingly being referred to as the cure to youth-related problems. The main ethos of positive youth development (PYD) is that all youths have the 'potential for successful, healthy development and that all youths possess the capacity for positive development' (Lerner *et al,* 2005: 20). Young people are no longer seen as damaged or a problem to be managed but rather as resources that can be developed (Lerner *et al,* 2005; Roth and Brooks-Gunn, 2003).

PYD is a complex term that has many definitions but a consensus amongst scholars has not yet been achieved. During its development in the 1990s PYD became an umbrella term, as it is a field of interdisciplinary research (Benson *et al,* 2007). This has caused problems when trying to define PYD. No definition has been able to include all the elements that PYD encompasses. Youngblade and Theokas (2006: 58) believe PYD is based on the theoretical constructs known as the 5 Cs (see table 1.1) and state that PYD is the 'active promotion of adolescents' competence, confidence, character, caring, and connection'. It has been suggested that when these five Cs are all present then a young person will demonstrate positive behaviour and live well with society (Lerner *et al,* 2005).

Table 1.1 – The Five Cs

Working Definition of the Five Cs of Positive Youth Development (Lerner *et al,* 2005: 23)

Five Cs	Definition
Competence	Positive view of one's actions in domain specific areas including social, academic, cognitive and vocational. Social competence pertains to interpersonal skills (e.g., conflict resolution). Cognitive competence pertains to cognitive abilities (e.g., decision making). School grades, attendance, and test scores are part of academic competence. Vocational competence involves work habits and career choice explorations.
Confidence	An internal sense of overall positive self-worth and self-efficacy; one's global self-regard, as opposed to domain specific beliefs.
Connection	Positive bonds with people and institutions that are reflected in bidirectional exchanges between the individual and peers, family, school, and community in which both parties contribute to the relationship.
Character	Respect for societal and cultural rules, possession of standards for correct behaviours, a sense of right and wrong (morality), and integrity.
Compassion or Caring	A sense of sympathy and empathy for others.

Life skills are a concept that falls under the umbrella term of PYD. Although life skills are discussed in more detail in Chapter 2, it is generally accepted that life skills are defined as 'those skills that enable individuals to succeed in the different environments in which they live, such as school, home and in their neighbourhoods' (Gould and Carson, 2008: 59). It is argued that by making young people aware of life skills, they become better equipped to deal with various life situations. Many life skill programmes aim to teach young people skills such as decision-making, time management, goal setting and teamwork, whereas other programmes aim to prevent certain behaviours such as drug and alcohol use and pregnancies in young people.

Sport has long been recognised as a vehicle to facilitate positive youth development through teaching life skills but there is nothing special or magical about sport (Danish *et al*, 2004; Petitpas *et al*, 2008) so what is it about sport that can have a positive impact on young people? Roth and Brooks-Gunn (2003) state that youth development programmes increase the opportunities needed for healthy development. It is commonly believed and widely accepted that sport can provide young people with the skills and values needed to prepare them for their life ahead (Danish *et al*, 2004; Fraser-Thomas *et al*, 2005).

However, many sport programmes or interventions are often badly structured and/or implemented and therefore the learning of life skills and positive development is unachievable (Danish *et al*, 2004). Theokas and Lerner (2006) state that although youth programmes for skill building have not been quantitatively or qualitatively measured and/or examined, there is agreement that such programmes are needed for positive development. Sport is seen as a valued social activity that most youths will engage with at some point (Camiré, Trudel and Forneris, 2012); using sport to develop life skills is becoming a growing trend not only advocated by the sport community but also through youth development campaigns and schools (Gould and Carson, 2008).

Youth participation in structured sports programmes has been positively linked with adolescents' physical, psychological, social and behavioural development (see Table 1.2) as well as positively impacting on academic-related achievement including increased school attendance and college enrolment (Zarrett *et al*, 2008). Although the vast majority of research shows sport participation to be a positive developmental activity for youths, it must be noted that this is not the case for all young people and sport participation can result in negative outcomes for a minority.

The relationship between coaches and peers can be poor and not necessarily positive. This can result in negative influences, possibly including inappropriate behaviour and jealousy (Dworkin and Larson, 2006; Fraser-Thomas and Côté, 2009). It is also acknowledged that youth participation in sport can lead to increases in stress levels (Dworkin and Larson, 2006; Fraser-Thomas and Côté, 2009).

If youths experience too many negative effects then ultimately they will drop out of sport (Dworkin and Larson, 2006). This suggests that mere participation is not the answer to positive youth development but rather the individual experience (Goudas and Giannoudis, 2008). In summary, this section has highlighted that sport can have both positive and negative influences on academic performance but it is generally thought the negative influences only impact a small minority of students. The next section of this chapter outlines the impact the political agenda has on school sport.

Table 1.2 – Benefits of Sport Participation

The development benefits of sport participation (cited President's Council on Physical Fitness and Sports, 2009)

Physical Assets
Motor skill competencies and movement literacy
Sport-specific competencies
Physically active lifestyles
Knowledge about physical activities, sports and games
Physical Fitness
Physiological capacities
Physical health
Psychological Assets
Self-determined motivation and physical activity
Positive values towards physical activity
Feelings of self-determination, autonomy and choice
Positive identity, body image and self-esteem
Perceived physical competence and self-efficacy
Positive affect and stress relief
Moral identity, empathy and social perspective-taking
Cognitive functioning and intellectual health
Hope and optimism about the future
Social Assets
Support from significant adults and peers
Feelings of social acceptance
Close friendship and friendship quality
Leadership, teamwork and cooperation
Respect, responsibility, courtesy and integrity
Sense of civic engagement and contribution to community
Resistance to peer pressure to engage in risky behaviours

1.2 Political Agenda and Influence on School Sport

It is important to note that during the development and implementation of TAP many education policies surrounding physical education were changing and many financial cuts were being made in the sport provision sectors. Sibley and Etnier (2003) state that in financially difficult times, schools will sacrifice Physical Education (PE) classes in favour of more academic subjects. This is mainly due to the cost of facilities, specific equipment and the insurance needed for PE. In practice many schools cut PE time in order to deliver more core academic subjects due to the pressure schools experience with regards to league tables (Sibley and Etnier, 2003). In recent years many modern schools within the UK were built without sufficient sport space or facilities resulting in meaningful physical education classes being impossible (Dills *et al,* 2011). Many older schools have recently found their playing fields have been sold off by central government. Dills and colleagues (2011) argue that children in the 1970s received more physical education classes at school than children do today.

If sport participation does have a positive impact on academic achievement (Bailey, 2006; Carlson *et al,* 2008; Coe *et al,* 2006; Eitle, 2005; Marsh and Kleitman, 2003; Sibley and Etnier, 2003) and budget cuts continue to lead to fewer physical education classes being delivered then out of school sport participation is going to be vital for child development. However, if research can demonstrate that physical activity may have a positive impact on academic achievement then retaining physical education classes and extra-curricular programmes may become a priority (Grissom, 2005).

Traditionally in the UK, local and national governments have had little impact on sport policy. It was not until the late 1960s that the British government recognised sport as their responsibility (Houlihan, 2011). Since then sport has received higher political salience but is now more controlled by politicians who often have different agendas (Hoye *et al,* 2010). The primary focus of sport has changed, more rapidly so in the last ten years. Originally sport was used to tackle complex social issues such as anti-social behaviour, crime and underachievement, now however; sport is used to tackle childhood obesity and to improve the nation's health (Houlihan, 2011). This has resulted in many policies aiming to increase youth

participation being implemented within the primary care, community and family sectors (Atkin *et al*, 2011), possibly at the expense of school sport provision.

Hoye and colleagues (2010), and Phillpots (2011) agree that governments now use sport as a tool to fix many non-sport problems such as public health, social welfare and national regeneration at a relatively low financial cost, which has led to a complex overlapping of policies and agendas. Physical Education classes however, are heavily reliant on government funding and support, with over £1 billion spent on school sport during the New Labour government (Phillpots, 2011). The Coalition Government (Conservatives and Liberal Democrats) who were elected in May 2010, have now reduced school funding, and dissembled the School Sport Partnership developed under the New Labour government.

Michael Gove, the Secretary of State for Education, announced in October 2010 in a letter to Baroness Sue Campbell that the Coalition Government were axing the £162million school sport funding (Bardens and Gillie, 2011). The government believed the cut in funding was the best way to stop ring fencing and give schools more control over the sport they deliver (Bardens and Gillie, 2011). Yet, despite the reduction of funding, the Coalition Government had a strong desire to change the sport ethos in schools. The UK government have embedded a new approach to PE and school sport, which goes against the approach of previous governments. School sport is now designed to have competition at its heart, moving away from the sport for all approach. This new approach is not without its critics; it has been suggested that the introduction of competition in all PE lessons is a masculine discourse that will fail to motivate many students (Harvey and O'Donovan, 2011).

In 2012, Jeremy Hunt, who at the time was the Secretary of State for Culture, Olympics, Media and Sport, announced the Coalition Government's plans for the new Youth Sport Strategy, which was designed to encourage young people to continue to participate in sport throughout their lives. £1 billion was pledged in order to deliver on Lord Coe's promise of a sporting legacy post the London 2012 Olympic Games. In terms of school sport, 2010 saw the Collation government introduce a new initiative known as the School Games, a national Olympic and Paralympic-style sports competition for schools. Jeremy Hunt wanted the School Games to boost the promotion of competitive sport in schools and that the initiative would be a key part of the 2012 Olympic sporting legacy. The aim of the School Games is for schools to compete against each other in leagues at a local level. The winning athletes and

teams from up to 60 counties then compete to qualify for the national finals. Schools are also being encouraged to host in-house Olympic-style sports days so that children of all abilities have the opportunity to compete. In addition, a Paralympic element is to be included at every level of the competition for young people with disabilities.

The problem with current policies for physical activity today is their limited focus. The 'Sport for All' campaign, which began in the early 1970s, has long since been forgotten, argues Green (2006). A shift in policy has led sport policies away from 'sport for all' and now policies tend to focus on two specific strands. The first concentrates on children and young people with an aim of reducing longer-term public health costs and increasing the contribution made by individuals to the economic well being of the United Kingdom (Green, 2006). The second strand has a sole focus on elite athletes and the accumulation of Olympic medals. £97 million of public money was used to support the elite athletes who attended the Beijing Olympics in 2008. Green (2006) argues that doing sport for fun may be a better rationale for increasing participation in physical activity but this seems to be lost in recent government policies, as there appears to be a distinct lack of a 'sport for all' ethos. Whilst this section has explained the government's current plans for school sport, the next section will explore the use and potential of school sport interventions.

1.3 School Sport Interventions

In recent years, governments and policy makers have targeted sport as a cure all approach to social issues and problems (Green, 2006). Thus sporting interventions have become increasingly popular when dealing with troublesome children and adolescents. In particular, sport has been used to initiate a reduction in youth crime and contribute to social inclusion strategies (Green, 2006; Kelly, 2011). Yet the idea of increasing the time youths spend doing school sport in order to increase academic achievement is not popular with parents (Bailey, 2006). This section will review the literature surrounding academic achievement and youth sport.

In 2004, a report published by the Department for Culture, Media and Sport (DCMS) stated that:

> *Getting school children into sport- and keeping them involved- is especially vital as regular participation can reduce obesity,*

> *improve fitness levels and, by improving concentration and self-esteem, can help attendance, behaviour and attainment* (p. i).

Using sport interventions and programmes that target young people has become extremely common but Astbury and colleagues (2005) suggest that although the use of sport is common, it is also contentious. Many of the critics of such interventions and programmes claim the efficacy of sport programmes still remains unproven (Astbury *et al,* 2005). However, the general consensus is that the vast majority of research shows sport participation to be a positive developmental activity for youths and young people (Zarrett, 2008).

It has become increasingly recognised by schools, government, councils and sport providers that after-school programmes are a positive way to develop young people (Hall *et al,* 2003). After-school programmes also allow schools to deliver additional organised sport lessons as recommended by the PE and Sport Strategy for Young People (PESSYP) strategy. The PESSYP is a government initiative launched in 2008 and is aimed at improving the quantity and quality of physical education and sport undertaken by young people aged 5-19 in England. PESSYP builds on the success of the PE, School Sport and Club Links (PESSCL), which was established in 2003.

Directly after-school is deemed a critical time for young people (Atkin *et al,* 2011). It is during this time that many children and adolescents have the most freedom in terms of how they spend their time. Free from academic commitments and parental curfews that may prevent activities in the evening, young people have a choice on what activities they do during this time (Atkin *et al,* 2011). By offering out-of-school sport programmes, schools have begun to realise they can capture and encourage a large audience to participate in more active exercise and sport (Spittle *et al,* 2008). The need for intervention programmes delivered after-school and on school premises is increasing, especially programmes that promote positive youth development. This study addressed this need by promoting the transfer of life skills developed in an after-school programme, delivered on school premises, into the classroom. The next section discusses the role of physical education and the role of PE teachers.

1.4 Physical Education and the Role of Physical Educators

Two hours of physical education (PE) per week is a compulsory component of the National Curriculum (NC) in England. The PE and Sport Strategy for Young People (PESSYP) states each child should receive at least five hours of physical activity per week. It suggests two hours should be allocated through curriculum PE, one hour should comprise of sport activities delivered by schools on school sites and a further two hours should consist of a mixture of school and community/club-organised sport either on school premises or at community sites. The NC declares that PE in schools is important as it helps students to develop personally and socially, it develops students' competence and confidence, it allows students to enjoy and succeed in many physical activities and allows students to make informed decisions about lifelong participation in physical activity.

Scholars have argued that all subjects, but particularly PE, play an important role in the social and moral development of children (Jacobs, Knoppers and Webb, 2013). PE allows for significant interaction to occur between pupils but also between pupil and teacher (Bailey, 2006). However, social, psychosocial and moral development does not automatically occur, Bailey (2006) argues development of such areas during PE is dependent on PE teachers. Bailey (2006) also suggests that social development is dependent upon the action and interactions of the teacher and pupil and whether teachers recognise the importance of such development. Whilst widely accepted, there is little scientific evidence that social and psychosocial development actually occurs during physical education classes. Jacobs, Knoppers and Webb (2013) argue that the educational policy and PE teacher education programmes throughout Europe do not equip teachers with sufficient knowledge to systematically integrate social development into their lesson plans. PE teachers are not formally trained to socially and psychosocially develop children and the NC provides little guidelines on how to accomplish such teaching. The aim of this study is to inform PE teachers on how to implement life skills teaching in their own practice. The next section explains the need for this study.

1.5 The Need for this Study

Teaching life skills is popular in many fields in an attempt to deal with common issues experienced during adolescence such as alcohol prevention and

tobacco prevention (Botvin and Kantor, 2000); drug prevention (Botvin and Griffin, 2004); suicide prevention (LaFromboise and Howard-Pitney, 1995); and school violence (Botvin, Griffin and Nichols, 2006). Life skills programmes are not a panacea for solving all the problems young people face in todays' society but such programmes can be part of the solution to potentially solve some problems (Danish, 2002a).

Teaching life skills through sport has been commonly used since the early 1900s, where sport was considered to develop sportsmanship and other essential values that prepared children for the rest of their lives (Danish, 2002a). Although there is now a debate within literature as to whether sport programmes can be used to teach life skills, the general consensus is sport can and does teach participants various life skills. What is not known is how do children learn these skills and how do they transfer such skills into other areas of their lives. How do children transfer skills in to other aspects of their lives? As the answer to this question is not fully understood, it was hoped that the qualitative element of this study would provide some insight.

The intervention sought to address some of the gaps that exist within current literature and contribute to knowledge. Such gaps include limited evidence of life skill interventions that include British participants as many studies are conducted in the United States with American college students (the equivalent to English University students). The USA have a different education system, a different sport structure and ethos towards school sport, and a different ethnic diversity to the UK. Therefore it is reasonable to assume that research programmes completed in the US may not be easily replicated in the UK. Furthermore, many studies use University (American College) athletes to determine if sport has any impact on academic achievement. The present study will focus on males in the early stages of adolescence (12-13 years old) in order to see if an impact can be found earlier in the education system.

Many American studies use participants who are already athletes, who have already self-selected to participate in sport and with many of the athletes having gained a University place due to their sporting ability. The participants in TAP are in the early years of secondary education and although many of them did play various sports, they did not identify themselves as athletes. TAP also used a multi-skill, multi-sport programme in order to give the participants exposure to a variety of

sports and events. This was to increase the likelihood that the participants would find a sport they enjoy and increase the possibility of prolonged sport participation once the study has ended (Kirk, 2005).

Unlike previous studies completed by Bailey, 2006; Coe *et al*, 2006; Eitle, 2005; Marsh and Kleitman, 2003; Sallis *et al*, 1999; Shephard, 1997, this study did not alter the time the participants spent in PE lessons. TAP was delivered after-school, which meant the children had to attend school before they could participate in the sport intervention. TAP was an extra sport session that was not tied by national curricular guidelines and had the potential to introduce new sports and life skills to the participants.

Finally, this study has the potential to inform current literature and practice in relation to government policy and school sport interventions, the role of PE and the National Curriculum, recommendations for teacher education and continual professional practice (CPD), and provide guidance to schools that wish to implement similar inventions.

1.6 Aims of the Study

The overarching aim of the Transfer-Ability Programme was to develop an understanding of the impact a sport based, life skills intervention may have on academic performance. More specifically, this study wanted to determine whether young people can learn life skills through sport participation and then transfer the life skills into other academic domains, such as the classroom. These aims were then used to formulate four specific research questions:

1. What is the impact of a sports programme on participants' academic performance in Science?
2. What is the impact of a sports programme on participants' perceived use of the life skills?
3. To what extent (if any) do the participants perceive they transferred the life skills from the sports hall into other school domains?
4. What factors do the participants' perceive to be enablers and/or barriers of life skill transfer from the sport halls into other school domains?

1.7 Structure of Thesis

This thesis comprises of six further chapters. This chapter introduced the study, the context, the relevance, and the need for this research. This section has also highlighted the implication of this research to future sport and education policy and has outlined the aims of this study and presents the research questions relating to the Transfer-Ability Programme.

Chapter two provides a comprehensive and critical overview of existing literature with reference to underachievement and the use of sport and life skill interventions. Each component is discussed, highlighting existing knowledge and gaps within the literature. The literature review was used to inform the design of methods and the fieldwork.

Chapter three presents the Transfer-Ability Programme. The intervention itself is discussed in greater detail; the seven life skills used and the sports used to facilitate life skill learning are presented. Participant information is also provided within this chapter. Chapter four presents the rationale for the Case Study methodology adopted to address the research questions highlighted in chapter two.

Chapter five presents and discussed the results from this research. The results are presented in three phases. The first phase examines the impact TAP had on academic performance. The second phase explores at the participants' perception of learning during the programme. Each participant rated his ability to use each life skill before and after the intervention. Phase three addresses the participants' perceptions of enablers and barriers in relation to life skill transfer.

Chapter six provides an overall conclusion and considers the implications and contributions for theory, research and practice in terms of underachievement and the potential impact of life skills interventions. The limitations of this study are discussed and the recommendations for future research are presented. Chapter 6 concludes by highlighting the personal learning of the researcher.

2 LITERATURE REVIEW

This chapter is split into three main sections. The first section examines the existing and relevant literature that relates to underachievement. Within this section underachievement is defined, underachievement in practice is discussed and the most commonly cited causes of underachievement are examined. Due to the complexity of the topic, many factors can contribute to underachievement and parameters must be set; a full debate on underachievement goes far beyond the scope of this study. Topics discussed therefore, relate to the relevance of this study only and not all aspects of underachievement are discussed. This review aims to consider underachievement in a multi-dimensional context by critically analysing and reviewing the literature and examining some of the key causes that are regularly cited as contributing to underachievement within the UK educational system

The second section of this chapter explores the rhetoric on the impact sport may have on academic performance, with a focus on government policy and school sport. The concept of Positive Youth Development (PYD) is further discussed and finally, the possible mechanisms that may promote a positive impact on academic performance are explored.

The third section of this chapter focuses specifically on factors relating to the learning and transfer of life skills. In particular, using sport as a vehicle to teach life skills to young people is examined. This section concludes with an overview of existing life skill programmes.

2.1 Underachievement

Underachievement has become a popular discourse over the last twenty years in the United Kingdom (UK) resulting in mass media and political attention. It is difficult to fully ascertain whether the actual prevalence of underachievement has increased over the past two decades or whether underachievement has just experienced more intense scrutiny. Either way, a vast amount of taxpayers money is spent every year trying to eradicate with what has become a moral panic surrounding underachievement (Gorard and Smith, 2004; Smith, 2010). Previous years have seen policies and remedies are implemented by governments and schools in order to produce a quick and quantifiable fix and recent government policies have continued

to put pressure on schools to raise achievement, however, underachievement still exists in schools today and as such no quick fix remedy has been found.

Underachievement is an international phenomenon affecting many countries, although Moreau (2011) argues that no other country debates underachievement in the same manner or to the same extent as the UK. It must then be asked, is the UK developing an unsubstantiated underachievement debate or does underachievement actually pose a threat to our children, our school and our whole educational system? The answer is not one that can be easily answered and many debates continue to argue this point. Underwood and colleagues (2009) suggest a vast number of children leave school with no qualifications and that does pose a real threat to our children and society as a whole but does this relate to underachievement or low achievement?

Although statistics on low achievement can be readily produced, gaining reliable statistics on underachievement is more problematic. It may be that underachievement is so complex that statistics are difficult to determine and no single strategy or initiative will ever eradicate underachievement in its entirety. The distinct lack of published interventions that show a significant positive impact highlights the difficulty in eradicating or even reducing underachievement. The next section of this chapter explores the existing definitions of underachievement and presents the working definition used in this present study.

2.1.1 Defining underachievement

Defining underachievement is not an easy task as there is no universal definition of underachievement. Whilst this section explores the concept and definitions of underachievement, it is important to highlight how underachievement was defined in this study. Despite the lack of a universal definition, it appears many attempts to define underachievement have provided a sufficient working definition, particularly for the purposes of this study. Underwood and colleagues (2009) recognise that underachievement is often defined as the gap between predicted achievement targets and actual student achievement, discovered by teacher observation and grades achieved in academic work and examinations. This was the definition that most closely represented the way in which the Case Study school (for more details see Chapter 3) predicted underachievement in their students. The school defined underachievement in their own pupils by comparing a student's target grade (based on teacher prediction) and the grade the student achieved in formal

assessments. If the student failed to reach teacher prediction, the student was deemed to be underachieving. This study looked at the participants' assessment performance versus teacher prediction and therefore only focusing on changes in academic performance.

Underachievement however complex should not be confused with low achievement. It is often the case that underachievement and low achievement are terms that are used interchangeably but Smith (2007) argues this cannot happen. Underachievement is concerned with a student's potential and not a lack of ability (Jones and Myhill, 2004a). Low achievement is essentially about low ability and low intelligence. Children who try their best in examinations (when all realistic variables known to influence academic attainment are accounted for), cannot be labelled underachievers whatever grade they obtain (Smith, 2007). In 2007 a report on low achievement was published which announced that 'nearly half of all low achievers are White British males' (Cassen and Kingdon, 2007: xi) but this is not the same concept as White British males who are deemed to be underachievers. As Smith (2007) acknowledges a male student, who achieves a level four in his Key Stage 2 exams instead of his predicted level 5 cannot be considered a low-achiever but would be labelled as an underachiever, despite the high level he obtained.

Wallace (2010) uses the term achievement to mean learning, perseverance, self-belief, encouragement and the outcome of effort and therefore underachievement is seen as the opposite. Achievement is the experiencing of challenges, making discoveries, learning from mistakes and then reaping the rewards for that effort (Wallace, 2010). Wallace's (2010) definition of underachievement appears to be somewhat vague and does not discuss the complexity of achievement. Black-Hawkins *et al,* (2007) argue achievement is the progress made by students over time, which allows students to achieve well if their starting point was substantially low but still not achieve any qualifications. Again this appears to be a rather vague concept as it is unlikely that any student will complete compulsory education without learning at least one piece of new knowledge. That is not to say they have achieved at school as this information could have been learnt after attending only one day and the child would ultimately be capable of acquiring more information.

Underachievement involves social perceptions, interactions and expectations; these all need to be explored in academic literature in order to understand this complex phenomenon. As well as the confused and simplistic definitions of

underachievement, there is confusion regarding how it is measured and its application as there is still no clear way of defining or measuring underachievement (Smith, 2003a; Bush, 2005). Confusing matters further, it appears the potential causes of underachievement are the same as those that may cause low achievement such as poverty, social class, ethnicity and the home learning environment. Essentially more care needs to be taken by academics and teachers when discussing and differentiating between low and under achievement. Even when low achievement has been accounted for, every teacher has experienced at least one child who could do better at school. However, due to the reasons mentioned (i.e. lack of definition and measurement tools) it is not known at what level the discrepancy between ability and actual achievement becomes significant (Preckel *et al*, 2006). This makes underachievement practically difficult for schools to recognise and use accurately.

In summary, underachievement is an important discourse and one that has dominated and continues to dominate the education domain. Due to using various definitions and methods to identify and determine underachievement, a consensus seems impossible to achieve. What has become apparent from existing research is that due to the complexity of underachievement multiple constructs must be researched and examined in order to truly understand the underlying causes. A vast range of social and political issues need to be examined and understood, as they are all crucial factors when considering academic achievements and educational outcomes. This section will now discuss the possible impact of underachievement on individuals and on society.

2.1.2 The impact of underachievement

Crucial questions to consider when regarding achievement is why is it important? Why does underachievement matter? Who does it affect? High academic achievement has many potential personal gains such as job satisfaction, higher annual salaries and better life chances (West and Pennell, 2003). There are also gains to society in terms of economy and social cohesion (West and Pennell, 2003). However, whilst the gains of high achievers are important to the individual and society as a whole, the costs of underachievement to the individual and society are much bigger (West and Pennell, 2003). For the individual there is the financial loss, lower job opportunities, potentially lower life-chances and lower expectations (West

and Pennell, 2003; Kingdon and Cassen, 2010). There is also a huge direct and indirect impact on society in terms of crime, benefit payments, social care costs, schooling costs, loss in taxes and increased health costs (West and Pennell, 2003). Research from the US indicates that low-income students are six times more likely to drop out of school due to low achievement than their middle-class peers (Wilson, 2006). Worryingly, half of the people in the USA who are claiming welfare benefits and half of the people in state prisons are high school dropouts (Wilson, 2006; Glenn and Van Wert, 2010).

Sociologists are now suggesting that males are becoming less educated and therefore less employable than women (Glenn and Van Wert, 2010). This is causing potential problems with relationships as many women view such men as less appealing and not husband material, this makes them a greater burden to themselves and to society (Wilson, 2006; Glenn and Van Wert, 2010). Whilst this section discussed the general impact of underachievement on individuals and society, the following section discusses underachievement in practice and the difficulties teachers may experience identifying underachievement and examines underachievement in gifted and talented students.

2.1.3 Underachievement in practice

Research shows there have been antagonistic views from teachers, schools, politicians and academics over the definition of underachievement (Gorard and Smith, 2004). It became apparent in the 1990s that there was confusion when attempting to define underachievement and low achievement (Gorard and Smith, 2004; Underwood *et al*, 2009). Myhill and Jones (2004) state boys are twice as more likely to be labelled as underachiever but do teachers fully understand the term underachievement? The difficulty in defining underachievement, the different types of underachievement and how underachievers are seen in schools today is apparent in all research literature (Gorard, 2000; Underwood *et al*, 2009). It is precisely due to the lack of a definition that underachievement is problematic to teachers and it is easy to see why many children are perhaps incorrectly labelled as underachieving.

There are seven background factors that are used to predict underachievement at the age of eleven; this is when children in the UK start secondary school. These factors according to West and Pennell (2003: 8) include:

- Eligibility for free school meals (common indicator of poverty)
- Large family size
- One-parent family
- Semi-skilled or unskilled manual parental occupation or unemployment
- Pupil's behaviour
- Lack of fluency in English
- Ethnic background

The above list is not a definitive list by any means but it does include the main factors that are suggested to contribute to underachievement and is used as a guideline by schools and governments. It is common practice to try and group underachievers into types, often seen in literature on personality (Montgomery, 2009). Grouping individuals together is often seen as a way for teachers to clearly identify underachieving pupils and use their characteristics in order to develop a diagnosis and cure (Wallace, 2010). The problem with typologies is that some children will fall into more than one group by demonstrating a complex range of characteristics. This makes the diagnosis and cure stage more difficult. By using the typology categories, effective schools should be able to intervene before the behaviours become ingrained and problematic (Montgomery, 2009).

It is worth noting that underachievers will not necessarily display all the behaviours in each typology but are likely to show several behaviours from several typologies. Although different typologies of underachievement exist, Jones and Myhill (2004b) found that male and female underachievers are not dissimilar which is important when trying to understand the debate of boys underachievement and more important when trying to fix the issue. Combining the work of Montgomery (2009) and Wallace (2010) the following typologies have been developed, although it should be noted that typology names might vary:

- Conforming coasters are 'invisible underachievers' who are well behaved, complete set work, unlikely to ask questions or supply answers voluntarily but can do both when asked and rarely make contributions to class discussions.

- Impatient or Overactive inattentives are also known as butterfly learners who may appear not to listen but always know the answer, are disruptive in their behaviour and in group work, are impatient and easily distracted, act the 'class-clown', and reluctant to complete written work.
- Apathetic non-engagers are also known as 'mental absentees' as they are likely to appear bored in all lessons, not interested in what is happening and sit day-dreaming, not interested in achievement, appear lethargic, tired, withdrawn and attend irregularly.
- Risk avoiders are also known as the 'safe players' who appear to lack self-confidence, self-efficacy and decision making skills, they often avoid new and/or challenging situations, rely on others, reluctant to volunteer and do not like leadership role.
- Disaffected disengaged are also known as the 'hard to reach' group who are anti-school and anti-learning, impatient, defensive, bad-tempered, perceptively humorous, disregard the rules, attend irregularly and rarely complete school work and homework.
- Doubly exceptional or masked gifted are learners who suffer from some form of disability such as a specific learning difficulty (dyslexia or attention deficit hyperactivity disorder, (ADHD)) or communication and interaction disorders such as Asperger's syndrome or Down's syndrome (Wallace, 2010). Learners may also have physical, sensory and/or medical difficulties (PSM) or social, emotional and behavioural difficulties (SEBD).

(Montgomery, 2009: 29; Wallace, 2010: 8-11)

Several of the participants in this study were classified as gifted and talented in their school but were still underachieving in relation to teacher expectations and predicted grades; therefore it was deemed an important aspect to consider. The term gifted and talented itself is a complex concept and one that is not explored or debated within this study. However, underachievement can be even more complicated when the underachieving child is regarded as a gifted learner (Seeley, 2004). This is mainly because the variance of ability and performance is greater than with students who have an average or below average ability (Preckel *et al,* 2006). Whilst the literature regarding this population has spanned across many years, the little depth in existing

research has led to many more questions being asked and little understanding being obtained. Gifted underachievement is often seen as more problematic and of larger concern than children with average ability underachieving (Preckel *et al,* 2006).

The problem many gifted underachievers will experience concerns the assumptions that teachers, educators and schools will make. When talented children begin to underachieve they are often labelled lazy, unmotivated, or worryingly told that they have behavioural problems, and schools largely place the blame for their underachievement on the student and their parents, avoiding any responsibility (Seeley, 2004). This is a problem that must be addressed if schools are to provide an education that will meet students potential. Especially as many of the gifted underachievers, represent at-risk groups such as low-income families and ethnic minorities (Seeley, 2004).

Common indicators of gifted and talented children who academically underachieve include a large gap between oral and written work, failure to complete schoolwork and homework, poor execution of work, refusal to do work, dissatisfaction with own achievements, avoidance of trying new activities, perfectionism and extreme self-criticism, setting unrealistic goals and aspirations, they often do not function well in groups, experience lapses in concentration, and a poor attitude to school (Montgomery, 2009: 6).

Gifted children who underachieve academically will not necessarily show all the above indicators but they will form clusters of several indicators that are likely to become persistent (Montgomery, 2009). What is common is the number of able students who underachieve when large quantities of written work is required (Montgomery, 2009). This may explain why many able boys underachieve in today's education system as writing has traditionally been considered as a girl's subject. It is argued that as many as 40% of gifted students are at risk of underachievement, which makes underachievement in gifted students a common problem across UK schools (Preckel *et al*, 2006).

This section has discussed underachievement in practice and some of the difficulties both underachievers and teachers experiences when attempting to identify and understand underachievement. The most common types of underachievers, the background factors used to predict underachievement and the typologies of underachievement have all been highlighted above. The difficulties children and teachers face when the child is regarded as gifted and talented were also examined

within the above section. The next section of this review discusses and examines the main causes of underachievement such as gender, ethnicity, social class, poverty, and family structure.

2.1.4 Causes of underachievement

As already discussed the reasons for underachievement can be vast and varied. Many factors may be at play and the cause(s) of underachievement vary depending on the individual and the circumstances in which they are faced. School practices, peer interactions, family relationships and community experiences are all crucial factors when looking at academic achievements and educational outcomes (Hubbard, 2005). Social status, laddish behaviour, teaching styles and parental involvement (Deforges and Abouchaar, 2003) have also been cited in recent literature (Mulholland *et al*, 2004; Clark *et al*, 2008a; Clark *et al*, 2008b). However, the most commonly cited causes of underachievement within the literature are gender, ethnicity, social class, poverty, and family structure and these causes are examined below.

2.1.4.1 Gender

Boys seem to be more easily distracted than girls. Some boys find it hard to cope or concentrate. Boys seem to be more laid back and relaxed… not worried about education

(Amandip, cited in Bush, 2005: 69)

As early as 1996, Chris Woodhead, the former Chief Inspector for Schools for England claimed that failing boys were ‘one of the most disturbing problems facing the education system’ (Strand, Deary and Smith, 2006: 464). The British newspapers, in particular The Times and The Sun picked up on the announcement and instigated a media debate about underachieving boys. However, Smith (2003a; 2003b) stated that the problem of underachievement did not climax until 1998. It was in 1998, at the 11th International Conference for School Effectiveness and Improvement that ‘laddish’ anti-school attitudes were blamed for negatively influencing academic progress (Smith, 2003b) and prompted a new wave of media and political interest in underachieving boys.

Male underachievement continues to be the focus of attention when annual GCSE results are published. For the past several years, boys have consistently achieved lower grades than girls in national tests at the ages of eleven and sixteen (Strand, 2010; 2011) despite both sexes having equal cognitive ability (Steinmayr and Spinath, 2008). It appears that many interventions are failing to produce a reduction in male underachievement rates and statistics suggest the achievement gap between males and females continues to widen in the UK. But is male underachievement as big a problem as the media and politicians suggest? It is apparent that boys achieve more extreme results than girls at GCSE and A-level (examination taken at the end of further education in the UK), resulting in more boys than girls with A grades but boys also have higher failure rates (Gorard, Rees and Salisbury, 1999). More males will achieve a first-class university degree but males also gain more third class or unclassified degrees. However, contrary to previous research Hansen and Jones (2010) have recently found that more girls were at the top distributions than boys, which may suggest the gender gap is continuing to widen.

Based on media reporting it appears there are no underachieving girls (Jones and Myhill, 2004b). The debate seems to be solely and exclusively about boys but not all researchers agree with the gender gap phenomenon. Even as early as 1999, Gorard, Rees and Salisbury argued that the underachievement gap might be misrepresented due to confusion when conducting quantitative research. The lack of differentiation between percentages and percentage points when publishing quantitative data leads to inaccurate, misinterpreted results and shows a higher underachievement gap (Francis 2006). Strand, Deary and Smith (2006) maintain that the differential gap is not substantial and boys being more greatly represented in special need populations and amongst those who fail to achieve any GCSEs may partly explain the gap.

The school environment has provided much debate within the literature, with a particular focus on male students. It is claimed that boys are not culturally and biologically suited to the current school setting and they have less positive attitudes towards school than their female peers (Van Houtte, 2004). Girls on the other hand seem to have thrived in an environment that is more conducive to female learning styles (Skelton, 2012) and is possibly why girls fair better in their GCSE's, which are predominately essay and extended writing based assessments (Strand, Deary and Smith, 2006).

Educational achievement and commitment to education is antithetical to boys who want to display typical masculine macho behaviour; to be popular and masculine, educational achievements must be deemed as feminine behaviour (Van Houtte, 2004). Smith (2010) suggests it has become widely recognised that boys prefer subjects that show their masculinity, such as information technology, science and physical education and are therefore less likely to enjoy subjects regarded as feminine such as creative writing and reading (Smith, 2010). In 2006, the largest achievement gap was found in reading and literacy and the most popular explanation was that whilst girls are superior at writing, boys just are not biologically made for literacy (Strand, Deary and Smith, 2006).

According to Myhill and Jones (2004), teachers tend to stereotype children into ideal pupils with girls often fairing more favourably than males. In terms of boys' behaviour within the classroom, female teachers often use more negative terms whereas male teachers use significantly more positive responses (Klein 2004). Gray and Wilson (2006) and Klein (2004) found that teachers' responses to girls' and boys' behaviour was very different not only in terms of classroom management but also in the level of support and attention. Teachers, female teachers especially, tend to be less patient with boys and are more likely to punish what they perceive as unreasonable behaviour (Klein, 2004). One strategy implemented to tackle classroom management and reduce underachievement was the increase of single-sex classrooms. In 2000, Sukhnandan, Lee and Kelleher published a paper stating single-sex classes had a more positive effect on boys than girls due to the changes in teaching approaches. As the main aim was to manage difficult male students, single-sex female classrooms were just a by-product of the strategy (Martino, Mills and Lingard, 2005). Disputing any positive findings, Gray and Wilson (2006) argue that single-sex classrooms have failed to raise academic standards, particularly in boys and the initiative itself does not improve classroom behaviour. Martino, Mills and Lingard (2005) argue that it is not the single-sex class policy *per se* that is effective but rather the skills and attitudes of the teachers that make single-sex classrooms successful.

Feminised school environments and a lack of male teachers, have resulted in a lack of male role models, particularly in primary/infant schools and is one possible cause of male underachievement (Carrington and McPhee, 2008; Watson, Kehler and Martino, 2010). Skelton (2009; 2012) believes that government initiatives aimed at

producing male primary school teachers have failed mainly due to the feminine ideology associated with teaching and therefore the rescue of boys has so far proved futile. Yet, there is strong evidence to suggest that children who have almost completed primary school will respond more positively and are more likely to have optimistic attitudes towards school if taught by a female (Carrington, Tymms and Merrell, 2008). Boys and girls have different learning styles and matching the gender of pupils and teachers has shown positive impacts on learning activities and teaching styles so policy-makers are continuing to use gender-matching approaches to combat male underachievement, especially with the young black population (Carrington and McPhee, 2008). Interestingly, research demonstrates that pupils think teacher gender is not important (Carrington and McPhee, 2008). Thus, matching pupil-gender may be another government policy failing to tackle underachievement.

In summary, there appears to be a lack of consensus on the scale and causes of the gender gap in terms of underachievement. Is this just a differential gap between males and females or are boys underachieving under the current curriculum? Gender issues are problematic within schools, with policy initiatives such as single sex classrooms and teacher matching having had limited success. This leaves policymakers with more questions than possible solutions and gender is not the only potential cause of underachievement. Strand, Deary and Smith (2006) warn against the danger of labelling underachievers based on gender differences alone as ethnicity and other factors discussed below are also cited as common causes of underachievement.

2.1.4.2 Differences in ethnicity

Underachievement in ethnic minorities became a popular research focus in the 1970s, has since received much literature attention, and continues to be a focus of concern (Demie and Lewis, 2011). The Swan Report (1985) was the first official publication that identified certain ethnic groups to be achieving less well academically than their white peers (Strand, 2010). Pupils from ethnic minority backgrounds (along with the working-class) are still experiencing the largest inequalities in the modern educational system (Smith, 2003b). The reasons for ethnic underachievement vary but Demie (2003) maintains ethnic heritage does not pre-suppose academic underachievement. Although underachievement is apparent in many ethnic groups, explanations include unintentional racism, prejudice from

teachers and/or schools, and difficulties schools and teachers my experience when trying to fully understand Caribbean and Black children (Crozier, 2005; Stevens, 2009), pupils fluency of the spoken language in the school, inappropriate curriculum and resources and poorer employment prospects (Walsemann and Bell, 2010).

Stevens (2009) and Walsemann and Bell (2010) state black students who attend predominately minority schools often have poorer resources, unsuitable curriculum and inferior teaching staff compared to predominately white schools as they are often serving more disadvantaged communities (Strand, 2010). The race of the teacher is also suggested as a determining factor when teaching black students. Downey and Pribesh (2004) acknowledge previous research and suggest that black students are often labelled as misbehavers within the classroom compared to their white peers. However, they argue this is not the case when the teacher's race is matched to their students, suggesting students either do not misbehave in the classroom when they have a black teacher or white teachers are too readily labelling black students.

Over a decade ago, Blair (2001) argued Black students were the unhappiest ethnic group at school as they often experience school as overly controlling and often deaf to their needs. Black students often report that school has little or no meaning for them and are often felt confused and angered about their education. He also states black males are deemed to feel the most disappointed by the education system. African Caribbean pupils were highlighted as one of the lowest achieving ethnic minority groups in the UK (Demie, 2003; Crozier, 2005). In 2006, national test review data showed Black Caribbean, Black African, Black Other and Bangladeshi students were below the mean of their White British peers (Department for Education and Skills in England, 2006; Strand, 2011). However, current research labels white working-class boys as one of the biggest groups of underachievers (Demie and Lewis, 2011). White working class boys are now performing worse than previous problem groups, a growing concern which has been present for the past decade (Clark *et al*, 2008a).

For over two decades researchers, politicians and other interested groups have looked at the achievement gap between minority and non-minority students. This singular definition ignores the within-group differences that occur which could mean current policies are not relevant in terms of closing the gap (Carpenter II, Ramirez and Severn, 2006). Literature suggests that different strategies work more effectively

with different ethnic groups (Murphy, 2009) and it may be that a variety of initiatives are needed to reduce underachievement in different ethnic groups. The most frequently cited explanation for ethnic underachievement is the substantial differences in socio-economic status and social class differences between Black and White groups (Strand, 2011). This suggests ethnicity may not be a cause of underachievement but rather the social and economic status is a bigger influence.

2.1.4.3 The role of social class

Despite the changes made to modern England and the social reform, which has shaped our current policies and practices, social class still remains one of the strongest influences and predictors of academic achievement (Berridge, 2007; Greene and Anyon, 2010). Underachievement in Britain's modern education system is still highly racial and a class phenomenon with the "continued polarisation of the wealthy and the poor" (Sutton, 2009, 277). As previously discussed social class is an important and decisive factor in early cognitive development (Berridge, 2007) and those children from working-class backgrounds have higher rates of underachievement in early schooling than other classes (Underwood *et al*, 2009). Underachievement in England can be evident when children are as young as 22 months and will continue to widen as the child gets older (Department for Education and Skills, 2002).

As early as 1998, McCulloch claimed the educational system in England had systematically failed the working-class for over a hundred years. Yet even to this day schools are still designed to appeal to the middle-class (Nesbit, 2006) mainly through the way in which the curriculum is presented. School policies and the whole education system tend to be designed and developed by middle-class politicians who have little understanding of working-class students (Ball, 2003). Maybe it is no wonder that working-class students are set up to fail from the very beginning of their education experience.

Affluent families are continually gaining places in better schools, which adds to the already existing educational inequalities between the rich and the poor (Sutton 2009; Coldron, Cripps and Shipton, 2010). This leads to the polarisation of extremely popular and extremely unpopular schools with the majority of poor children going to the unpopular school, resulting in a decline of social interaction between different class backgrounds causing inequalities of opportunity and social justice (Cheng and

Gorard, 2010; Coldron, Cripps and Shipton, 2010). Results have shown that poor children in concentrated schools with other poor children are less likely to progress in the same way they would in a school which had a more balanced intake (Coldron, Cripps and Shipton, 2010).

In 1999, a flagship policy known as Excellence in Cities (EiC) (DfEE, 1999) was implemented. Initially launched in over 400 secondary schools, the policy quickly expanded to include more schools including primary schools (Machin, McNally and Meghir, 2004). The policy targeted disadvantaged urban schools and although the policy included many strands and stated aims, the overarching aim was to raise standards in urban schools. Despite being on the political agenda for many years and the EiC policy showing promising results, the overall results have been poor. Governments and educational professionals appear to have failed to narrow the achievement gap of working class children as national statistics still show that middle-class children leave secondary school with higher grades and more qualifications than working-class children (Dunne and Gazeley, 2008). Although working-class children make up 50% of the population for their age group, only 30% will go to university (Bradley and Miller, 2010). Many working-class children who are underachieving at Key Stage 2 will struggle to close the gap by Key Stage 3 examinations. These children are likely to achieve less than five A*-C GCSE grades (Dunne and Gazeley, 2008). Although extensive mobility has been seen since the start of the post-war period, this social mobility does not always positively impact the working-class. It may be possible for many working-class students to gain increased social mobility by only completing compulsory education or completing vocational courses. Therefore the academic achievements and aspirations of the working-class are often lower than the expectation of the middle-class.

The reasons for academic failure and the lack of working-class students in further and higher education are suggested by two different concerns. Firstly, parents of working-class children are less likely to have attended university or gained good grades at school and therefore lack knowledge to pass onto their children in the way middleclass parents can (Davis-Kean and Sexton, 2009). Secondly, the educational choices made by youths and their parents regarding transitional points and educational careers are different to middle-class families. Middle-class families are more willing to promote university and further education than working-class families (Dunne and Gazeley, 2008). It is argued that changing the curricular alone will not

address the working class failure and their lack of value for knowledge. Rather than introducing new policies and making schooling changes in relation to social class, it may be that alleviating poverty will have a bigger impact on reducing the prevalence of underachievement.

2.1.4.4 The effects of poverty

Poverty and parental educational success are regarded as the most influential predictors of child achievement (Davis-Kean and Sexton, 2009). Unfortunately, children in low-income families are unlikely to live in an environment that stimulates academic achievement (Demie and Lewis, 2011). Children who live in poverty often learn at a slower rate, demonstrate slower progress, and gain lower GCSE results (Greene and Anyon, 2010).

Neihart (2006) suggests families living in poverty may not think higher education is worth the financial sacrifice and may simply not know about the aid and resources available to help financially. Some families require their children to be more concerned about basic survival than academic achievements. The environment and neighbourhood in which some families live pose a real threat of danger and academic achievement is just not a priority. Some families require children to be earning a wage from as early as possible due to economic demands or social burdens therefore excluding children from higher education and lowering the need for academic achievement. Although Neihart (2006) highlights some of the issues regarding family support, she does state family dynamics are a larger influence on academic achievement than demographic variables.

There are several facets of underachievement in relation to family resources. Disadvantaged families have fewer books around the home and are unlikely to access libraries, poor children access school with more limited language and communication skills and have less developed social skills (Wilson, 2006). Some facets are more influential on children's early development, research has previously shown that children who live in poverty and are undernourished are more likely to be irritable and disengage with some curricular activities such as physical education (West and Pennell, 2003). This disengagement often leads to a lack of further interest in school and result in underachievement.

In summary, the discussion above suggests working-class children are more likely to fail academically because they come from a low socioeconomic

background. As the research above also demonstrates, some working-class children do go to university and achieve success (Dunne and Gazeley, 2008; Bradley and Miller, 2010). This shows not all working-class children fail compulsory education suggesting that social economic status alone does not predict academic achievement. It could be argued that family impact and support may be more influential than socio-economic status (Strand, 2011).

2.1.4.5 The potential consequences of family structure

It has become widely accepted that the family are the most important influence on a child's early development and behaviour. Desforges and Abouchaar (2003) and Kordi and Baharudin (2010) believe if children are to maximise their potential they will require the full support of their parents and therefore parental involvement is a major factor when looking at academic achievement. Parents who are involved in their children's education and who help, advise and monitor their children's homework have a higher positive significant influence on their children's academic achievement (Kordi and Baharudin, 2010). Interestingly though, parental involvement has been found to be strongly influenced by their child's level of attainment. The higher the child's attainment levels the more likely parents will show an interest in their education and become involved (Desforges and Abouchaar, 2003), resulting in a possible cause/effect situation.

Large family size. Children living in large families are over represented in underachieving groups (Underwood *et al*, 2009). This has mainly been attributed to a lack of resources. Many large families have been found to have less material resources and spend less time with each individual child. Children who are born first or earlier than their other siblings are more likely to be higher achievers than their later born siblings. Children who are born later often access a dwindling pool of resources and are unlikely to dominate their siblings for parental affection (Fergusson, Horwood and Boden, 2006).

However, it is suggested that the most influential factor in large families is lower levels of socioeconomic status and not material resources (Desforges and Abouchaar, 2003; Marks 2006). If resources were the important factor, research would show that a child with no siblings (commonly known as an only child) would outperform their peers with siblings by a large margin. However, this pattern is not

reflected in the literature, studies show that children who live in two-child homes do as well as their only child peers. Blake suggested academic performance only starts to drop if the family is larger than two children in as early as 1981. Booth and Kee (2009) argue birth order is more complex than Blake suggests as parents' age, maturity, income and the time lapses in between births are all contributing factors but generally children from larger families demonstrate lower levels of academic attainment.

Single Parent versus Two-Parent Families. With single parents becoming an increasing trend, there is increasing concern that children living in such families are becoming educationally disadvantaged. Lee and Kushner (2008) claim approximately a third of European marriages end up in divorce in modern societies. Many social scientists suggest that single parent families and families involving stepparents provide a greater academic risk to children than two-parent biological families (Musick and Meier, 2010; Shriner, Mullis and Shriner, 2010).

Children from single-parent families seem to have higher school dropout, poorer attendance records, poorer achievement levels, and lower university attendance than their peers who live within two-parent families as do children who live with both parents who extensively argue (Hampden-Thompson, 2009; Musick and Meier, 2010). Scott (2004) recognises that single mothers have received particularly negative attention in the media. Although single-mums are more common, single-father families are the largest growing family structure in the US; however very few studies look at the academic impact when living with a single-father (Lee and Kushner, 2008).

Scott (2004) recognises working mothers are often the focus of attention and are regularly labelled as missing mums, with many considering them selfish. Traditional gender roles dictate that women should stay at home and raise children, as this is deemed most beneficial for the child's development. This may be true as some research shows that children who have working mums often do less well at school compared to their peers who have stay at home mothers (Scott, 2004). Hampden-Thompson (2009) states children from single parent families have been found to be educationally disadvantaged in many countries such as Sweden, Netherlands, England and Switzerland, with the biggest gap between single parent and two-parent families occurring in the USA. However, this area of research

remains inconclusive, with only weak support for this hypothesis, it is difficult to determine if single parent status alone effects child achievement. Musick and Meier (2010) argue that two-parent families are not always better than single-parent families. Their research suggests children who live with high conflict married parents fare poorer academically than children who live with low conflict married parents. Although single parents can and do get involved in their child's schooling, they often experience greater limitations such as time resources (Jeynes, 2005).

To summarise, the literature on family structure and potential causes of underachievement remains inconclusive. It is unclear whether living in a single-parent family is more detrimental than living with both biological parents, especially if the parents argue extensively. Family size appears only to be an issue if sibling size is over two and socio-economic appears to be more important than material sources. More research is needed to understand the relationship between family life and underachievement.

2.1.5 Summary relating to the aspects of underachievement

It is beyond the scope of this review to list every possible cause of underachievement but it does discuss the more common contributing factors. Underachievement has become a problematic, complex issue in the UK and the extent literature appears to raise more questions than answers. Surely, we have to ask ourselves if underachievement will ever be eradicated within the UK educational system. In spite of the rhetoric, there are no practical solutions to underachievement and therefore it appears underachievement will be a prominent discourse in schools for many years to come.

One can speculate that the problem is not a lack of government money spent trying to reduce this national issue or the lack of research that has been conducted over the past two decades but rather the sheer complexity of underachievement. The causes of underachievement are not often singular nor can they be easily identified, addressed, and resolved. Children live complex lives that can lead to multiple contributing factors resulting in underachievement. Therefore, it is not difficult to understand why quick fix policies are failing. The lack of initiative and policy success may be due to many of the government programmes targeting either all or at least large populations of children. It may be that more interventions are needed that target smaller specific groups. There is a definite need for more effective

interventions which address underachievement whilst monitoring academic trajectory. The second major issue is that not all children with contributing factors will underachieve for example not all working-class boys living with a single parent will underachieve despite the literature identifying them as likely victims but middle-class children from wealthy backgrounds, with involved parents may underachieve.

The unpredictability of which children will underachieve makes the development and implementation of a solution difficult, especially as many of the contributing factors are difficult for children to change. Factors such as socio-economic status, parental education, family structure, gender, and ethnicity are factors that cannot be readily changed. It may be easier to address factors that can be changed such as school environment, teacher gender and attitudes and the National Curriculum. However, these changes will require fundamental change, resources, and time. The introduction of new government policies and strategies will need to be implemented. Future research should seek to find a solution that considers the complex and multi-dimensional aspects of underachievement with an aim to influence policy change. Having identified a lack of interventions within policy and literature, future research should seek to address such gaps.

2.2 The Impact of Sport, Exercise and Physical Activity

This section of the literature review examines the influence and impact sport may have on academic performance, with a focus on government policy and school sport. The concept of Positive Youth Development (PYD) is further discussed and finally, the possible mechanisms that may promote a positive impact on academic performance are explored and the role of motivation is highlighted.

2.2.1 Impact of sport on academic achievement

During the 1990s, many researchers such as Shephard (1997) and Marsh (1993) discussed the impact of sport and physical activity on academic performance in schools. The general view was physical activity could provide children with academic benefit; however in practice it is not that simple. Bailey (2006) highlights that sport and physical activity in schools had previously been regarded as less important than other academic subjects. This trend is still apparent in many schools and has been highlighted by parents and indeed some teachers as a source of concern (Bailey, 2006; Taras, 2005). Many state funded schools (in particular) adopt a negative attitude towards P.E and the curricular time it occupies, not to mention the limited sport facilities and budget difficulties many schools experience (Holt *et al*, 2012). The simple truth is many parents would rather their child spent their time studying perceived academic subjects than wasting their time doing P.E (Bailey, 2006).

Previous studies such as those by Bailey (2006) and Coe *et al*, (2006) have shown that increasing PE time may actually increase academic achievements. As early as 1997, Shephard highlighted that active students have a higher rate of academic learning per unit of class time, thus schools should not deny children good quality activity classes. Bailey (2006) and Trudeau and Shephard (2008) found increases in physical PE had no detrimental effect and in some cases may improve academic achievements; even when time spent on perceived academic subjects was reduced. Pfeifer and Cornelißen (2010), Stephens and Schaben (2002) and Carlson *et al*, (2008) go as far to recommend that all students should be encouraged to participate in school sport as simply increasing the time participants spend doing extra sport should not have any detrimental effect on their academic achievement; a finding also supported by Rasberry *et al*, (2011).

Although Stephens and Schaben (2002) found athletes who participate in interscholastic sport programmes outperform non-athletes academically, they do not know exactly why. It is suggested that skills such as goal-setting and time management developed through sport participation are transferrable and lead to increased academic performance (Miller *et al*, 2005; Stephens and Schaben, 2002), although there may be other reasons for academic performance such as school affiliation and improved health. Carlson and others (2008) state physical activity may increase academic achievement by positively influencing behaviour and cognitive functioning.

Despite such supportive rhetoric, not all research positively links physical activity and academic performance. It is possible that time spent on extra-curricular activities such as sport has a negative influence on educational success. As early as 1961 Coleman argued that spending time away from academic study led to a decline in academic achievement, this relationship became known as the zero-sum theory. Although more recent research by Bailey (2006) and Coe *et al*, (2006) and a systematic review conducted by Rasberry *et al*, (2011) contradict Coleman's zero-sum theory. In support of Coleman (1961), Dawkins, Braddock II and Celaya (2008) suggest sport is overemphasised and diverts attention away from academic study. Students who aspire to become professional athletes, for the financial and status rewards often sacrifice their education in order to pursue success in the sport domain (Dawkins, Braddock II and Celaya, 2008; Zeiser, 2011). However, this is likely to only affect a minority of students (Zeiser, 2011) and the benefits of sport and physical activity should not be overlooked.

Despite difficulties and concerns over causality, theoretical models have been developed to explain how sport can improve academic attainment such as Marsh's (1993) Athletic Participation (AP) model. The AP model suggests that an engagement in school sport activities was likely to lead to increased pupil identification and involvement with the school and increased pupil commitment to work towards defined academic goals. This was linked to increased time spent in school, which is also likely to increase feelings of belonging and increased attention from certain staff members. Students however, must learn to balance extra-curricular activities and academic workload for such activities to be beneficial (Lipscomb, 2007).

2.2.2 How sport may improve academic achievement

2.2.2.1 Physiological factors

There are several physiological changes that may contribute to increases in academic achievement. It is widely accepted that increases in health benefits such as increased physical fitness and reduced obesity can have a positive impact on education (Bailey *et al*, 2009; Carlson *et al*, 2008). Research indicates that more specific physiological changes may also impact on academic achievement such as increases in cerebral blood flow, changes in hormone secretion, enhancing arousal levels, increased neurotransmitter efficiency (Coalter, 2007), higher capillary volumes and a greater number and density of neuronal synapses (Chomitz *et al*, 2009), which have been shown to enhance long-term memory. Increases in physical fitness and improved health can stimulate increases in cognition particularly in children aged between six and thirteen years old (Sibley and Etnier, 2003). A combination of such factors can lead to an increase in school attendance (as number of days lost at school due to illness/sickness decreases) and increases in concentration, which leads to clearer thinking and improved learning. Although research indicates a link between physical fitness and academic performance, Bailey (2005) suggests more systematic research is required to understand the precise relationship. Although previous research should not be discounted, it is bold at this stage to state physical activity improves academic performance (Bailey *et al*, 2009).

2.2.2.2 Psychological factors

Research has shown there are many psychological benefits to be gained through sport participation. It is possible that participation in exercise and physical activity can lead to an increase in self-efficacy (Bailey *et al*, 2009; Bailey, 2005), which is developed through a sense of achievement. Self-efficacy is the belief an individual has in their own ability and is often used in sport as a predictor of sport participation (Çetinkalp and Turksoy, 2011). In turn, increased self-efficacy can lead to an increase in self-esteem. Increased self-esteem can often lead to increased self-belief that stimulates increased learning and improved behaviour and attitudes towards learning and school (Coalter, 2007).

In theory sport and physical activity could help all children to become more self-confident however, in reality children who participate in sport have been shown to be more likely to demonstrate high levels of self-esteem even before they began to

participate. This suggests that although sport has been found to increase self-esteem (Carlson *et al*, 2008), children must already have demonstrated a developed level of self-esteem to begin participation. Linder (1999) suggested over a decade ago children who participated in sport had higher self-esteem levels when entering school and those who demonstrated low self-esteem were likely not to participate in sport. This makes it difficult to determine the total effect of sport and physical activity on self-esteem levels.

2.2.2.3 Sociological factors

There are several sociological factors that may explain the influence school sport participation may have on academic performance. Coalter (2007) developed earlier work completed in 1990 by Snyder and Spreitzer and created six largely sociological hypotheses that are outlined below:

(1) **Participation-identification** suggests individuals may become more committed to their school and community and therefore more committed to achieve goals and take on extra challenges.
(2) **Increased self-concept** suggests individuals gain acceptance from peers, as they are good at something. Sport can help to facilitate social acceptance, which in turn allows students to feel better about their individual self.
(3) **Increased attention** is where increased attention from teachers, parents and coaches may result in greater encouragement for students to do well academically especially if significant others encourage academic achievement.
(4) **Membership** implies that participation in sport may lead to membership of *elite* groups such as a school team who have an orientation to academic success.
(5) **Eligibility** is usually where participation on the sport team may be dependent on academic success. This is commonly observed in American Colleges where students must achieve certain academic grades in order to qualify for sport team selection but not an overly common requirement in the UK.

(6) **Sport as an incentive** where the desire to participate on a team (university team) can act as a motivator for students to achieve academically. US colleges and some UK universities will offer places to students who can represent the college in their professional sports.

It is not clear to what extent these sociological hypotheses may impact on academic achievement individually but what seems to be certain is that they are heavily interrelated and therefore it is likely students will benefit from several of the stated hypotheses if they participate in school sport (Coalter, 2007).

2.2.3 Motivation related to participation

Researchers and practitioners such as Klint and Weiss (1987), Allen (2003), Trost *et al*, (2003) and Allender *et al*, (2006) have begun to show an interest in the psychological aspects related to sport participation and the reasons why children in particular participate in sport outside of school, as physical education participation in school is deemed compulsory. It has become generally accepted that children participate for a variety of reasons, however Passer (1981, cited in Klint and Weiss, 1987) concluded that the main motivates could be classified under six general themes, (i) affiliation, (ii) skill development, (iii) excitement/challenge, (iv) success/status, (v), fitness and (vi) energy release.

It has become apparent however, that if given a choice very few individuals and particularly children would participate in sport on their own (Allen, 2003). The primary reason often stated for sport participation is socially related, for example, being part of a team, friendship opportunities and social status are reasons often reported (Allen, 2003). Also the opinions and interactions with significant others (parents, coaches and peers) have been reported to impact and influence sport participation (Allen, 2003; Trost *et al*, 2003). Allender *et al*, (2006) argue that children participate in sport mainly for enjoyment and fun and they are more likely to enjoy participation most if they are not forced to compete and are not expected to win.

Trost and colleagues (2003) state parental support was deemed an important influence when looking at motivating factors on children's sport participation. Parental support such as observation and encouragement has been suggested to be necessary to sustain youth participation as this has a positive effect on children's

confidence levels. They also state that supportive parent behaviour was found to have a direct and indirect influence on children's self-efficacy, which in turn promoted continued sport participation. Interestingly parental participation in sport was not deemed to have any positive effect on youth participation, however parents who did not value sport participation were not likely to encourage and promote sport participation.

Harter's (1978, 1981; cited in Klint and Weiss, 1987) early research on competence motivation theory indicates that children are motivated in be competent in certain areas such as sport, academics and peer relationships. However, sport participation may only be maintained if individuals perceive themselves to be physically competent. Children who have low perceived physical competence are more likely to withdraw from sport (Harter, 1978, 1981; cited in Klint and Weiss, 1987). Competence motivation theory suggests the main reason children will participate in sport and continue to participate is if they are successful and have a high level of physical competence. Therefore if they are not successful then drop out is likely, however, such children are still expected to complete compulsory physical education classes in school. Allen (2003) argues that physical competence alone is not enough to sustain participation and therefore other factors such as social connections must also play a role.

There is no simple answer as to why children choose to participate in out of school sport. The reasons are vast and complex depending on age, gender, ethnicity and socioeconomic income to name a few. It is also complex because the reasons why children participate in sport are likely to change throughout childhood and adolescence. Social factors such as encouragement from family, friends and peers, high levels of confidence and self-esteem, intrinsic motivation and enjoyment and high levels of ability have all been shown to have a positive effect on participation motivation (Martin, 1997).

It is worth noting at this point that not all sport participation is positive and children who have negative experiences are not likely to enjoy physical education or participate in out of school sport (Ennis, 1996). There are some students who do not like sport but feel obliged to participate in physical education as it is a compulsory school subject in the UK until the age of 16 (Ntoumanis *et al*, 2004). It may not always be their level of competence that results in the negative experience for there are a vast number of reasons why children might not enjoy sport and physical

education classes. One important reason experienced by both girls and boys is the feelings of embarrassment experienced during physical education (Ennis, 1996). Boys in particular also cite verbal abuse and fear of playing against stronger and faster boys as a reason for disliking physical education (Ennis, 1996). Other reasons include a dislike of kit/uniform, changing in front of others, using showers after lessons (Ntoumanis *et al,* 2004) and a dislike and/or a poor relationship with the coach/teacher (Fraser-Thomas and Côté, 2009).

Students who do not like physical education often become less motivated and are likely to feel that physical education classes have no purpose (Ntoumanis *et al,* 2004). Ennis (1996) and Ntoumanis and colleagues (2004) state that students are likely to experience feelings of boredom and passive participation becomes a habitual behaviour. Low attendance or non-compliance even faking an injury/illness within physical education lessons is likely when students dislike sport and physical education lessons (Ntoumanis *et al,* 2004). However, despite having just listed many negative outcomes Petitpas and others (2004) believe young people gain more positive outcomes from playing sport than negative outcomes especially with regards to personal and social development.

In summary, despite the lack of agreement surrounding the impact sport may have on academic performance, participation in sport is generally and widely viewed as a positive environment in which to engage and develop young people. It is argued that only a small minority of young people experience negative outcomes (Petitpas *et al,* 2004) and therefore the majority of young people can develop various skills through sport and exercise participation. The next section presents the notion of life skills, discusses the use of life skill teaching in sport as well as outlining previous life skill interventions. Finally, the next section explores the concept of life skill transfer from one environment into other life domains.

2.3 Life-Skills

When reviewing the literature concerning underachievement it was apparent that there are many causes and contributors that may lead to underachievement. The problem when developing an intervention is that many of the factors identified as possible causes of underachievement are either very difficult or impossible to change such as socio-economic status, family structure, race, gender and masculinity or even teacher perceptions and the national curriculum. Developing an intervention, which aims to reduce underachievement in males without being able to address some of the potential key causes of underachievement complex. However, with large literature support for the impact of sport on academic achievement as discussed earlier in this chapter, it was decided that a sport intervention would be a good place to start. Although the impact of sport and physical activity on academic performance remains inconclusive, the research strongly supports the notion that young people can develop various skills through active participation. This final section examines the role of life skills in sport and the impact such skills may also have on academic performance. This chapter then concludes within an overview of existing life skill programmes.

2.3.1 Definition of life skills

The term transferable skills and life skills appear to be terms that are used interchangeably within the literature. The term transferable skills has become popular in education over the last thirty years (Gibbs *et al*, 1994). The use of transferable skills in higher education has become a fashionable research arena and has gained much political attention and funding. Transferable skills are deemed to be the skills students needed in order to be successful at school but it soon emerged that such skills were also relevant and needed within the workplace (Gibbs *et al*, 1994). Many educationalists, researchers and education institutions have put extensive resources into looking at transferable skills in higher education to prepare students for the life ahead and the world of employment.

Relying on terms outside of sport and sport psychology may be somewhat problematic. Terms used by educationalists and researchers in social studies may not be reflective of terms used by sport researchers and adolescents in sport. However, to make the issue even more complex there is a distinct lack of a universal definition of

life skills in sport (Hopson and Scally, 1981; Danish, 2002a). Danish (2002a) argues that life skills are often discussed within sport literature but life skills are rarely defined. However, Danish and colleagues define life skills as 'those skills that enable individuals to succeed in the different environments in which they live, such as school, home and in their neighbourhoods' (Gould and Carson, 2008: 59). Papacharisis and colleagues (2005) state life skills can be physical, behavioural, or cognitive in nature and can be transferred into other life domains.

The World Health Organization (WHO) has defined life skills as abilities for adaptive and positive behaviour that enable individuals to deal effectively with the demands and challenges of everyday life. WHO also state:

> *Life skills are a group of psychosocial competencies and interpersonal skills that help people make informed decisions, solve problems, think critically and creatively, communicate effectively, build healthy relationships, empathise with others, and cope with and manage their lives in a healthy and productive manner* (WHO, 2003).

Hopson and Scally (1981) divided skills into four categories: i) skills I need to survive and grow generally, ii) skills I need to relate effectively to you, iii) skills I need to relate effectively to others, and iv) skills I need in specific situations. These categories were then related to five areas of living where such skills would be needed. The areas identified by Hopson and Scally (1981) are education, work, home, leisure and the community. The skills identified and used in this study are particularly related to education although some skills can/may be transferred to other areas of life such as the home and eventually the workplace.

2.3.2 Life skills in sport

Teaching life skills in a sporting context is a common method to use in order to develop skills that athletes not only need in their chosen sport but also in other aspects of their lives. Previous research strongly postulates that sport can be used as a vehicle in order to develop and transfer life skills. Sport is seen as a valued social activity that most youths will engage with at some point (Camiré, Trudel and Forneris, 2012); therefore using sport to develop life skills is becoming a growing trend not only advocated by the sport community but also through youth

development campaigns and schools (Gould and Carson, 2008). It is widely recognised that organised sport provides favourable conditions for young people to engage in positive youth development (Larson, 2000) and is a significant factor in adolescent development of identity and self-esteem (Danish, Forneris and Wallace, 2005). Danish and colleagues (2005) state the greatest risk to young people is the belief that playing with a ball alone is enough to make a difference. Whilst they argue that school sport provides attractive opportunities to develop youths, they also stress that there is nothing magical about sport. It is not the game itself that facilitates development but rather the deliberate teaching of skills and attitudes (Danish, Forneris and Wallace, 2005). Despite the growing number of sports-based, life skill programmes that are implemented, Gould and Carson (2008) recognise the lack of research focusing particularly on sport, especially when it is seen as such an important topic.

Danish, Forneris and Wallace (2005) suggest school sport may be an appropriate context in which to develop and teach youths life skills. Yet, despite such strong claims that sport environments can be used to facilitate life skill development, Jones and Lavallee highlighted in 2009, that practitioners were still not clear how sport could help to develop young people and improve their life skills. They state that the omission of such information makes it difficult to design and implement effective life skill programmes. More recently, Forneris, Camiré and Trudel (2012) recognise that researchers have begun to develop frameworks that can be used to design, plan and deliver effective programmes/interventions that facilitate positive youth development. In particular, Gould and Carson developed a model (see Figure 2.1) to help facilitate the coaching of life skills through sport. The model includes all aspects relating to the coaching experience and the components that need to be addressed in order for successful learning and application of life skills to occur.

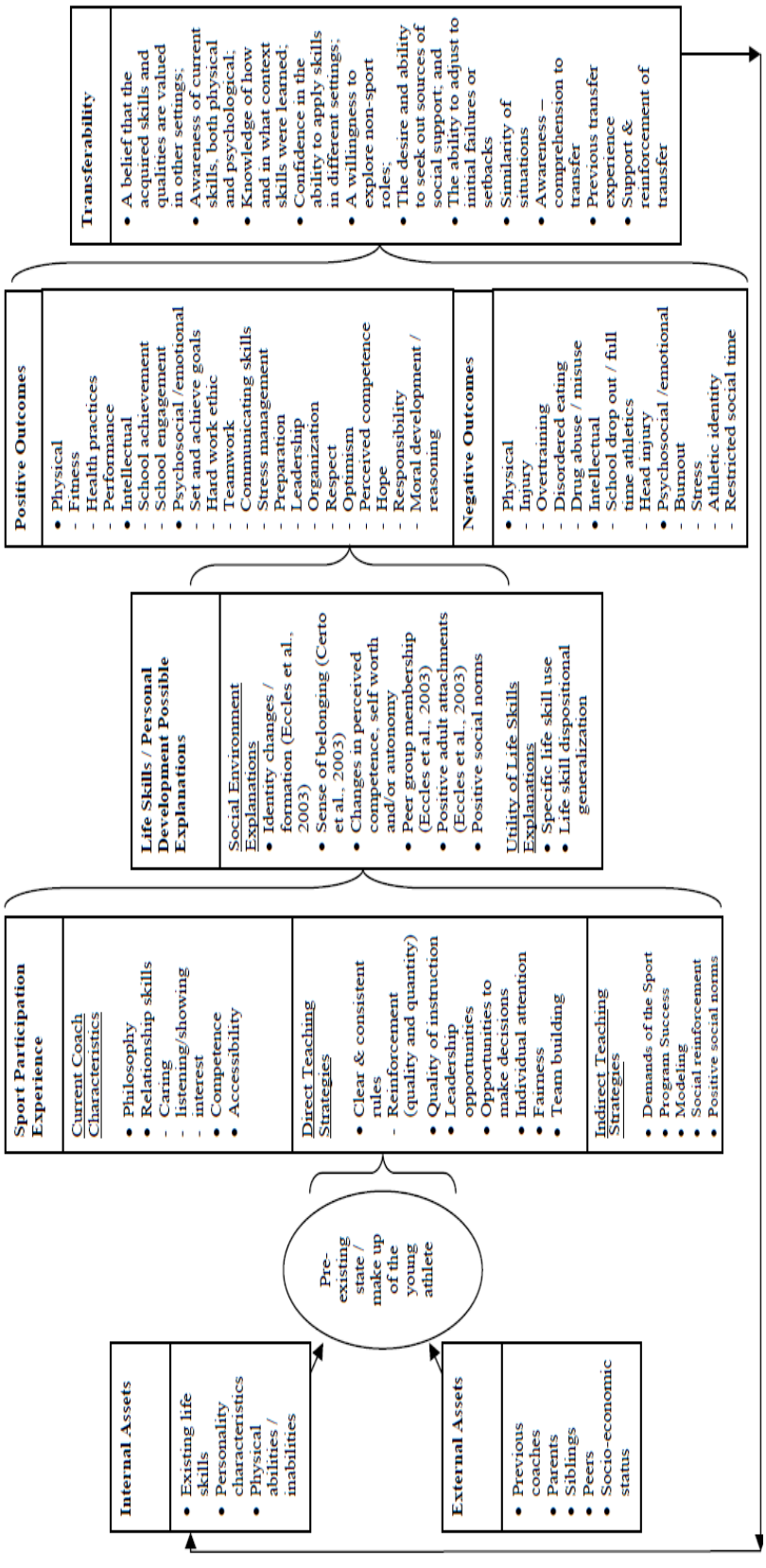

Figure 2.1 – Gould and Carson's Theoretical Framework

A model of coaching life skills through sport. Permission to republish. (Gould and Carson 2008). Original publication: International Review of Sport and Exercise Psychology, vol. 1:1, (2008) pp. 58-78. Available at: http://www.tandfonline.com

2.3.3 Caught or Taught

Research suggests that sport can develop life skills (Goudas and Giannoudis, 2008; Petitpas *et al,* 2005) but that does not provide any insight into how individuals learn such skills. Whether life skills have to be taught to young people or whether young people happen to learn the skills just by playing sport (caught skills) without active teaching needs to be addressed. Such questions are important because the answers affect the way life skill programmes should be delivered.

There are two arguments that are debated within life skill literature. The first argument is that such skills are caught. The idea that life skills are caught during sport engagement was an early and common assumption. It suggests that individuals pick up skills whilst doing sport that they do not need to be taught and such skills can then be used in different domains and situations. Sport is seen as an appropriate environment for young people to gain, develop, and practice life skills and it was thought participation alone would be sufficient to facilitate life skill development. Lerner and colleagues (2005) suggested for development to occur, young people need to be conscious and deliberate producers of their own learning and development. They believe that young people should not have to rely on adults, suggesting that life skills are caught through sport, with no need for deliberate teaching, or that young people are automatically aware of the life skills that can be learnt through sport participation.

The second argument is that such skills have to be taught. The traditional idea of catching life skills was challenged under the assumption that life skills have to be taught in the same way as physical skills; through modelling and repetition (Danish and Nelson, 1997). The taught approach is essentially adult led to facilitate youth development by imparting their knowledge to young people. The fundamental assumption of the present research is that the taught approach is most appropriate for young adolescents, particularly arguing that young people need guidance, to be taught what life skills are and how to use them in different life domains. This leads on to the concept of skill transfer from one life domain into another.

Whether skills are taught or caught is a fundamental question as it determines the way in which life skill programmes should be developed and delivered. Some children will progress through adolescence without reaching developmental milestones and enter adulthood without the skills they require to thrive in society

(Jones and Lavallee, 2009; Theokas and Lerner, 2006). This is despite every young individual having the potential for successful development (Jones and Lavallee, 2009). A lack of skill development is worrying as such children are likely to be dependent on welfare and are often deemed a burden to society. What is interesting is how some children can go through compulsory education but not learn the skills they require to do well in society. This appears to support the argument that skills must be taught.

2.3.4 Transfer of skills

The idea of skills being transferred from one context into another context is still a contentious issue in the research community. Danish, Forneris and Wallace (2005) recognise that individuals are likely to be dissimilar to each other and therefore such differences have to be considered when developing life skill programmes. However, they also state that there is a core set of life skills that all individuals need to know and can be effectively transferred from one environment to another as appropriate. For example, all students require a core set of skills to succeed in school such as discipline, concentration and communication skills. Whilst transfer is a desired outcome of any life skill interventions, can young people actually transfer life skills?

A number of large-scale, sport-based, life skills intervention programmes have been developed in recent years. Such programmes include Going for Goal (GOAL; Danish, 2002b), Sports United to Promote Education and Recreation (SUPER: Danish, 2002c), Teaching Responsibility through Physical Education and Sport (Hellison, 2003) as well as the First Tee (life skill programme through golf) (Weiss *et al*, 2013) and Play It Smart (Petitpas *et al*, 2005). Whilst these interventions are needed, it is often the case that research lags behind the applied application of such programmes. Despite being hugely popular, there is little evaluation of programmes such as GOAL and SUPER and the role of life skill transfer is still a neglected concept (Gould and Carson, 2008).

Hellison (2003) found that transferring skills learnt in the teaching personal and social responsibility programme (TPSR) was the most advanced stage and therefore was the final goal of the programme. Although transferring skills sounds like a common solution to deal with many situations, in reality it is complex and transfer often proves problematic. The issue is that skills do not transfer very readily

(Gibbs *et al*, 1994). Gibbs and colleagues (1994) even went as far as to say that due to the limited evidence it is not convincing that skills are transferred from one context to another. They argue that if skills are transferred then the contexts are often very similar. Early research suggests that automatic transfer of skills should not be assumed. The ability to transfer skills from one domain into another requires achieving the maximum outcome possible from sport participation (Hellison, 2003). However, transfer may be enhanced if the programme is initially designed to facilitate transfer and if similarities and opportunities for transfer are present in the intervention.

Over a decade ago Martinek and colleagues (2001) conducted an overall evaluation of Project Effort (a TPSR programme), which sought to teach underserved youth goal setting skills through a school sports programme. They found that goal setting was not transferred from the sports hall into the classroom. Despite such a finding, they highlight transfer is not unrealistic but do support the notion that life skill transfer is not an automatic process. They recommend that the conditions facilitating transfer should be examined in future research.

More recently, contradicting research findings related to Project Effort, Camiré, Trudel and Forneris (2009) found that a large portion of their participants believed they had applied the life skills taught in the programme to their academic work, suggesting youths believe they can transfer life skills from the sports hall in to the classroom. Jones and Lavallee (2009) also examined life skill transfer with one participant. They discovered through in-depth interviews that Linda believed life skills learnt in sport could be transferred into other situations. Linda specifically discussed transfer of life skills such as communication and confidence from a sport environment into academia. With promising but mixed research findings, more research is needed. Jones and Lavallee (2009) highlight their findings were from a single case and we cannot assume similar results would be found in other participants. Therefore, further research is needed in order to clarify why transfer may or may not occur.

More recently, Weiss and colleagues (2013) published an evaluation of the First Tee programme. The ability of the First Tee participants to transfer the skills taught on the programme into other life domains was examined. The findings highlight that the young people were able to learn and transfer the life skills they had been taught on the programme. However, despite recent findings, the transfer of life

skills specifically into academic domains needs further examination in order to clarify exactly why transfer may or may not occur.

In as early as 1993, Danish and colleagues suggested one of the main barriers to life skill programmes is that the participants do not know and are not made aware of the skills they have learnt. If participants lack awareness of skills that have been developed, how can one possibly expect them to transfer such skills into other areas of academic life? They do however, suggest variables individuals should possess in order to encourage and promote transfer of skills across domains. These variables include the following list and can be identified in the final component of Gould and Carson's (2008) model (see figure 2.1):

1. A belief that skills can be of value in other situations
2. An awareness of possessing physical and psychological skills
3. An understanding and knowledge of how skills are learnt
4. A confidence to use skills in different situations
5. A motivation to explore non sporting roles
6. Seeking and finding sources of social support
7. The ability to adjust and cope with initial setbacks and/or failures

Gould and Carson's model for coaching life skills is extensive and includes aspects such as internal and external assets, sport participation experience, life skills/ personal development possible explanations, positive and negative outcomes, and transferability. The transferability component is the aspect this thesis is most concerned with and explores the transfer of life skills from the sport environment to other non-sport aspects of life, which was an element TAP was particularly interested in exploring.

Research has shown that life skills are not automatically transferred (Martinek *et al,* 2001) and factors that may affect transfer are discussed within Gould and Carson's (2008) framework. Such factors include a belief that the acquired skills and qualities are valued in other settings, knowledge of how and what context the skills were learnt, confidence in the ability to apply skills in different settings, a willingness to explore non-sport roles, ability to adjust to initial failures or setbacks, awareness of skills, similarity of situations, awareness of transfer, previous transfer experience, and support and reinforcement of transfer. It was argued that students

would not know what skills they could possibly learn by participating in sport unless they were told. Petitpas and colleagues (2005) have suggest that young people rarely have insight and understanding of life skill transfer; young people do not often know how skills learnt in a sporting environment can be transferred into other spheres. TAP is hoping to address this barrier by making it perfectly clear to the participants which skills are being taught. TAP is also aiming to discover how participants hope to transfer such skills taught in sport sessions.

2.3.5 Existing life skill programmes

2.3.5.1 GOAL

Going for Goal (GOAL) is a school-based intervention developed and implemented in the US by Danish and colleagues in order to develop participants' competence and potential. GOAL was initiated in 1987 and began its national dissemination through the United States of America in 1992. Within the first four years of dissemination almost 20,000 students had participated in the programme (Danish and Nellen, 1997). The programme is a ten-hour, ten-week intervention (see Table 2.1) and was originally designed to teach life skills to at-risk adolescents in an attempt to reduce risky behaviour such as drug and alcohol abuse, violent behaviour and school dropout.

The aim of GOAL is to provide participants with the opportunity to acquire goal setting, problem solving and learn support skills. Goal is designed to provide adolescents with a sense of personal control and assist them to achieve a positive outlook of their own future (Forneris *et al*, 2007). GOAL uses a peer mentoring system, where older high school students are diligently selected to become leaders in order to teach middle school or junior high students. Older students are deemed to be appropriate leaders and strong role models for younger students as they have grown up in the same neighbourhoods, attended the same schools and have often encountered and overcome similar challenges and obstacles. Therefore, older students can be effective leaders as long as they are taught how to deliver the workshops and receive effective supervision.

GOAL was founded upon the belief that young people need to know how to succeed in life. It was not enough to just teach young people what they need to avoid, specific skills have to be emphasised in order to help young people to be competent and successful members of society. Although many of the outcomes and claims of

the GOAL programme are difficult to evaluate, for example, citizenship is difficult to evaluate because of its subjectivity, it is still deemed a viable programme to teach young people life skills.

Table 2.1 – Overview of GOAL Workshops

(Adapted from O'Hearn and Gatz (2002)

Workshop	Workshop Theme
Week One	**Dare to Dream:** an introduction to the programme and the session encourages participants to identify their dreams
Week Two	**Setting Goals: s**ession teaches participants to turn their dreams into goals. Goals are identified as 'positive, specific, important to you and under your control'
Week Three	**Making Goals Reachable:** session assists participants in setting their own goals applying the four characteristics of reachable goals
Week Four	**Making a Goal Ladder:** introduces the idea of a goal ladder- a series of mini steps in order to reach their goals
Week Five	**Redefining Roadblocks:** Considers obstacles that may arise and prevent participants from achieving their goals
Week Six	**Overcoming Roadblocks:** introduces STAR (Stop and chill out, Think about the alternatives, Anticipate the consequences, Respond with the best choice) a problem solving strategy
Week Seven	**Seeking Help:** emphasises the importance of asking others for help
Week Eight	**Rebounds and Rewards:** emphasises rebounding from roadblocks and the importance of self-reward if successful
Week Nine	**Building on Strengths:** helps participants to identify their own strengths and use them to achieve their goals
Week Ten	**Going for the Goal:** wraps up the intervention and gives participants the opportunity to apply information they have used in previous weeks

2.3.5.2 SUPER

SUPER is an abbreviated term of Sports United to Promote Education and Recreation and a derivative of the GOAL programme. Developed by Danish and colleagues at the life skills centre at Virginia Commonwealth University, SUPER was designed to link sport with various life skills and uses goal setting as the main life skill in order to teach problem solving and overcoming obstacles to achieve goals (Jones *et al,* 2011). SUPER is taught over 18 workshops (see table 2.2), each session is approximately 30 minutes in duration and uses sport as the vehicle to teach life skills. During the SUPER programme the participants are involved in three sets of activities i) learning the physical skills related to a specific sport, ii) learning life skills related to sports in general, iii) playing the sport (Papacharisis *et al,* 2005).

Although SUPER is based on the same concept as GOAL, one obvious difference is how the programmes impart knowledge. Whilst GOAL is based on writing tasks, SUPER is much more action-orientated and adapted to fit specific sports. However, many of the successful components of GOAL have been transferred to SUPER, such as the use of older students acting as role models and leaders for their younger peers. It appears that the leaders receive a more structured and in-depth training during SUPER as elements such as teaching sport skills and life skills, organising sessions, and the transfer of skills into other life domains are included (Danish, 2002a). SUPER was designed to provide each participant with the belief that physical and mental skills are important in both life and sport, that it is important to set and attain goals in all aspects of life and sport and obstacles can be overcome in order to achieve set goals (Danish and Nellen, 1997).

Table 2.2 – Overview of SUPER Workshops
(Adapted from Brunelle *et al*, 2007)

Workshop	Workshop Theme
Week One	**Developing a Team:** An introduction to the programme and participation in team building activities
Week Two	**Dare to Dream:** Participants' learn the importance of having dreams for their future and identify dreams they have
Week Three	**Setting Goals (Part 1):** session teaches participants to turn their dreams into goals. Goals keepers and goal busters are introduced
Week Four	**Setting Goals (Part 2):** Participants learn the four characteristics of reachable goals (positively stated, specific, importance and under goal setter's control)
Week Five	**Setting Goals (Part 3):** Participants practice what they learnt in week four
Week Six	**Making Goals Reachable:** session assists participants in setting their own goals applying the four characteristics of reachable goals
Week Seven	**Making a Goal Ladder:** introduces the idea of a goal ladder- a series of mini steps in order to reach their goals
Week Eight	**Redefining and Overcoming Roadblocks:** Considers obstacles that may arise and prevent participants from achieving their goals. Introduces STAR (Stop and chill out, Think about the alternatives, Anticipate the consequences, Respond with the best choice) a problem solving strategy
Week Nine	**Seeking Help:** emphasises the importance of asking others for help and identifying key people
Week Ten	**Using Positive Self-Talk:** Participants learn to identify their self-talk and how to ensure positive self-talk is used when related to their goals
Week Eleven	**Learning to Relax:** Participants learn the importance of relaxation and how to focus
Week Twelve	**Managing Emotions:** Participants learn to manage their emotions in sport and life using the four R's (Replay, Relax, Redo and Ready)
Week Thirteen	**Developing a Healthy Lifestyle:** Participants learn the importance of a healthy life and learn how to make changes to ensure healthy living
Week Fourteen	**Appreciating Differences:** Participants learn to identify individual differences and differences important to reaching their goals
Week Fifteen	**Having Confidence and Courage:** Participants learn the importance of self-confidence and believing in their own ability
Week Sixteen	**Learning to Focus on Your Personal Performance:** Participants learn how to compete against oneself to improve performance
Week Seventeen	**Building on Strengths:** helps participants to identify their own strengths and use skills taught in the programme in other areas of their lives. **Goal Setting for Life:** Participants learn how set goals throughout their lives and set two goals to achieve within three months

2.3.5.3 Evaluations of life skill interventions

Despite a wave of implemented sport-based life skill interventions since the mid-1990s, evaluations of such programmes have been disappointingly lacking. The effectiveness of such programmes has received little attention despite a large number of programmes assuming positive outcomes (Papacharisis et al, 2005; Holt *et al*, 2008). Many of the sport-based life skill interventions have originated in the USA and despite initial positive findings and assumptions that such programmes provide a viable setting to teach life skills, they are designed to work with American children. There is little evidence to suggest such programmes would work across nations, cultures and societies (Holt *et al*, 2008) and there are limited evaluations of the long-term benefits. GOAL is now over twenty years old and systematic evaluations of the programme are few and far between. Evaluations that have been conducted are either from adapted versions of the programme such as Heke's (2001) evaluation or have not been published.

In 2005, Papacharisis and colleagues conducted an evaluation of a modified version of SUPER. The evaluation included two studies with all participants being Greek children between the ages of 10-12 years old. The first study included 40 female volleyball players and the second study included 34 male footballers (soccer). The sessions included the same number of workshops and similar content as SUPER; however the sessions were shorter in duration (15minutes). The programme addressed problem-solving, goal setting and positive thinking and included discussions, group learning and written worksheets. The children who received the intervention reported higher problem solving, goal setting and positive thinking skills than the children who were in the control group. The intervention group also reported higher knowledge of life skills and increased sport skills compared to the control group (Papacharisis *et al*, 2005). Although these studies have proclaimed effectiveness in teaching three life skills to children through a sport-based intervention the studies have not looked at the effect of teaching life skills specifically on educational outcomes, mainly academic achievement. Holt *et al*, (2008) argue there is a need to embrace direct instruction in order to teach life skills through sport.

Whilst popular, there are several limitations with the GOAL and SUPER programmes. Both programmes are designed to heavily promote goal setting with

limited opportunities for participants to learn other life skills. Variations of SUPER and GOAL exist, with many interventions targeting general skills such as goal setting, time management, problem solving and teamwork (Camiré, Trudel and Forneris, 2009; Holt *et al*, 2008, Jones and Lavallee, 2009). Papacharisis and colleagues (2005) delivered and evaluated a modified version of SUPER with Greek schoolchildren with promising results; children in the intervention group showed improvements in physical skills and programme knowledge.

As previously mentioned, Hellison (2003) delivered the TPSR programme which has a long history that predates the positive youth development movement (Hellison, Martinek and Walsh, 2008). This model sought to instruct coaches and teachers how to teach responsibility to youth through sport. TPSR utilises strong instructor-participant relationships to help youths learn goal setting, self-motivation, as well as developing their respect for others and exploring transfer of such skills. Importantly, GOAL, SUPER and the TPSR model have all disagreed with the caught assumption and sought to systematically teach life skills. Therefore, this study is seeking to support the taught assumption by deliberately teaching life skills with younger participants.

2.4 Summary

To summarise, the belief that sport can be used as vehicle to develop young people has long been recognised. Using sport to increase academic performance has also gained increased research attention but with limited and mixed results. Despite the uncertainty surrounding the impact sport may have on academic performance, participation in sport is generally and widely viewed as a positive environment in which to engage and develop young people. However, more research is needed that examines the use of sports based, life skills programmes that look to develop and engage young people in an academic environment.

Sports based, life skills interventions have become increasingly popular over the last decade but mainly in the United States. There is limited support that such interventions would be beneficial or effective in other countries. Therefore, it is unclear whether existing life skills programmes would work with underachieving students in order to develop their academic performance. Developing such a

programme is problematic as there is no clear evidence to indicate what skills should be included and more specifically, what life skills underachieving students in the UK need.

There has also been a distinct lack of intervention evaluations and what published evaluations have been completed has resulted in mixed findings, especially in relation to life skill transfer. There are several gaps in life skill research (Gould and Carson, 2008), particularly in terms of how children and young people learn life skills through sport and whether such skills can be used in other domains (Dworkin, Larson and Hansen, 2003; Gould and Carson, 2008). Forneris and colleagues (2007) also suggest that more research is needed to find out if adolescents are actually learning the skills such programmes set out to achieve and how such skills are developed. Whether life skills are taught or caught is a fundamental question as without the answer it is difficult to design effective programmes.

Finally, the literature is still unsure of the limit, if any, of life skill transfer, despite decades of research and the development of recent frameworks. Gould and Carson (2008: 74) highlight the belief that life skills learnt in sport spill over into other life domains but stress that 'this assumption is seldom tested'. This uncertainty around transfer needs attention and must be addressed in research in order to ensure life skill interventions are well designed and effective.

This chapter has examined a wide range of literature surrounding many complex and interlinked concepts such as underachievement, sport, and life skill interventions. However, existing literature surrounding each concept has produced more questions than answers, particularly when addressing complex issues such as underachievement and using sport to teach life skills to students in the UK. The themes highlighted within the literature review informed the design, implementation, the data collection and the analysis of this study. The next chapter discusses the Transfer-Ability Programme (TAP) in detail.

3 THE TRANSFER-ABILITY PROGRAMME

3.1 Introduction

This chapter introduces the Transfer-Ability Programme (TAP) and provides details of the participants in the intervention and the comparison groups. TAP is a programme that was implemented in an attempt to tackle male underachievement in an inner city London, state funded secondary school. TAP is a multi-faceted intervention designed to facilitate the acquisition and transfer of life skills through sport. A range of sports were delivered, some of which were outside the current curriculum provision, in order to teach seven transferable life skills to twenty underachieving male students. Sessions were delivered once weekly during term time for one full academic year (for session plans see Table 3.2), with each session lasting approximately ninety minutes. It was hoped that the participants could develop seven skills during TAP sessions and then transferred to other academic domains in an attempt to increase academic performance.

Philosophically, existing research is grounded in the assumption that life skills are caught in sport. TAP challenged this assumption by deliberately teaching life skills. Such an approach could transform the way in which we view life skills and may possibly have wide ranging consequences for social and sport sciences. Unlike previous interventions, TAP was much longer in duration, whereas GOAL, SUPER, and many other youth development programmes (Papacharisis *et al,* 2005; Goudas *et al*, 2006; O'Hearn and Gatz, 2002) are approximately between eight to eighteen sessions long, TAP included a total of 25 sessions. Due to the prolonged engagement, a recommendation made by Gould and Carson (2008), the participants had sufficient time to learn the seven life skills, develop the knowledge and understanding of such skills and attempt to transfer the skills into other academic domains. Data was collected with the intention that the findings would inform future research and contribute to current knowledge on life skill interventions and life skill transfer.

3.2 Rationale for Sport Intervention

Sport has often been treated as monolithic in research relating to self-esteem and academic achievement (Eitle and Eitle, 2002). However little research exists that examines the sport-specific effects and determines which sports are best to promote self-esteem and academic achievement. Eitle and Eitle (2002) argue that participation may increase various forms of human, social and culture capital, which will vary depending on the background of the individual participating. Therefore different sports will appeal to different groups depending on their social class, age, gender, ethnicity, and access availability, especially to sports that require specific and expensive equipment such as sailing, cycling, motor sports and horse riding/racing. Sport initiatives have also been used in order to tackle male behaviour and attitudes towards school with mixed results. Some academics suggest that using competitive sport that draws on a masculine culture is counterproductive because such sports instil and promote macho stereotypes and 'are certainly not going to raise standards' (Francis, 1999: 9), whilst others argue 'anything has to be worth a try' (Wragg, 1999: 9).

Previous UK sport incentives and interventions usually focus on football. The reasons for this appears simple, it is mainly due to the high profile the sport has in the UK and its undisputed popularity. In many schools up and down Britain, football takes a central position in any break-time and lunchtime periods (Skelton, 2000). There is also a long-standing relationship between schools and football, although it is not essentially on the National Curriculum, the majority of schools teach football during PE lessons and most will have an after-school club and competitive school teams. This means that football appears to be the sport of choice as many boys will voluntarily choose to play football in rest and recreational periods and schools are happy to promote this as competitive sport as it can boost a school's status through achievement and success (Skelton, 2000).

As established through literature and observations made in schools, the majority of boys will choose to play football, although their reasons may vary and differ between individuals. Football is hugely popular within the UK and is seen as the national sport of England but there are still large numbers of students who dislike football and prefer to participate in other sports. This is especially true with ethnic

minority students, for example Indian children often prefer to play cricket as this is deemed as their national sport.

Due to the lack of specific sport research on academic achievement TAP was designed to be a multi-sport, multi-skills programme, in order to introduce new games/sports and develop both sporting and life skills (Bartko and Eccles, 2003; Kirk, 2005; Fredricks and Eccles, 2006; Zarrett *et al*, 2008, President's Council of Physical Fitness and Sports, 2009). Fraser-Thomas and others (2005) state that up until the age of thirteen all children should remain in the sampling stage of development. This means sampling as many sports as possible with the emphasis on play rather than competition. As the students were all twelve years of age when the intervention started it was deemed beneficial to offer a variety of sports. It is also argued that individuals in the study may have been attracted to different sports and by allowing a varied programme, motivation and interest were potentially maximised. The sports selected (see table 3.1) were identified and included due to the opportunities they provided when teaching life skills. For example, a martial arts instructor worked with the participants in order to teach them about discipline. The instructor discussed discipline in great detail and extensively used it throughout the sessions. This approach was used for each of the life skills.

3.3 Life Skills Taught in TAP

Life skills can be placed into three broad categories; physical, behavioural or cognitive. However, no published life skill programme could be found that looked specifically at reducing underachievement and improving academic performance. Therefore, there were no recommended guidelines that could inform the selection of life skills to include within TAP; however, the skills were selected with academic performance and achievement in mind. The senior management group within the school identified skills they thought their students' needed and/or lacked and existing life skill intervention research (highlighted below) provided information on other skills that had been deemed appropriate and successful in previous interventions. Based on these selection criteria, TAP included the following life skills; team work (Gould *et al*, 2006; Jones and Lavallee, 2009), communication (Jones and Lavallee, 2009), discipline (Jones and Lavallee, 2009), self-confidence with positive self-talk (Brunelle *et al*, 2007; Goudas *et al*, 2006), concentration (Forneris *et al*, 2007;

Goudas *et al,* 2006) and goal setting (Gould *et al,* 2006; Goudas *et al,* 2006). Persistence was the final personal life skill that was included in TAP, and is a skill that could not be found in previous interventions. The school felt that persistence was a skill that would be beneficial for many of the participants and was therefore included in this study.

Table 3.1 – Life Skills and Sports Included in TAP

Life skill	Sport used to teach life skill
Team work	American Football
Discipline	Martial Arts
Communication	Goalball
Persistence	Frisbee
Goal Setting	Boxing
Concentration	Rock Climbing and Athletics (sprint hurdling)
Self-confidence and positive self-talk	Football

3.4 How the Life Skills were Taught

Only the intervention group received the sports sessions and were taught the seven life skills. Each life skill was taught over a three-week period (see Table 3.2; The TAP Planner). This was to ensure that the intervention group participants had sufficient time to practice the skill in the sports hall and attempt to transfer the skill into other academic domains. The first session of each life skill was used to introduce the skill to the participants and establish their current level of understanding. This included discussions on what the skill was, how the skill could be used, how it was related to the classroom and the sports hall and discovering the perceived importance of the life skill to the participants and their learning. The participants had approximately 40-45 minutes to use the life skill whilst engaging in various sports/games/activities. The second session allowed the participants to practice the life skill in more detail and depth for the entire 75-minute session. The third session

allowed the participants to further practice each life skill for approximately 30 – 45 minutes. The remainder of the session involved the intervention group participating in a focus group where they discussed amongst themselves what they thought of the life skill, how it could be beneficial in sport and in other life domains, and how they may possibly transfer the skill into other academic environments (i.e. the classroom).

Goal setting was taught slightly differently to the other six life skills as it was taught through a scheme known as the Sky Sports Living for Sport programme. A former, female, UK boxing champion came to the school to work with the participants in the intervention group on two separate occasions. On her initial half-day visit she give the participants an inspirational speech about her background and career and spent time teaching the intervention group how to set goals and then she made them set their own short term goals. Her second visit was over a full school day and she discussed with the intervention group if they had achieved their own short-term goals. Boxing activities and games were used in both sessions in order to demonstrate and support the teaching of goal setting.

Table 3.2 – TAP Planner

Date (week commencing)	Session plan/ Theme
5 September 2011	**START OF ACADEMIC YEAR**
12 September 2011	**Introduce myself and the study to participants.** **School to randomly select intervention and comparison groups. Consent forms to be sent out to parents. Cool off period for participants.**
19 September 2011	
26 September 2011	
3 October 2011	
10 October 2011	**Meet with participants:** explain intervention, collect consent forms
17 October 2011	**Meet intervention group**- complete demographic data, life skill questionnaire.
24 October 2011	HOLIDAY- Half term
31 October 2011	Week off- school strike
7 November 2011	**Group Activities:**
14 November 2011	**Team work session 1**: Coach JH - American football
21 November 2011	**Team work session 2**: Coach JH- American football
28 November 2011	**Team work session 3**: American Football and Focus Group
5 December 2011	**Discipline session 1:** Sensei NT- Martial Arts
12 December 2011	**Discipline session 2:** Sensei NT- Martial Arts
19 December 2011	HOLIDAY- Christmas
26 December 2011	HOLIDAY- Christmas
2 January 2012	WEEK OFF- School staff meeting
9 January 2012	**Discipline session 3:** Martial Art Activities and Focus Group
16 January 2012	**Goal setting session 1:** Coach HB- Boxing
23 January 2012	**Communication session 1**: Coach GA- Goal ball
30 January 2012	**Communication session 2:** Coach GA- Goal ball
6 February 2012	**Cancelled**: School closed due to adverse weather
13 February 2012	HOLIDAY- Half term
20 February 2012	**Communication session 3**: Goal Ball activities and focus group
27 February 2012	Cancelled due to facility issues
5 March 2012	**Persistence session 1:** Coach GA- Frisbee
12 March 2012	**Persistence session 2:** Coach GA- Frisbee
19 March 2012	**Persistence:** Frisbee and Focus group
26 March 2012	**Concentration session 1:** Rock Climbing- Brunel Climbing staff
2 April 2012	HOLIDAY: Easter
9 April 2012	HOLIDAY: Easter
16 April 2012	**Concentration session 2:** Athletics- Brunel Coaching
23 April 2012	**Concentration:** Focus Group and Wii free time
30 April 2012	**Goal Setting session 2:** Boxing Coach HB **Goal Setting session 3:** focus group
7 May 2012	**Self-confidence and positive self-talk 1:** Coach DH- football
14 May 2012	**Self-confidence and positive self-talk 2:** Coach DH- football
21 May 2012	**Self-confidence and positive self-talk 3:** Focus Group
28 May 2012	**Intervention ends**: Final Discussions and Free time
4 June 2012	HOLIDAY- Half term
11 June 2012	**FINAL ACADEMIC GRADES RELEASED**
18 June 2012	**In-depth interviews with intervention students** **Questionnaires completed** **Interviews with staff and parent**
25 June 2012	
2 July 2012	
9 July 2012	
16 July 2012	
23 July 2012	**END OF ACADEMIC YEAR**

3.5 Frameworks used in TAP

Frameworks developed by Gould and Carson (2008), and Petitpas and colleagues (2005) were used to plan and develop the intervention. A full diagram of Gould and Carson's (2008) model was provided in chapter two (see Figure 2.1). TAP focused on the transferability component of the model but for a full discussion of the model; see Gould and Carson (2008). The transferability component of the model is concerned with the transfer of life skills from the sport environment to other non-sport aspects of life.

Research has previously shown that life skills are not automatically transferred (Martinek *et al*, 2001). Factors that may affect transfer are discussed within Gould and Carson's (2008) framework and include a belief that acquired skills and qualities are valued in other settings, knowledge of how and in what context the skills were learnt, confidence in the ability to apply skills in different settings, a willingness to explore non-sport roles, ability to adjust to initial failures or setbacks, awareness of skills, similarity of situations, awareness of transfer, previous transfer experience, and support and reinforcement of transfer. TAP sought to address each factor by providing opportunities to learn, practice and transfer life skills, using focus groups to explore similarities of situations in an academic context and how skills could be used in other non-sport domains. In addition support and reinforcement to deal with initial setbacks was provided during the weekly sporting sessions and in the focus groups.

Petitpas and colleagues (2005) developed a framework for developing an effective youth sport programme, which was also embraced during the planning of TAP. According to their framework, youths are more likely to experience positive development in the presence of (1) an appropriate environment (context), (2) caring adults (external assets), and (3) they are provided opportunities at learn life skills (internal assets). TAP embraced all three elements by implementing the programme within the participants' school. The aim of TAP was to teach life skills that could be transferred into other academic domains such as the classroom, and it was thought that by providing the programme in a suitable context, the intervention group would find it easier to learn, discuss and transfer such skills within their school environment. Each week the boys were provided new opportunities to learn the life skills (internal assets) through new sports, new activities and different games.

Participants were encouraged to discuss transfer from the sports hall into the classroom on a regular basis. TAP also provided the participants with caring adults; the author of this study was present at the school on a weekly basis and developed a positive relationship with the participants throughout the programme. The participants also saw a female P.E teacher, who did not teach them academically, as a caring adult they could seek advice and support from on a daily basis. The school only allowed female PE teachers to teach female students and as a result she did not teach any of the male participants in the school. Her involvement in the programme therefore did not result in any biased teaching or extra attention being placed on the boys within their academic environments. The PE teacher was the main pastoral support provider for the boys throughout the programme.

3.6 The Case Study School

This study used one school, referred to as the Case Study school in order to ensure anonymity. For more information on the case study approach used in this study, refer to chapter 4. The Case Study school is located in inner city London and is a mixed sex school. The school's general profile from the most recent Office for Standards in Education, Children's Services and Skills (OFSTED) inspection in July 2011 can be found below in Table 3.3. OFSTED is a non-ministerial government responsible for inspecting and reporting the strengths and weakness of schools in England. Further information highlights that the school had a higher than average number of students and the number of students eligible for free school meals was approximately double the national average, which indicates a high level of social deprivation. Almost two-thirds of the students spoke English as an additional and/or second language.

Table 3.3 – OFSTED Information on Case Study School

Data from OFSTED inspection (July 2011)	Case Study School
Type of school	Comprehensive
OFSTED category	Foundation
Specialist status	Specialist Arts College
Age of pupils	11-18
Number of pupils enrolled	1296
Predominant ethnic group	Wide range of ethnic backgrounds
Free school meal status (indicator of social class and poverty)	Numbers are approximately double the national average
OFSTED overall effectiveness grade	Good
Core subject attainment	Exceptional progress made in English Good progress made in mathematics Poor progress made in science

The OFSTED report highlighted a discrepancy between English and mathematics attainment grades compared to science attainment at GCSE level. The inspection found that English and mathematics were outstanding and these subjects had made good progress since the school's previous OFSTED inspection. Although the science results had improved, they were well below the English and mathematics results. The report states the school needed to 'raise levels of attainment and rates of progress in science so that at least they matched those in English and mathematics' (OFSTED Inspection Report, 2011: 2). The male students underachieving in at least science were identified for TAP as more students were underachieving in science than any other subject and science grades were of particular interest to the school's management staff.

3.7 Inclusion Criteria

The participants in this study had to meet several criteria in order to be deemed eligible for selection. Potential participants has to be:

- Male
- Year 8 (12-13 years old)
- Underachieving in at least Science

The study initially used a purposive sampling approach that required gaining a sample where the participants had to match eligibility criteria. All students selected had to be male, in the same school and same school year in order to try to standardise teaching and grade predictions. This meant the students were receiving a similar level and style of teaching. Only one PE teacher was involved with the intervention and she did not teach any of the students in the intervention or comparison group. This ensured limited contamination occurred between the intervention and in-school teaching. All the students were underachieving in at least Science as this was deemed the school's weakest subject in the 2011 Ofsted report. Underachievement was measured on actual grades obtained compared to teacher prediction.

The school initially selected all participants eligible for the programme based on the inclusion criteria above and were then responsible for randomly selecting which children formed the intervention group and the comparison group. Of the eight classes that existed in Year 8, seven of the classes had at least one student involved in TAP. The school insisted on taking control of the allocation of the participants. Although slightly uncomfortable with the school having full control of the allocation process, the author had experienced difficulty in finding a school willing to be involved in the programme and was not prepared to lose the schools engagement. The school reported that they used the simply random technique of pulling names out of a bowl as requested at a senior staff meeting.

Participants were randomly allocated as this method is deemed to be best practice in some fields of study, particularly when running quantitative parametric data analysis tests. Matched-pairs were also considered but as the literature review has demonstrated, underachievement is complex and can be a result of many factors. This would have made it difficult to allocate students based on a matched-pairs criteria. Time constraints and a limited number of participants also made matched-

pairs problematic. Despite random allocation, the participants were matched on school, gender and age.

The school reported that they randomly selected the participants as requested. However, some scepticism may be required. It appears the largest underachievers were placed in the intervention group (see Figure 5.1) as well as the students with the largest number of detentions and reported behavioural issues. This may be a result of random selection or it may be possible that the school were deliberate in their allocation of the intervention group participants.

3.7.1 How underachievement was defined for this study

All the participants in this study were identified by their school as underachieving in Science. Many of the participants were also underachieving in other core and foundation subjects such as English, Mathematics, and Foreign Languages. The term underachievement was defined by the school as any student who were not achieving their expected grade (predicted by the class teacher) and/or who had made no improvement to their attainment grade during their first year at the school. This included students who had received the same grade in their end of year seven examinations as they had in their Standard Assessment Test (SAT) exams[1] at the end of Year 6.

3.8 Participants

The participants for this study were all male and in the adolescent phase of their life. Adolescence is divided into three phases commonly known as early (11-14 years), middle (15-18 years) and late (19-21 years) (Holt, 2008). The male participants were all 12-13 years old when the study commenced and were in Year 8 of secondary education; therefore the participants in this study were in the early phase of adolescence.

Year 8 students were identified as being the most suitable for this study for a number of reasons. Mainly, it was judged timely to make a difference to their attainment and attitudes to school. Sport participation begins to decline when youths reach the age of 12 (Bloom *et al*, 2008). This is a crucial period for the development of social skill and self-esteem (Bloom *et al*, 2008) and as sport has been found to

[1] SAT (Standard Assessment Test) examinations are completed by children in the England at the age of 11, during their final year of primary education.

positively impact on youth development (Bartko and Eccles, 2003; Fredricks and Eccles, 2006; Goudas and Giannoudis, 2008; Zarrett *et al*, 2008) then participation beyond 12 years old often needs to be encouraged and promoted. It is also the age where many students begin to participate in new sports and it may be the last opportunity to entice young males into sport.

Year 8 was also deemed a year which has a limited changeable impact on students. Year 7 is a year where students must adapt to a new school, make new peers and embark on a new stage of curriculum and learning. Research shows that transitional effects can last well into the first year of secondary school (Zeedyk *et al,* 2003) and can negatively impact on academic achievement. Galton and others (2000) claim transition from primary school to secondary school can result in some students underachieving in comparison to previous performances. It was hoped that any transitional effects would have ceased by the end of Year 7 and therefore would not have been an impacting factor on the intervention.

3.8.1 The intervention group

The school identified thirty-nine male students who were eligible for participation in TAP. Twenty participants were randomly selected to form the intervention group. Twenty was deemed a suitable number to safely conduct sport sessions and a viable number for qualitative research. Hellison (2000) argues that young people who are in involved in programmes with smaller group numbers and stay as one group for an extended period gained more benefits than youths in programmes with large numbers of participants. It was hoped the students would gain benefit from working in a small group as it potentially allowed for greater group cohesion and more individual attention from the sport coaches.

All the participants were in Year 8 (12-13 years old) as it was judged timely to make a difference to their attainment and attitudes to school. Thirty-nine students were eligible but four students rejected the invite to participate in the study. Twenty of the eligible students formed the intervention group; fifteen male students underachieving in the same core curricular subject and in the same school year formed a comparison group. One student in the intervention group withdrew from the study after 6 weeks as he was excluded from the school, leaving nineteen students in the intervention group. No data was used for the student who withdrew.

3.8.2 The comparison group

The comparison group, also identified by the school, included fifteen male participants also in Year 8 and underachieving in at least Science. The comparison group did not receive the intervention but they were involved in a fun day at the school, where they were able to participate in a number of sporting activities. The fun day was arranged once TAP had finished and took place at the end of the summer term. Creswell (2009) states all participants must benefit from the study, not just the experimental/intervention group and the school deemed this as the most appropriate way in which to engage with the comparison group.

3.8.3 Ethnicity

TAP included participants from a number of different ethnicities. With the school being situated in one of the most diverse cities in the country, ethnicity was considered to be a particular issue. Although, it is worth mentioning at this point that TAP did not control for ethnicity. Table 3.4 shows the representation of each ethnic group involved in the intervention group and the control group.

Table 3.4 – Ethnicity Groups of Participants

Ethnicity	Intervention Group	Control Group
Black Caribbean	5	4
Pakistani	2	2
White British	2	2
Other Black African	2	0
Other Asian	2	4
White Western European	1	0
Black Somali	1	1
White and Black African	1	0
Indian	1	1
Iraqi	0	1
Afgan	1	0
Other	1	0
Total	**19**	**15**

3.9 Teacher Interaction and Teaching Styles

When designing TAP it became apparent that the teaching the participants received across the curriculum had to be standardised in some way. As underachievement and not low achievement was the focus of this programme it meant students could be selected from any of the classes within the appropriate age range. The students in the intervention group represented seven of the eight classes in Year 8; meaning teachers could not concentrate or bias their teaching on one particular class. This helped to ensure that the teaching content would be similar for the intervention group as well as the comparison group. In order to limit the variation of teaching styles and ensure academic teaching was as similar as possible for all participants was the main reason for using one Case Study school for this programme.

In order to ensure no bias or contamination occurred in the academic teaching of the intervention and control groups, no academic staff involved in the participants' teaching were included or involved in the programme. The only member of staff involved in the planning and supervision of the programme and was the daily contact point for the participants was a female PE teacher, who had no teaching responsibilities with any of the boys involved in the programme. Although senior members of staff at the school knew about the programme, in particular the management team and administrative staff, members of the Year 8 teaching team were only vaguely aware of the programme. The majority of teachers were only aware of TAP's existence and received no knowledge of the content or intent of the programme.

3.10 Summary

This chapter explained the Transfer-Ability Programme, the Case Study school and the participants that were included in this intervention. Gould and Carson's (2008) model was also discussed as it provided the framework for the transfer element of this study. The next chapter will highlight the methodology used whilst collecting data from various sources as well as discussing the reliability and validity of data. Chapter 4 also explains the ethical procedures undertaken.

4 METHODOLOGY

4.1 Introduction

Efforts were made to use appropriate methodology in order to gain understanding on some of the complex issues surrounding male underachievement and examine the possible impact of a sport intervention. Whilst chapter two suggested that transferable skills can be taught through sport the aim of this study was to provide some insight on *how* such skills are learnt and *if* they are transferred into the classroom and used across various academic domains. This chapter discusses the methodological assumptions upon which this study was based and the reasoning for using a mixed methods approach is explained. Finally, the ethical procedures undertaken are discussed.

4.2 Philosophical Perspective

During the design of TAP it became apparent that personal philosophical perspectives had to be examined as such views can influence the way in which the researcher collects and analyses data. Personal assumptions and understandings had to be reviewed in order to establish my own position within the research. This section discusses my own worldviews and the paradigms adopted in this study.

A paradigm is generally regarded as a belief system through which individuals can see and make sense of the social world (Guba and Lincoln, 1989). A paradigm is a worldview that spans ontology, epistemology and methodology (see Figure 4.1). Hammersley (2012) states that in the context of research methodology, the term paradigm refers to a set of philosophical assumptions about a phenomena and how such assumptions can be understood. Although many paradigms exist, social science research is dominated by two main paradigms: positivism and interpretivism. Before the two main paradigms are discussed in more detail, it is important to introduce and briefly discuss the concepts of ontology and epistemology.

Ontology is regarded as the starting point of all social science research (Grix, 2002) and is based on assumptions about the nature of reality or a phenomenon. Blaikie (2000:8) declares that ontological assumptions are:

> ‘Claims and assumptions that are made about the nature of social reality, claims about what exists, what it looks like, what units make it up and how these units interact with each other. In short, ontological assumptions are concerned with what we believe constitutes social reality’

So, if ontology is concerned with the knowledge we may know, then epistemology is concerned about *how* we gain such knowledge (Grix, 2002). It asks if knowledge is possible and how it can be gained. Epistemology focuses on the process of gathering information and knowledge in an attempt to develop new theories and/or models (Grix, 2002). A large proportion of life skill research has adopted quantitative methods that ontologically assume an external reality and epistemologically allows the research to determine how things are and what they mean. This approach is often referred to as a positivist approach. In contrast to quantitative methods is the use of qualitative methods that ontologically assume that there are multiple realities and epistemologically states that knowledge is created through human interaction.

As previously mentioned the two most popular paradigms in social research are positivism and interpretivism, also known as a constructivist approach, (for an overview of the key characteristics and assumptions of the positivist and interpretive approach, see Table 4.1). The purpose of TAP was to gain an understanding within a social context, and should have used an interpretive approach. However, it became apparent that the use of an interpretive framework alone might not have addressed all the research questions this study sought to explore. Therefore, it was assumed that a combination of interpretive and positivist approaches would provide the most appropriate tools in which to collect sufficient data and facilitate a comprehensive understanding of this topic.

Table 4.1 – Interpretive and Positivist Approaches

Key characteristics and assumptions

Interpretive approach	Positivist approach
Assumptions • Reality is socially constructed • Researcher and reality are inseparable • Knowledge of the world is intentionally constituted through lived experience • Variables are complex and difficult to measure	**Assumptions** • Social fact have an objective reality • Researcher and reality are separate • Objective reality exists beyond the human kind • Variables can be identified and relationships quantified
Purpose • Contextualisation • Interpretation • Understanding perspectives	**Purpose** • Generalisability • Prediction • Causal explanations
Method • Qualitative • Naturalistic • Inductive	**Method** • Quantitative • Experimentation • Deductive
Validity • Certainty: data truly measures reality	**Validity** • Defensible knowledge claims
Reliability • Results can be reproduced	**Reliability** • Interpretive awareness: researchers acknowledge and address their subjectivity

(Adapted from Glesne and Peshkin, 1992:7 and Weber, 2004: iv)

4.3 The Mixed Methods Approach

Mixed methods research is a research paradigm whose time has come

(Johnson and Onwuegbuzie, 2004)

A mixed methods research design is essentially using both qualitative and quantitative methods in a single study (Creswell, 2012). Whilst it is a relatively young paradigm and continues to gain increasing support, mixed methods research still receives criticism from many purist researchers. Purists believe that qualitative and quantitative paradigms and methods 'cannot and should not be mixed' (Johnson and Onwuegbuzie, 2004: 14). However, supporters of mixed methods research argue such an approach embraces both qualitative and quantitative methods in order to

render less biased and more accurate conclusions (Reams and Twale, 2008). Descombe (2008: 272) suggests that mixed methods research can:

- Increase the accuracy of data
- Provide a more complete picture of the phenomenon than a single approach, thereby overcoming the weaknesses and biases of single approaches
- Enable the researcher to develop the analysis and build on the original data
- Aid sampling

Creswell (2012) suggests that using a mixed method approach with both qualitative and quantitative techniques provides a clearer understanding of the research problem than either technique could provide on its own. He also states that mixed methods have to be used when either qualitative or quantitative data alone is not enough to sufficiently address the research question. Personally, my historic assumptions were purely qualitative and TAP was originally designed to be a qualitative study. Whilst a qualitative perspective was needed in order to gain a greater understanding of participant perspectives, qualitative data alone did not address *all* the research questions this study sought to address. This provided sufficient justification for including both qualitative and quantitative methods in this study. As previously introduced in chapter one, the research questions of this study are:

1. What is the impact of a sports programme on participants' academic performance in Science?
2. What is the impact of a sports programme on participants' perceived use of the life skills?
3. To what extent (if any) do the participants perceive they transferred the life skills from the sports hall into other school domains?
4. What factors do the participants' perceive to be enablers and/or barriers of life skill transfer from the sport halls into other school domains?

It was thought the first two questions would be better understood using a quantitative approach, whereas the latter two questions needed a qualitative approach in order to gain in-depth understanding. Using a mixed method design however meant my own personal paradigm debate had to be readdressed. Whilst qualitative researchers may have an interpretive worldview and quantitative researchers have a positivist worldview, is there such a worldview that is compatible with a mixed method approach? Creswell (2012) argues the case for a pragmatic approach, which emerged in the second half of the nineteenth century by classical pragmatists such as Charles Sanders Peirce, William James and John Dewey (Johnson and Onwuegbuzie, 2004). Johnson and Onwuegbuzie (2004: 17) state:

> Philosophically, mixed research makes use of the pragmatic method and system of philosophy. Its logic of inquiry includes the use of induction (or discovery of patterns), deduction (testing of theories and hypotheses), and abduction (uncovering and relying on the best set of explanations for understanding one's results.

Bryman (1996) argues that whether there is an appropriate fit between epistemology and method is not the key question but more importantly is there an appropriate fit between research question and method. It was hoped that using a variety of qualitative and quantitative methods, the intervention group would be able to explore the impact a sports based programme may have on their academic achievements and address some of the gaps which exist within the literature, such as perceived learning of life skills and life skill transfer (see chapter two for a more detailed discussion).

4.3.1 Convergent parallel design

TAP embraced a convergent parallel mixed method design (see Figure 4.1) in order to fully address the research questions. This is where quantitative and qualitative data is collected simultaneously but both data sets are separate from each other. This means data from one method does not influence the data collected from the other method and vice versa (Cohen, Manion and Morrison, 2011). Results from the qualitative and quantitative data are analysed to determine if the two data sets reveal similar or dissimilar findings. It is argued that the quantitative results provide generalisability and the qualitative data provides the context/setting, the in-depth information and the rich data (Creswell, 2012).

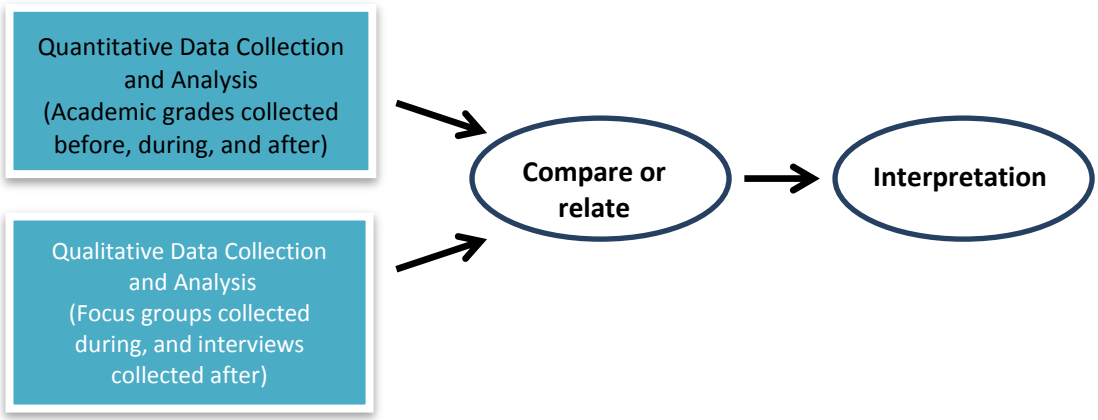

Figure 4.1 – Convergent Parallel Mixed Method Design in TAP

Academic performance grades were collected before, during and after the intervention at three separate time points. End of Year 7 performance grades were taken for every participant (intervention and comparison participants) before the intervention began, grades were also collected at the end of term one (after the Christmas vacation) and at the end of term three (the end of Year 8 grades). Focus group data with the intervention group only were completed every three weeks and interview data was collected at the end of the programme with the intervention group, an intervention group parent and the female PE teacher involved in the programme. In total, this included 20 interviews and 7 focus groups. Data was then triangulated to determine if the results provided similar or dissimilar findings.

In summary, it is important to note at this point that Lincoln and Guba (2000) claim no method can deliver one ultimate truth. However, it can be argued that some methods might be more suitable at answering particular research questions than others. The majority of previous life skill studies/interventions have used a quantitative approach (e.g., Brunelle, Danish and Forneris, 2007; Forneris, Camiré and Trudel, 2012) but Gould and Carson (2008) highlighted the need for understanding of life skill transfer (see chapter two) and recommended the use of quantitative and qualitative methods. The use of quantitative methods alone would not have provided the insight and detail this study sought to obtain. Therefore a range of qualitative and quantitative methods and techniques were deployed, and in doing so, a pragmatist paradigm had to be accepted.

4.3.2 Learning Perspectives

During the planning and delivery of the intervention. Both the participants and the author were viewed as constructivist learners. Constructivism is based on the work of Jean Piaget who argued that knowledge should be actively constructed by the learner and not passively received from the outside. Throughout the whole PhD process I was constructing my own knowledge both as a learner and researcher. I started TAP with no pre-assumptions of potential outcomes; throughout the programme I was inductively developing theories and meaning. Although sufficient literature on life skill transfer was read to ensure understanding, I did not have any preconceived ideas with regards to findings as no previous studies have explored the nature of life skills and underachievement in the same way. I was also aware of my own constructivist worldviews when analysing and interrupting the data.

The participants' learning was an on-going process as they were constructing their own knowledge on the seven life skills and the transfer of such skills into other life domains. TAP was designed to provide the participants with new information on the learning and transferring of life skills by building upon and adding to the information the participants already had constructed. This form of learning was deemed to be crucial as it is argued that optimal learning occurs when learners are actively constructing their own understanding (Pritchard, 2009). It was hoped that the participants experienced a scaffolding process throughout the programme, where the author was able to provide a scaffold so that the participants could construct their own knowledge and restructure their framework with regards to their own learning (Pritchard, 2009). I wanted to force the participants out of their comfort zone, encourage them to try new skills and challenge their own knowledge. Vygotsky refers to this process as the zone of proximal development; a concept that is often defined as:

> 'The distance between actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers' (Vygotsky, 1978: 86)

Although the participants were constructing their own knowledge throughout the process, there was also an important social aspect to the intervention. Creswell

(2013) states that the goal of social constructivist research is for the participants to develop subjective meanings formed through interaction with others and through the historical and cultural norms that exist in the participants' lives. In practice, social constructivism allows meanings to be forged through discussion or interactions with others (Creswell, 2013). The intention was for the participants to learn from each other throughout the process. This was facilitated through the use of different sports to learn the life skills; the use of sport provided a social environment where the participants were able to interact and learn from each other on a regular basis.

4.4 Methods

The previous sections of this chapter have discussed and explained the paradigms and worldview that has shaped this study. The following sections now highlight and review the methods employed during the data collection phase of TAP and ethical considerations undertaken prior to this study commencing.

4.4.1 Case study

A Case Study approach was deemed the most relevant approach to adopt for this research; however there appears to be a lack of consensus on what actually constitutes a case study (Flyvbjerg, 2011; Yin, 2009; Lincoln and Guba, 1985). Many definitions and explanations of case study as a method of data collection exist within the literature. This is due to the fact that case study as a generic term has multiple meanings (Bassey, 1999) resulting in a combination of views and thoughts having to be used in order to adapt a model appropriate for this study. Flyvbjerg (2011) recognises whilst many definitions of case study research are helpful others are not. Therefore many definitions of what constitutes a case study have been examined in order to gain a clearer understanding.

Yin (2009: 18) states a case study is *an empirical inquiry that investigates a contemporary phenomenon in depth and within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident.* Thomas (2011) believes a case study is concentrating on one thing and looking at it in detail, which is a very simple concept. Gillham (2000) suggests a case study can investigate an individual, a group, an institution or a community in order to answer specific

research questions. For Shen (2009: 22) *case study research can bring us to an understanding of a complex issue or object and can extend experience or add strength to what is already known through previous research.* Shen (2009: 22) also goes on to establish a very important aspect of case study research; *the purpose of a case study is not to represent the world, but to represent the case.* As can be seen, many debates exist surrounding the question of what is a case study. Is it a method of data collection or a distinct research paradigm? Stake (2000) describes a case study as a choice of what is to be studied, with the study including whatever methods deemed suitable rather than an actual methodological choice. With no universal definition of a case study, this study used the definition proposed by Yin (2009) and used a number of methods deemed most suitable to address the research questions as suggested by Stake (2000). Having looked at case study definitions, the various types of case studies are now examined.

4.4.1.1 Types of case studies

Whilst many different definitions of case study exist, there are also various types of case studies and different typologies that exist in the literature. Stenhouse (1988) identifies four broad styles of case study research: ethnographic, evaluative, educational and action research. According to Stenhouse's typologies this study aligns best with the evaluative style of case study as it seeks to inform schools and decision makers such as students, parents and teachers of the possible impact sport may have on underachieving students.

In contrast, Stake (2000) identified three types of case study research; intrinsic, instrumental and collective case studies. Intrinsic studies are undertaken usually because the researcher has an interest in the topic but more so an interest in that particular case. Instrumental studies are undertaken in order to aid understanding of a topic by researching a particular case. The emphasis is about insight or a general understanding and not the particular case. Collective case studies are about representation and require several cases to be researched (Stake, 1995; 2000). TAP used a singular case study approach and hoped to provide insight into a particular issue; therefore, it best fits into Stake's instrumental typology.

In support of case study methodology, Miles and Huberman (1994) state the biggest strength of case study research is the increased likelihood of discovering and generating new and/or novel data. The fact that the data is usually collected over a

sustained period of time makes it a powerful tool when studying any topic or process (Miles and Huberman, 1994). Similarly, Punch (2009) believes case study research can make a valuable contribution to education research in three ways:

- Researchers can learn about a particular case
- Only in-depth case study research can provide understanding of important aspects
- Case study research can make contributions to knowledge in combination with other research approaches.

To summarise, Yin (2009) believes case study research meets the three important tenets of qualitative research: describing, understanding and explaining. TAP aimed to achieve in-depth understanding through various qualitative and quantitative methods and case study research was deemed the most appropriate and suitable method to use.

4.4.1.2 Generalisation of case study research

When discussing and using a case study design it is important to discuss the implications of generalisation and whether generalisation can be achieved. The lack of generalisability is often seen as the case study's biggest weakness (Flyvbjerg, 2011; Punch, 2009; Stake, 1995). Case study researchers continue to debate the issue of generalisation with many arguing generalisation cannot be achieved. *A case study is about the particular rather than the general. You cannot generalise from a case study* (Thomas, 2011: 3). Similarly, Schofield (2002) also states that although not all researchers reject the idea of generalisation so strongly, many do not see it as an aim or goal of their findings and deem generalisation to be a low priority.

The literature has provided a mixture of views, to the point where there is now a lack of understanding and a lack of consensus regarding generalisability within case study research (Morse *et al*, 2002). Despite literature claiming that generalisability cannot be achieved, there are case study researchers such as Flyvbjerg (2011) who claim that case studies can have a limited amount of generalisation. Punch (2009: 123) states *if every case were totally unique, there would be no transferability of knowledge from one case to another.* As case studies

are used in a number of professions such as nursing, social care and law in order to train staff to deal with certain situations there must be *the potential generalizability of knowledge from case studies* (Punch, 2009: 123). Flyvbjerg (2011: 205) also recognises that a single case study can be generalised and can contribute to scientific knowledge:

> *One can often generalize on the basis of a single case, and the case study may be central to significant developments via generalization as supplement or alternative to other methods. But formal generalization is overhauled as a source of scientific development*.

Gomm and colleagues (2000) ask whether generalisation is a necessary component of case study research. It is possible that a case may be deemed so important or interesting enough to be studied in its own right without the need to make generalisations. It is also important to study the cases that do not match other cases and should be studied in order to find out *why* a case is different from the general pattern (Punch, 2009).

To summarise, the use of case study methodology allowed for various different methods of data collection to be used (see Figure 4.2) and combined, thus increasing the validity and reliability of the research (Bassey, 1999). The main aim of TAP was to inform future research and not to produce generalisations. TAP was based on an inductive and deductive approach, using previous literature to inform the design but allowing the results to be generated without a hypothesis. A mixed methods approach was considered the most appropriate for this research and the various qualitative and quantitative tools used are now discussed.

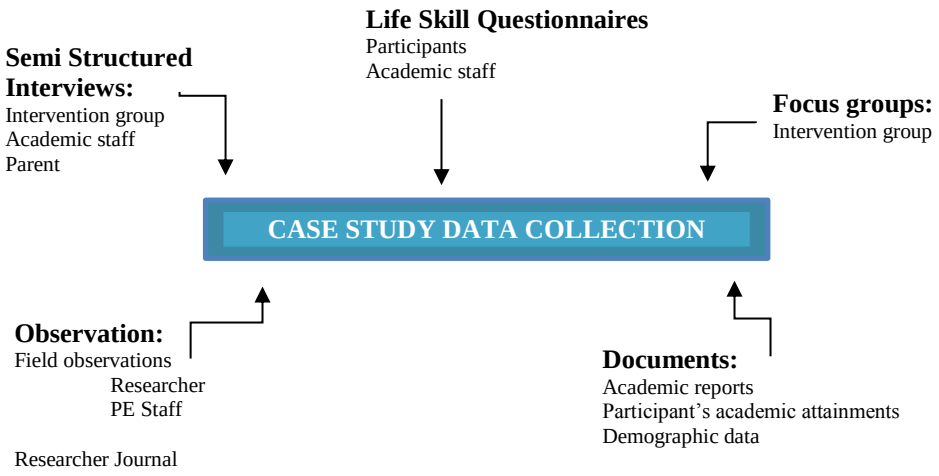

Figure 4.2 – Case Study Data Collection Model

4.5 Focus Groups

Focus groups are a form of interviewing which seeks to find the same access and understanding as standard interviews but are conducted in groups. This results in a number of people simultaneously being interviewed at any one time. It is during group interviews that the role of the interviewer changes, to become more of a facilitator that allows the group to take over the discussion (Punch, 2009).

Focus groups are often data-rich, inexpensive and rather flexible, which makes the use of focus groups an attractive and appealing option (Morgan, 2001; Punch, 2009). As the interviewer initiates contact and dictates the content of the discussion, focus groups provide insightful information (Morgan, 2001). However problems can arise with group dynamics and achieving balance in a group can be difficult and sometimes even impossible (Drever, 2003; Punch, 2009).

The main weakness of focus groups is the difficulties involved with correctly recording the data. Focus groups can become noisy and are extremely difficult to record by hand due to the speed at which the conversation takes place (Drever, 2003). Voice recordings become problematic in large groups, as identifying the speakers can be a difficult task. In order to overcome the difficulties of voice recordings often experienced when conducting focus groups, each focus group in the intervention will be video recorded in order to make speaker identification easier and in order to assess body language and group dynamics.

4.5.1 Focus groups in TAP

Seven focus groups were conducted with the intervention group. Each focus group was completed on the third week of teaching each life skill. The focus groups were on average 30 minutes long and each focus group consisted on average of 17 intervention group participants.

4.6 Interviews

As well as using focus groups, individual in-depth interviews were conducted. Eder and Fingerson (2001) state that a combination of individual interviews and focus groups work well with adolescents when trying to uncover a social phenomenon as older children have the ability and capacity to reflect upon their own experiences. Interviews are the most common method of data collection in qualitative research as it is deemed the most powerful tool to use when trying to gain access and understanding of peoples' perceptions, experiences, emotions, meanings and establishing definitions, situations and constructions of reality (Drever, 2003; Fontana and Frey, 2000; Punch, 2009).

Interviews are generally made up of three styles, structured, semi-structured or unstructured (Drever, 2003). Generally in small-scale educational research the most commonly used style is semi-structured as this allows the researcher to decide on a general structure of the interview and ensure that the main questions/topics are answered and explored (Drever, 2003). Despite unavoidable weaknesses such as being labour intensive, interviews have many strengths (Drever, 2003). Gillham (2000) argues the most overwhelming strength of interviewing is the richness of the data. Interviews often lead to in-depth, data rich information if done correctly (Miles and Huberman, 1994). The fact that interviews can be flexible and can occur in a natural environment also makes them a very productive and accessible tool to use (Gillham, 2000; Miles and Huberman, 1994; Rogers *et al,* 2005). The idea of being able to probe for clarification and expand on responses allows for a clearer interpretation and for misunderstandings to be avoided (Drever, 2003), which makes interviews very appealing.

Open-ended, face–to-face interviews have been found to be greatly successful and the most effective way of gaining children's perspectives (Rogers *et al,* 2005). This is mainly due to the flexible nature of interviews, which allows for exploration of sensitive experiences and individual perspectives (Rogers *et al,* 2005). It was due to such strengths that semi-structured interviews were selected as the most appropriate option for this study. Gillham (2000) argues that semi-structured interviews are the most important form of interviewing to use in case study research as it is the most likely to generate rich data. Individual, face-to-face interviews are the most common form of interviewing (Fontana and Frey, 2000) and face-to-face interviewing was deemed essential for this study due to the age of the participants. Semi-structured, face-to-face interviews were chosen because the study needed to address specific aspects in order to assess the impact of the intervention and explore the reasons why the intervention may or may not have had an impact on academic achievement.

4.6.1 Interviews in TAP

A semi-structured interview (see Appendix 1 for interview guide) was conducted at the end of the programme with each participant. An unstructured interview was conducted with the female PE teacher that was involved in overseeing TAP within the school, and one parent whose child was in the intervention group. Unstructured probing questions were also used to gain clarification and greater understanding. The interviews were conducted to gain independent insight and understanding surrounding the transferability of the life skills taught during the programme. The interviews hoped to identify if the intervention group learnt life skills through sport and if they transferred those skills into other classroom lessons. The enablers and barriers surrounding the transfer of such skills were also explored.

4.6.2 Critical evaluation of qualitative methods

Conducting interviews and focus groups with children can be problematic for a variety of reasons. Historically, education research has always involved children but studies have rarely used children as participants (France, 2005; Punch, 2009). Children were previously thought to be unreliable and incompetent research participants who lacked the necessary skills required to provide valid data (Kirk, 2007; Morrow and Richards, 1996). Kirk (2007) and Hill (2005) also stress that

previous arguments suggest that adult researchers cannot understand the world from a child's point of view. Therefore interpreting children's perspectives is not something adults can accurately portray. Over the past two decades this attitude has changed with many studies now using children as participants. Children are often chosen to be participants in order to understand their perspectives and acknowledge them as competent human beings (Hill, 2005; Punch, 2009). Children are now deemed able to provide reliable, important and competent information and therefore are worthy research participants. Stewart, Shamdasani and Rook (2007) argue that children make excellent qualitative research participants but do pose special problems. It was vital to this study that the young participants in this study had a voice, mainly to gain their perceptions and experiences during the programme. However, several problems had to be addressed.

Conducting research with children and young people can be difficult due to access. Gaining access to young people is often complex due to the number of gatekeepers that are involved (France, 2005). It was a long and slow process involving several negotiations with school before one school agreed to be involved in the study. Once receiving an initial agreement with the teacher involved in the study, consent was gained from the school's senior management team and the participants' parents. Finally, assent was obtained from the participants themselves.

The author was present in the school one afternoon every week, for one academic year ensuring prolonged engagement and persistent observations (Sparkes and Smith, 2014) and acted as both the deliverer and researcher. This was unavoidable due to limited resources; this appears to be common occurrence when completing research as part of a PhD. However, this dual role of researcher and deliverer has its own strengths such as ensuring the programme was delivered as planned and allowing a rapport between the researcher and the participants to develop. It is important that children must feel comfortable with the researcher when qualitative tools are used. It is argued that children often feel more comfortable with female researchers, particularly when the topic is not gender related (Stewart, Shamdasani and Rook, 2007).

The relationship the author developed with the boys was one that developed over a period of several weeks and it is thought that this relationship aided the data collection. The importance of the rapport was reaffirmed throughout the study. The first two focus groups were difficult to conduct and the participants appeared

reluctant to answer the questions and respond to the researcher. The participants were given the opportunity to withdraw from future focus groups because they appeared so uncomfortable. However, all of the boys agreed to participate in all of the focus groups and communications improved as rapport was developed. All the participants appeared to be comfortable and responsive during the interviews that took place at the end of the intervention.

It must be acknowledged that the dual-role may have had some potential consequences that must also be addressed. The issues involved with designing and implementing the programme as well as collecting and analyzing the data may have been limited by allowing an independent source to collect the data (i.e., conducting the focus groups and interviews). Historically, children were seen as easy targets and could be open to exploitation by researchers (Kirk, 2007). The power relationship between an adult researcher and young participants was something that needed to be minimised as much as possible during TAP. It was hoped that the prolonged engagement and rapport developed between the researcher and participants allowed the participants to feel more comfortable during the interviews and focus group. This would have been lost if an independent researcher conducted the interviews and focus groups. However, the relationship between participants and researcher raises questions with regards to the trustworthiness of the data and the potential problems linked to over-rapport.

In an attempt to prevent over-rapport, a member of the research team acted as a 'critical friend' as suggested by Sparkes and Smith (2014). This researcher had no contact with the participants or the school and was able to help guard against researcher bias. This was particularly important when the researcher gained a rapport with the participants. Rapport between the author and the participants was an essential part of the research process. Due to the age of the participants, rapport was vital. This was made apparent during at the start of TAP, when the participants were reluctant to engage in conversation with the first author or each other. The critical friend was able to ensure the first author was aware of the relationship with the participants and prevent any potential over-rapport. Whilst the author recognises the limitations of rapport, particularly with young people, rapport was an important and preferable aspect of TAP, particularly during the interview phase of data collection.

4.6.3 The transferable skills questionnaire

Although very few studies have actually looked at the impact on academic achievement, TAP also wanted to explore how the skills were transferred and whether adolescent males think it is possible to transfer such skills into other academic environments. During the interview process, the participants were individually asked whether they thought the seven skills taught within the programme could be transferred from the sports hall into the classroom and if they had ever consciously transferred any of the skills. Gould and Carson (2008) highlighted a need for future research to explore the transferability of life skills. In order to gain some possible understanding, the participants completed a questionnaire at the end of the study that quantified their perceived learning of the seven life skills during the programme. The PE teacher involved in the study also completed a questionnaire in order to assess if the participants had witnessed an improvement in the use of the seven skills taught during the programme.

The intervention group each completed three questionnaires during the intervention, a pre, a post and a reflection questionnaire. The pre- questionnaire (see Appendix 2) was given to each participant prior to the intervention starting in attempt to understand how all of the participants in the intervention and comparison groups perceived their knowledge on each life skill. Each participant had to self-assess his own ability in each of the seven transferable skills. This questionnaire was based on a Likert scale of one to six. High scores indicated high levels of competence and low scores indicated low levels of competence.

The same questionnaire was also given to all of the participants at the end of the programme (the post questionnaire) in order to reassess their competence and learning of the seven transferable skills after the intervention. Once this was completed the boys were then given the same questionnaire again. The boys had to re-rate their perceived ability to use each life skill at the beginning of the programme. This was known as the reflection questionnaire. It was considered that 12-13 year old boys would not know what they had not been taught and therefore the scores on their reflection questionnaire may be a more realistic ability rating. Asking the participants to rethink their original self-assessments would identify if the participants has thought they had learnt anything during the intervention. The PE teacher involved in the study also completed a questionnaire (see Appendix 3) at the start and at the end

of the programme in order to assess if she had seen any change in the intervention groups ability to use the seven skills taught during the programme.

The use of the Likert scale questionnaire allowed the participants to chance to reflect on their use of the seven life skills prior, during and after the programme. It was important for this study to allow the participants to have a voice and this was deemed to be a strength of the self-assessment tools. Self-assessment ratings are notoriously suspect, particularly in this study as increases in self-confidence may have led to false or inflated perceptions and it is also possible that the boys just wanted to please the researcher. However, the boys' perceptions were an essential aspect of TAP. Whilst the participants discussed the use of the life skills during the interviews, it is possible that the questionnaire made it easier for them to rate their ability to use the skills. The questionnaire also allowed all of the participants to rate themselves using the same scale and in that respect the questionnaire provided a standardised measure. However, despite using the same scale, the same ratings may not have had the same meaning for all of the participants. For example, a rating of four on the questionnaire may have meant the same as another participants rating of five or six.

The questionnaire did also have a number of weaknesses. Whilst the questionnaire was piloted before the programmes started, the questionnaire was not a validated questionnaire. Unfortunately no existing, validated questionnaire would have generated information on the participants' perception of the seven life skills used on the programme. The data from the questionnaire was only intended to be used in triangulation with the qualitative data and provide a reference point on the boys' perceptions of their life skill learning. It is possible that some participants struggled to reflect and therefore were not able to accurately rate themselves or did not fully understand the nature and purpose of the test. This could have resulted in the participants just ticking a number irrelevant of its meaning. It may also have been the case that the participants wanted to please the researcher and selected numbers to which showed their ability to use the seven life skills during the programme regardless of their actually ability. Finally, the life skill questionnaire only determined the participants' perceived ability to use the life skills, it did not measure frequency of life skill use or the boys' perception of the importance of each life skill.

4.7 Other Data Collection Methods

Other data collected in this study include demographic data and academic performance scores over one full academic year. For a breakdown of ethnicity and free school meals and a full discussion on how academic grades were calculated, see Chapter 3. Figure 4.3 provides an overview of the various methods used in Phase 1, Phase2 and Phase 3 of data collection.

4.8 Piloting

Although it was not feasible to pilot the whole programme due to time constraints and the longitudinal nature of TAP, various elements of the programme did receive piloting. The life skill questionnaire was piloted on twenty children of a similar age (11-13 years old) in order to determine understanding and clarity. Discussions about the participants' ability to use each skill took place prior to them completing the questionnaire. This was to ensure their verbal indications of skill use matched the number they indicated on the questionnaire. For example, if the participant perceived himself to be really good at teamwork and marked a 6 on the questionnaire, then understanding had been established. However, if the participant perceived himself to be really bad at teamwork and marked a 5 on the questionnaire, further time was taken to discuss the questionnaire with that participant, until it was apparent an understanding of the questionnaire had been reached.

The semi-structured interview scripts were piloted on three children (11-13 years old) to also determine understanding and clarity. The interview guide underwent minor changes due to the information obtained during the pilot phase. The first focus group with the intervention group acted as a pilot but no changes were made to the focus group script as a result of the pilot.

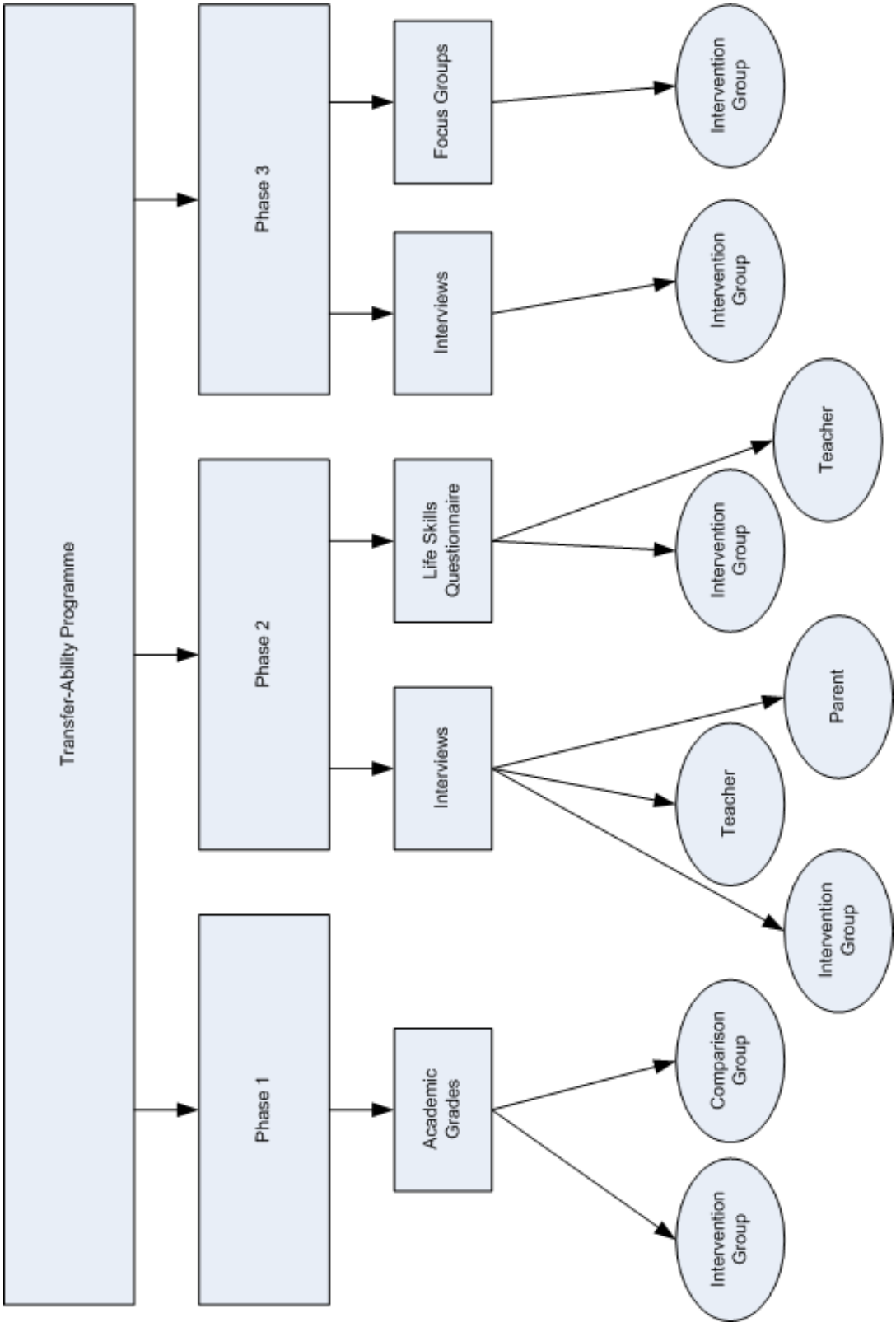

Figure 4.3 – Data Collection Overview

Data collected in Phase 1, Phase 2, and Phase 3 of the Transfer-Ability Programme

4.9 Validity, Reliability, Trustworthiness and Triangulation

Reliability and validity are processes that help to determine the rigour of the research and the trustworthiness of the data collection and research findings (Morse *et al*, 2002; Roberts *et al*, 2006). Morse and colleagues (2002) even go as far to state that without rigor research is worthless. They also recognise that many authors believe validity and reliability to be issues pertaining to quantitative research whilst others have adopted a new criteria and new terminology for establishing validity and reliability within qualitative research. Riege (2003) argues that despite the many advantages of case study research, the issues of establishing validity and reliability still remain in doubt.

Merriam (2009) maintains that many writers argue validity and reliability should be considered *from a perspective congruent with the philosophical assumptions underlying the paradigm.* This has resulted in many conceptualisations existing, with various authors stating different criteria for establishing the quality of qualitative research. Lincoln and Guba (1985) proposed truth-value, transferability, consistency and objectivity. Yin (2009) uses a four criteria model in order to judge the quality of qualitative case study research: construct validity, internal validity, external validity and reliability. Terms such as credibility, transferability, dependability and confirmability have recently been replaced by terms such as internal validity, external validity, reliability and objectivity that have now become widely adopted in qualitative research (Merriam, 2009).

Although many authors such as Lincoln and Guba (1985) and Yin (2009) have established their own terminology and concepts the basic premise is essentially the same. The main question that must be addressed is can the findings be trusted? Validity, reliability, trustworthiness, and triangulation were used in order to establish quality and rigour during TAP and to ensure the trustworthiness of the data.

4.9.1 Validity

Validity is a subtle concept compared to reliability (Roberts *et al*, 2006). Validity is about what we are measuring and whether it is close to what we intended to measure (Roberts *et al*, 2006). Various types and the number of ways in which validity can be analysed exist (Bassey, 1999). The most common forms of validity include the differentiation between internal and external validity. However not all

researchers/authors are in favour with the issues of validity in qualitative research. Bassey (1999: 74) writes *the concept of reliability and validity are vital concepts in surveys and experiments but not in case study research* and Maxwell (2005) argues that understanding is a more fundamental concept of qualitative research than validity.

The main difficulty when establishing validity is the issue of researcher bias (Maxwell, 2005; Roberts *et al*, 2006). Controlling for the effect of the researcher is essential for non-bias findings, however eliminating researcher influence is often impossible and the aim then becomes to understand and productively use any researcher influence (Maxwell, 2005). In order to reduce reactivity or researcher bias when analysing the interviews several steps were undertaken. These included not asking leading questions, voice-recording all interviews and video-recording all focus groups. All interviews and focus groups were transcribed verbatim (Maxwell, 2005). The intervention group participants were also involved throughout the whole process and not just at the data collection stage. This helped to inform the design of the study, allowed the researcher to gain an in-depth understanding of boys and reduced bias at the final data collection phase and facilitated an accurate interpretation of the data.

4.9.2 Reliability

Reliability refers to whether a particular research technique will yield the same results if applied repeatedly to the same object (Lewis, 2009: 7). However, reliability is more easily achieved in quantitative studies than qualitative studies. Reliability is problematic in social science studies as human behaviour is not static nor is it always generalisable. It is also problematic to replicate and generalise case study research, as it is a singular study in which behaviours may not be apparent in other studies. Lincoln and Guba (1985) suggest an alternative to reliability in qualitative research; consistency. This suggests that replication is not the vital issue but rather that outsiders should be able to make sense of the results, if given the same data;.

However in an attempt to make qualitative data reliable and achieve consistency, several suggestions have been made within the literature. Based on the work of Steinar Kvale, Lewis (2009: 8) developed seven areas that need to be addressed in order to establish researcher reliability:

- **Analysis methods:** are the interviews interpreted by the same or different researchers?
- **Answer reliability:** did the researcher ask the same question in a different way?
- **Coder reliability:** are the interviewers asking the same thing in an unbiased manner?
- **Critical checking:** are all researchers asking critical questions to test the interviewee's story?
- **Follow-up questions**: are all the researchers using follow-up questions to ensure the collection of thick, rich data?
- **Leading questions:** are interviewers avoiding leading questions that may solicit a desired response, but not necessarily an accurate response?
- **Transcriptions:** are interviews and observations being transcribed correctly and accurately.

In order to address the seven areas listed above, the author of this study was solely responsible for conducting all of the semi-structured individual interviews and focus group interviews and responsible for transcribing the data. Leading questions were avoided throughout all interviews, critical questions were asked and follow-up questions were asked when necessary. The interview data was transcribed verbatim, and the transcripts were checked several times in order to ensure the transcriptions were accurate and correct.

4.9.3 Trustworthiness

External validity is concerned with the generalising of results, which is often problematic with case study research. Case study research, as already discussed, is a study of singularity and uniqueness and therefore is not wholly concerned about external validity. As an alternative and solution to external validity within case study research Lincoln and Guba (1985) developed the idea of trustworthiness. Bassey (1999) has since developed a more simplistic set of eight questions based on Lincoln and Guba's (1985) term of trustworthiness. However, Bassey (1999) acknowledges that not all researchers will need to address all eight questions. Table 4.2 (see below)

shows the eight notions of trustworthiness and the actions undertaken within this study to ensure the trustworthiness of findings

Table 4.2 – Eight Questions of Trustworthiness

Based on Bassey's (1999) eight questions of trustworthiness

Eight Questions of Trustworthiness	Responses
Has there been prolonged engagement with data sources?	Yes. The intervention lasted one full academic year.
Has there been persistent observation of emerging issues?	Yes. The intervention involved weekly observation during sport sessions. Staff observations were also recorded during academic hours.
Have raw data been adequately checked with their sources?	No. Raw data was not checked with the participants due to their academic time restraints and school holidays.
Has there been sufficient triangulation of raw data leading to analytical statements?	Yes. Data was gathered in various forms including surveys, focus groups, individual interviews, and an interview with a parent and a teacher, observations and academic attainment scores.
Has the working hypothesis, or evaluation, or emerging story been systematically tested against the analytical statements?	Yes. The key findings of this study emerged from the raw data.
Has a critical friend thoroughly tried to challenge the findings?	Yes. Both supervisors and peers constantly reviewed and challenged the findings.
Is the account of the research sufficiently detailed to give the reader confidence in the findings?	Yes. Extensive coding of data and use of quotations to provide thick descriptions of the case should provide the reader with sufficient detail and confidence.
Does the case record provide an adequate audit trail?	Yes. Detailed personal/researcher notes and session plans were recorded each week. All focus groups and individual interviews were voice recorded and transcribed. The school, in a excel spreadsheet, provided all demographic and academic performance grades in order to provide an adequate audit trail.

4.9.4 Triangulation

Triangulation is a technique used to improve the validity and reliability of qualitative research by using two or more methods of data collection in one study, usually combining qualitative and quantitative methods. Therefore, triangulation is a process of converging lines of enquiry (Yin, 2012). If various methods of data all indicate the same phenomenon it ensures that the data collected are not simply

artefacts of one method (Creswell, 2009). Total reliance on one data method may result in bias or distort the researchers' sense of reality (Cohen *et al*, 2011). It is argued that the appropriate use of a mixed method design and data triangulation increases the validity and reliability of the data collected.

Cohen and colleagues (2011) recognise that not all researchers are in favour of triangulation. Many researchers appear critical of triangulation and reject the notion that triangulation increases validity and reliability. Seale (1999) argues that even if data collected from various methods all indicate the same findings, how do we know that they are right? Logically we cannot guarantee that all the data is correct which leads to the question- is triangulation a necessary process in research?

This study however, sought to increase validity and reliability by triangulating the data collected through various methods. The flexibility of case study research gives perfect opportunity for triangulation. Case study research easily allows more than one type of data collection to be used, which in turn, has the potential to increase validity and reliability. According to Yin (2009), a case study that compares data utilised through various methods of collection can achieve triangulation. In TAP that was achieved by using a questionnaire, focus groups, individual interviews, observations and academic attainment scores.

4.10 Qualitative Data Analysis

The analysis of qualitative data is a process that involves making sense out of written and verbal data. This involves an in-depth process of preparing the data and then interpreting the collected data. Figure 4.4 shows the steps taken in order to interpret and present the data within this study. Creswell (2009) however, recognises that the diagram can be somewhat misleading as the figure is a linear process that works from the bottom up. This is not how the analysis process always occurs; rather a more interrelated approach is usually common. This means the stages can often occur in different orders and in practice it is often more interactive (Creswell, 2009). The analysis process is usually split into six steps (Creswell, 2009):

1. Organising and preparing the data
2. Reading through all the data in order to gain a general sense
3. Begin detailed analysis through a coding process
4. Produce a description of categories or themes for analysis
5. Represent the data in qualitative narrative- provide descriptive information
6. Interpret the information and draw conclusions

TAP used Creswell's (2009) model during the analysis phase of the qualitative data. Content analysis is defined as "the process of identifying, coding, and categorizing the primary patterns in the data" (Patton, 1990: 381). This method was employed to provide a descriptive account of the themes that emerged from the participants in the intervention group, the PE teacher, and the parent. TAP used a similar analysis technique (i.e., interviews) as previous studies in the field (e.g., Gould *et al*, 2007).

After transcribing the data verbatim, transcripts were then read and reread to ensure familiarity. Segments of meaningful text or raw data units were identified and coded. Grouping together similar items of raw data then created interrelated themes/ categories. Two researchers (the author and supervisor) then deliberated and discussed the meanings and interpretations of the themes until an agreement was reached. These findings were then checked and discussed with a third researcher to ensure complete agreement was established.

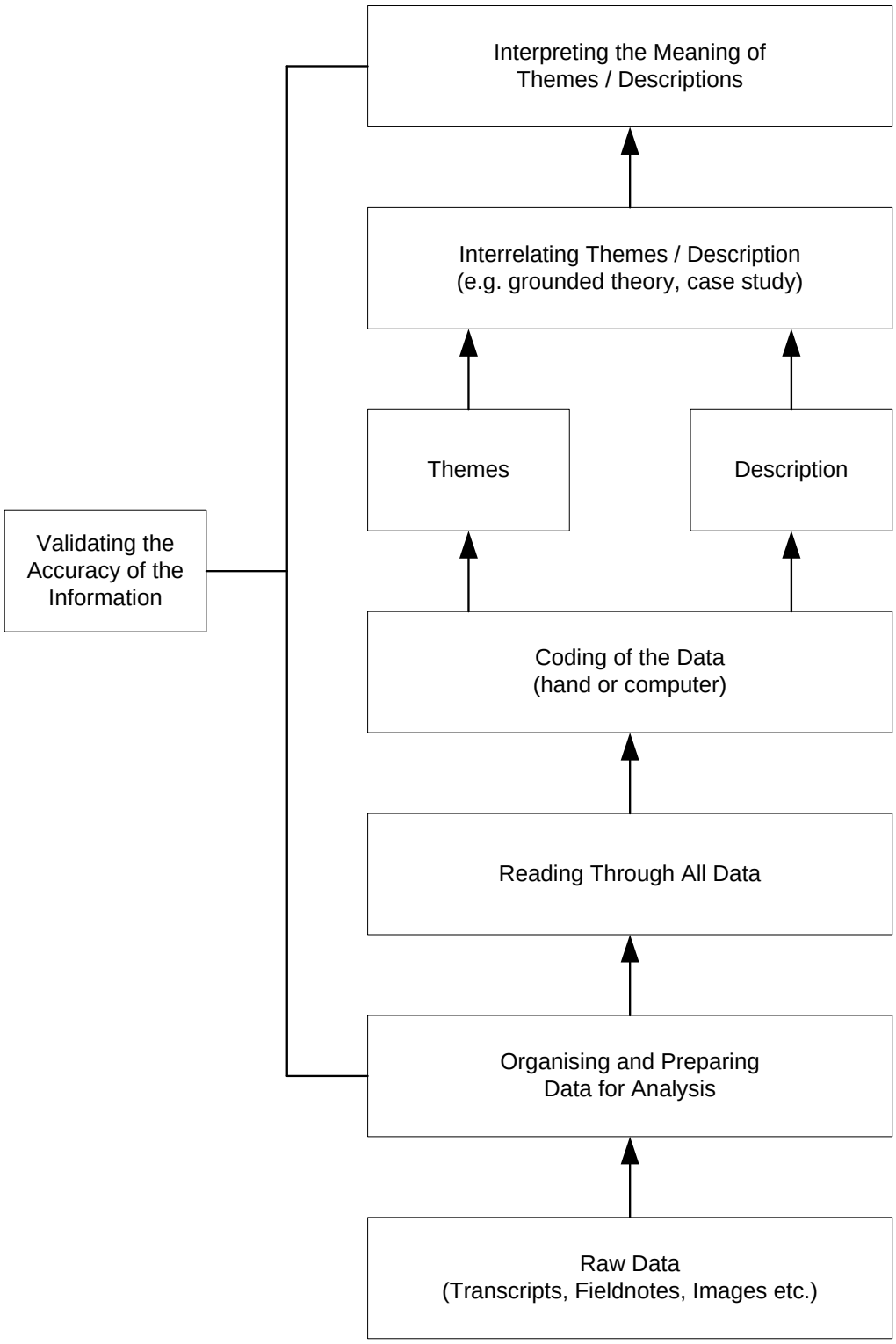

Figure 4.4 – Data Analysis Model

Data Analysis in Qualitative Research (Creswell, 2009: 185)

4.11 Quantitative Data

Due to the nature in which TAP was conducted, the results have been presented as three separate phases. In order for the statistical results to be clearer to the reader, the specific quantitative data procedures undertaken at each specific phase are discussed within the results chapter (see Chapter 5, Phase 1 and Phase 2).

4.12 Ethics

Ethics are important as they form the basis of professional conduct for researchers (Creswell, 2012). Bassey (1999) recognises that in many case studies there will be a clash of ethical values especially if the researcher deems risk taking to be necessary when collecting data. Research ethics can be divided into three categories: i) respect for democracy, ii) respect for truth, iii) respect for persons (Bassey, 1999). Skelton (2008) states ethics are an extremely important part of research and must be specifically sensitive when working with young people. There is now a growing body of research that promotes using children as participants, something that was previously not recommended (Kirk, 2007).

Children as young as preschool age have successfully been used in recent research and are now deemed to be reliable sources of information (Hill, 2005). Kirk (2007) identifies three issues that must be addressed when conducting research with children: i) power relations, ii) informed consent, and iii) confidentiality. Prior to any data collection, the ethics committee for the School of Sport and Education approved this study (see Appendix 4) as it met the ethical guidelines outlined by Brunel University.

4.12.1 Confidentiality

Confidentiality is essential for all research and is seen as the primary safeguard against unwanted exposure (Christians, 2011). Christians (2011: 66) cites the work of Reiss who believes *the single most likely source of harm in social inquiry is the disclosure of private knowledge considered damaging by experimental subjects.* However confidentiality becomes a hazy concept when conducting research with children under the age of 18. The issue of child protection means that confidentiality should not be totally guaranteed when conducting research with children as the disclosure of information which implies that the child or another child

is at 'risk' must be reported (Kirk, 2007). In such instances it is important, and often seen as a duty, to report such information on to relevant authorities. During TAP all appropriate measures to ensure confidentiality were undertaken where possible. The names of the participants were changed in order to assure anonymity. The school was also not revealed in order to maintain the confidentiality of the school and the participants.

4.12.2 Informed consent

Participants must voluntarily give informed consent and their decision to participate must be based on full information (Christians, 2011). Homan (2002: 26) stresses that the following criteria must be met in order to appropriately obtain informed consent:

Informed:

- That all pertinent aspects of what is to occur and what might occur are disclosed to the subject.
- That the subject should be able to comprehend this information

Consent:

- That the subject is competent to make a rational and mature judgement.
- That the agreement to participate should be voluntary, free from coercion and undue influence.

Initial consent was obtained from the school in order to conduct a Case Study piece of research within the school. Information about the study was provided, as it is essential in order that participants and gatekeepers make a decision whether to participate in the study or not based on the full details of the study (Creswell, 2012). All participants were informed of the study in both written and verbal forms. The parents/guardians were informed of the study in written forms from the school and the author (see Appendix 5). In order to avoid associated detrimental effects of labelling, participants were merely informed that the study was interested in measuring the impact of participation in the intervention on academic learning. It was deemed a potential risk to inform participants and their parents/guardians that

they had been identified as underachieving in at least one core subject (see Chapter 3 for further clarification and detail).

Written assent (see Appendix 6 for a copy of the assent form) was obtained from every participant and parental/guardian consent (see Appendix 7 for a copy of the consent form) was obtained for each participant. Parental consent was needed, as all the participants are children. The term 'children' means any individual under the age of 18 (Skelton, 2008). As well as gaining parental consent, it is important that child participants are deemed competent enough to participate and are able to provide assent. Morrow and Richards (1996: 95) state that *a competent child is one who achieves a sufficient understanding and intelligence to enable his or her to understand fully what is proposed.* Morrow and Richards (1996: 95) also go on to say that a *competent child also has sufficient discretion to enable him or her to make a wise choice in his or her own interests.* Guidelines suggest that as a 'rule of thumb', children aged 14-15 have sufficient maturity and are capable of providing informed consent (Kelly and Halford, 2007).

The participants in this study all attended mainstream education and were deemed at an age (12-13 years) where they were sufficiently competent and able to make an informed decision whether to participate and to provide assent (Kirk, 2007) but parental consent was also necessary. In order to ensure that participants were freely and voluntarily agreeing to participate in the study (Kirk, 2007) a cooling off period was used. This was to prevent any of the participants feeling pressured or coerced to agree to participate due to the researcher being present (Creswell, 2012). Hill (2005) states a child may be vulnerable to persuasion and therefore no child should be pressurised into taking part in research. Research suggests that although children often feel pressured in participating, they are also less likely to withdraw from studies due to the power relationship (Kirk, 2007; Morrow and Richards. 1996). Power relations are more acute in research conducted by adults that use children as participants and therefore researchers must be acutely sensitive to children's needs and their agenda (Hill, 2005; Kirk, 2007; Morrow and Richards. 1996). Therefore the most appropriate action was to allow a week cooling off period for all participants to discuss their participation with peers and family members if they so wished and make an informed, non-pressurised decision.

4.12.3 Withdrawal from the study

The participants and parents/guardians were informed they could withdraw from the study at any point without providing reason(s). This information was included on the research information sheet (see Appendix 5) and was verbally expressed on numerous occasions. Participants were informed at the selection stage of the recruitment process that they could withdraw at any time and that participation was on a voluntary basis. No participant was placed under pressure to participate at any stage of the intervention. As suggested by Kirk (2007) the participants were regularly asked if they still wished to be involved in the study and were reminded that they did have the right to withdraw at any time.

4.12.4 CRB disclosure and coaching experience

Prior to TAP commencing, the author of this study undertook a full Criminal Records Bureau (CRB) Enhanced Disclosure check. A CRB disclosure highlights if the applicant has/ does not have any criminal convictions. In this instance, the criminal record was clear, entitling the author to work with vulnerable groups, such as children. The author also had extensive experience (over eleven years) of coaching/teaching young people between ages of 2-19 years old in a variety of sports, and multi-skills and youth development programmes.

4.12.5 Permission to publish

The school, the participants in both the intervention comparison groups and parents/guardians were informed both verbally and in writing that the study would be presented as a PhD thesis and the findings would be disseminated in a variety of formats such as journal publications, presentations and written reports.

4.13 Summary

To summarise, this chapter began by highlighting the paradigms that shaped TAP and the reasons for using a mixed methods approach. Chapter 4 explained the methodological procedures undertaken during this study and clarifies the qualitative analysis protocol used and the use of content analysis. The quantitative analysis is discussed in further detail in Chapter 5. This chapter then concluded with a

description of the ethical issues addressed in TAP such as ethical approval, informed consent from guardians, assent from the participants and the right to withdraw. This chapter did not include information such as participant information, access to the participants, and the Case Study school as these were presented in Chapter 3. Chapter 5 will present and discuss the findings of TAP.

5 RESULTS AND DISCUSSION

The results of the intervention are presented in three separate phases with each phase addressing a specific research question. These phases do not represent specific time frames, for example the data collected in phase two did not commence directly after the data from phase 1 was complete. Both qualitative and quantitative data were collected over the duration of the programme. Rather than separating by time points, each phase relates to specific research questions that lead the reader through a logical process in order to enhance understanding of the study.

5.1 Phase 1

The notion that physical activity is linked to increases in intellectual abilities is not a new concept; however researchers are still trying to determine the scope of such a claim. The ancient Greeks were most likely the first to speculate a relationship but more recent research has failed to reach a consensus on the extent to which sport and physical activity may have an impact on academic achievements. There are many plausible channels in which involvement in sport activities can improve academic performance but equally plausible is the argument that sport involvement may result in time for academic activities being sacrificed, resulting in a negative impact on academic performance. With underachievement continuing to be defined as a moral panic in the UK's educational system, it is essential a remedy be found. Could well-delivered sport and physical activity be the solution to a dilemma academics, teachers, parents and politicians are desperate to eradicate?

Recent research has mainly been conducted in the United States where the culture and structure of school sport is different to the UK, it should be assumed that the striking differences mean results cannot be generalised across nations. Therefore the purpose of phase 1 was to determine if an after-school sports programme had any impact on male underachievement within the UK education system and addresses the following research question:

- What is the impact of a sports programme on participants' academic performance in Science?

5.1.1 Methods

5.1.1.1 Data collection

Phase 1 only presents the quantitative data from the study. Academic grades were obtained by the school's standard assessment procedures for each participant in the intervention and comparison group. Assessment results for Science were taken from the end of Year 7 (before the study began- time point one), at the end of Term One (time point two) and at the end of Year 8 (when the study had finished- time point three). Academic grades were converted into plus or minus numbers depending whether the participants were under or above teacher prediction. A number and a letter represent each grade level, for example, 5c is the lowest grade within the grade 5 band. Progression from a 5c is a 5b and then a 5a; the next level would then be a 6c as so on. A score of 0 indicated that teacher prediction had been met and therefore the participant(s) was not underachieving. If a participant was achieving a 5c but was predicted a 5a then this was represented as -2, as the participant was two sub-levels below the teacher's prediction. If a participant was predicted a 5c but achieved a 4a it was represented as -1. Although the student had missed the level five grade, a 5c is the next level up from a 4a. If a participant was overachieving, this was represented as a positive number. For example, if the participant was predicted a 5c but achieved a 5a it was represented as +2 as the participant was two sub-levels above the teacher's prediction.

5.1.1.2 Statistical analysis

An initial analysis was conducted using mixed design analysis of variance (ANOVA) to establish a main effect for group (intervention group and comparison group) and a group x time (pre, post and reflection) interaction effect. In case of significance, a further one-way repeated measures ANOVA was used to identify differences between the intervention and comparison group over the three time points. As significance was established in the one-way repeated measure ANOVA, follow up independent samples t-tests with Bonferroni corrections were conducted between groups for each time point; time point one, time point two and time point three. Finally, to specifically identify the time points at which a significant difference occurred between the intervention group and the comparison group, a paired samples

t-test with Bonferroni correction was conducted. Using an ANCOVA to control for differences in baseline scores between the intervention and comparison group was considered but several limitations in the data did not make this test a viable option. This was mainly due to the practicality issues of conducting research in an educational setting (see limitations section for further details). Data were analysed using SPSS statistical software (v18.02, SPSS Inc., Chicago, USA). When analysing the results of SPSS the *p*-value was set at 0.05. A Bonferroni correction is a method used to counteract the increased risk of type 1 errors when conducting multiple comparisons. This was calculated by dividing 0.05 (the *p* value) by 3 (the number of comparisons) in order reduce the risk of a type 1 error occurring. The Bonferroni correction was set at 0.16.

5.1.2 Results

Table 5.1 – Means and Standard Deviations

The table shows the means and standard deviations for the intervention and comparison groups' academic grades

Time Point	Intervention Group- Mean (sd)	Comparison Group- Mean (sd)
1	-2.26 (0.99)	-1.52 (0.52)
2	-0.47 (0.9)	-1.2 (0.68)
3	0.47 (1.07)	-0.4 (0.91)

When exploring whether the data meet the assumptions of parametric statistics, it was identified that while there was homogeneity of variance across conditions, the data were not normally distributed. Field (2013) suggests that ANOVA and t-tests are robust enough statistics to withstand the violation of the normality assumption, therefore, the data were analysed using parametric statistics.

5.1.2.1 Academic performance

Academic performances at the start of the programme (time point one) for the intervention and comparison group were -2.3 and -1.5 respectively (Fig. 5.1 illustrates the mean academic grades and standard deviations for the intervention and control group). After term one (time point two) the intervention group saw a greater improvement than the comparison group (-0.5 and -1.2 respectively). At the end of the programme (time point three), academic performances for the intervention and comparison group were 0.5 and -0.5 respectively. Although both groups show a significant improvement in academic performance, the intervention group superseded teacher prediction whereas the comparison group remained below teacher prediction.

Results from the 2 x 3 mixed ANOVA (see Fig. 5.2) revealed a significant difference between the two groups over the three time points. There was a significant main effect for group ($F(_{1,\ 32})$ = 54.34, $p < 0.05$, η_p^2 = 0.63), and a significant interaction effect for group x time ($F(_{1,\ 32})$ = 11.36, $p < 0.05$, η_p^2 = 0.26). Follow up one-way repeated measures ANOVAs revealed a significant main effect for time, for both the intervention group ($F(_{1,\ 32})$ = 46.2, $p < 0.05$, η_p^2 = 0.72), and the comparison group ($F(_{1,\ 32})$ = 16.79, $p < 0.05$, η_p^2 = 0.55). This highlights that there was a significant difference in both the intervention and comparison group over time but still did not highlight at which time point the differences occurred. Follow up t-tests indicated that there was a significant difference between the intervention group and the comparison group at time point one (t (32) = 2.77, $p < .05$, d = 1), time point two (t (32) = 2.59, $p < 0.05$, d = 4.4), and time point three (t (32) = 2.52, $p < 0.05$, d = 0.88). This means the intervention group had achieved a significantly higher grade at time point two and time point three, despite being significantly below the comparison group at the start of the programme.

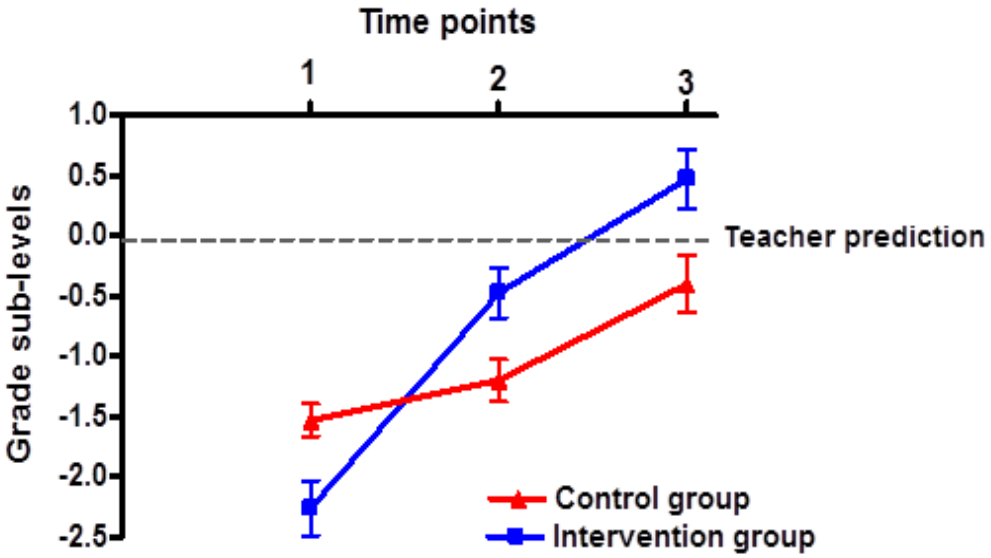

Figure 5.1 – Trajectory of Academic Grades

Academic performance trajectory measured by school assessment at the start of the programme (time point 1), after term one (time point 2) and at the end of the programme (time point 3).

A paired-samples t-test for the intervention group showed a significant difference between time point one and time point two (t (18) = 5.58, $p < 0.05$, d = 1.88), between time point two and time point three (t (18) = 4.53, $p < 0.05$, $d = 0.95$), and finally between time point one and time point three (t (18) = 8.47, $p < 0.05$, d = 2.62). This means the intervention group had significantly improved their academic grades at the end of term 1 (time point two) and at the end of term 3 (time point three). The paired sample t-test for the comparison group showed a significant difference between time point two and time point three (t (14) = 3.6, $p < 0.05$, $d = 1$), and time point one and time point three (t (14) = 4.8, $p < 0.05$, $d = 1.6$), but there was no significant difference found between time point one and time point two (t (14) = 2.65, $p > 0.05$ (0.19), $d = 0.55$). This means that the children in the comparison had not made a significant improvement in their academic performance at the end of term 1 (time point two) but had made a significant improvement to their grades by the end of term 3 (time point three).

By the end of the programme, the intervention group results revealed that 12 out of the 19 students in this group had reached teacher expectation and were no longer deemed to be underachieving. Interestingly, six students from the intervention

group exceeded teacher predictions, with one student achieving a whole grade higher than their predicted grade. In the comparison group, four out of the fifteen students reached teacher expectation by time point three but no students within this group exceeded teacher prediction. Furthermore, by using group data the intervention group were deemed to be no longer underachieving at time point three whereas the majority of the comparison group were still classified as underachievers by the school.

To summarise in general terms, the results indicate that the intervention group had made a significant increase in academic performance, whereas the comparison group did not make a significant difference in academic performance between time point one and time point two. During time points two and three, the intervention group and the comparison group made significant improvements in their academic performance. The intervention group continued to improve at a greater rate than the comparison group which indicates the programme had a sustained significant impact on academic performance throughout the whole academic year. By time point two, the intervention group had a higher academic performance grade than the comparison group had at time point three.

5.1.3 Discussion

The purpose of this phase of the study was to monitor the trajectory of academic performance across one full academic year for both the intervention and comparison group. Both groups made a significant improvement in academic performance across the academic year. This finding was expected as the predicted progression throughout an academic year for the Case Study school is between one or two sub-levels of one grade. By attending school for one full academic year both groups have made the recommended improvement in their academic performance set by their school. However, the intervention group improved to a higher level of attainment than the comparison group despite having a lower baseline performance. The intervention group started the programme at a lower sub-level grade than the comparison group. This provided some limitations (see Chapter 7) but by the end of term one the intervention group, although still underachieving, had achieved a higher sub-level grade than the comparison group.

Marsh's (1993) Athletic Participation (AP) model could explain why a sports-based intervention had a positive impact on academic performance. The AP

model suggests that an engagement in school sport activities is likely to lead to increased pupil identification and involvement with the school, and increased pupil commitment to work towards defined academic goals. The model supports the notion that engagement in sport activities can be linked to increased time spent in school, increased feelings of belonging and increased attention from certain staff members. Students however, must learn to balance extra-curricular activities and academic workload for such activities to be beneficial (Lipscomb, 2007).

The findings of TAP suggest that a sports-based programme, conducted on school premises may have had a positive impact on the participants' identification and engagement with the school. The qualitative data presented in Phase 2 and Phase 3 indicates that the participants enjoyed increased attention from teachers, received fewer detentions throughout the programme and increased the time they spent in school. The sport-sessions were conducted once weekly which also made it manageable for the boys to balance the extra-curricular activity with their academic workload.

Existing research literature is unable to provide conclusive evidence that the debate on school sport participation and educational achievement continues. It is argued that sport participation often has no impact on academic performance, some even go as far to say that school sport participation may hinder academic performance (Dawkins, Braddock II and Celaya 2008; Zeiser 2011). The results from this study support the findings of Chomitz and others (2008), which shows a positive relationship between sport participation and academic performance. The findings show a significant change in academic performance, supporting the notion that an after-school, sports based life skills programme can be used as a tool to positively impact on academic performance as long as the programme is designed to do so. Sport has long been recognised as a vehicle to facilitate positive youth development but there is nothing special or magical about sport (Petitpas *et al*, 2005). Sport programmes can be good for academic performance providing they are designed to facilitate positive changes in academic performance.

Overall, the findings revealed that academic performance significantly increased for both groups, however this was to be expected, as the participants should be making on average a one-to-two sub-level improvement per full academic year. This finding suggests that the programme did have some impact on the intervention groups' academic grades. How the programme had influenced academic

performance was examined. Phase 2 seeks to challenge the caught assumption by demonstrating that life skills should be *taught* in sport, especially with children and young adolescents.

Phase 2

5.2 Introduction

The statistical results previously presented (see Chapter 5, Phase 1) revealed that the participants in the intervention group significantly improved their academic grades (over one school year) to above teacher prediction. This suggests TAP had some influence on academic performance. This phase sought to examine how TAP had an impact on academic performance by exploring the perceptions of the participants (in the intervention group) life skill learning during the programme: addressing a significant gap in life skill transfer literature (Gould and Carson, 2008). In particular, phase 2 examines the participants' perceptions of the programme and highlights their thoughts on like skill transfer. Researchers such as Jones and Lavallee (2009) and Weiss and colleagues (2013) have recently explored the perceived life skill transfer with their participants but research on perceived learning and transfer of life skills with adolescents is limited. In summary, this phase of the study hoped to answer the following research questions:

- What is the impact of a sports programme on participants' perceived use of the life skills?
- To what extent (if any) do the participants perceive they transferred the life skills from the sports hall into other school domains?

5.2.1 Method

5.2.1.1 Data collection

This phase of the study used a mixed method design using a questionnaire and semi-structured interviews. The questionnaire was based on a six point Likert scale in which the participants rated their ability to use each of the seven skills taught on the programme. The intervention group participants completed three questionnaires during the intervention, a pre, a post and a reflection questionnaire. The questionnaire (see Appendix) was given to each participant prior to the intervention starting in attempt to understand how all of the participants in the intervention and comparison groups perceived their ability in relation to each life skill. Each participant had to self-assess his own ability in each of the seven

transferable skills. High scores indicated high levels of competence and low scores indicated low levels of competence.

The same questionnaire was also given to all of the participants at the end of the programme (the post questionnaire) in order to reassess their competence and learning of the seven transferable skills after the intervention. Once this was completed the boys were then given the same questionnaire again. The boys had to re-rate their perceived ability to use each life skill at the beginning of the programme. This was known as the reflection questionnaire as it was considered that 12-13 year old boys would not know what they had not been taught and therefore their reflection may be a more realistic ability rating. Asking the participants to rethink their original self-assessments would identify if the participants thought they had learnt anything during the intervention. The PE teacher involved in the study also completed a questionnaire at the start and at the end of the programme in order to assess if she had seen any change in the intervention groups ability to use the seven skills taught during the programme.

5.2.1.2 Questionnaire analysis

One-way repeated measures ANOVAs were conducted on each individual life skill, this was to test for a main effect of time (pre, post and reflection). If a significant main effect was present, post hoc t-tests with Bonferonni correction ($p < 0.016$) were conducted. All statistics were performed using SPSS statistical software (v. 18.0, SPSS Inc., Chicago, USA).

5.2.1.3 Interviews

Semi-structured interviews were conducted with the intervention group participants during the last two weeks of the school year. One parent and the female P.E teacher involved in the study were also interviewed, in order to gain a more in-depth and insightful understanding of the learning and transfer processes that may have occurred during the programme. A semi-structured interview guide was developed based on previous research such as the work by Jones and Lavallee (2009) and Camiré, Trudel and Forneris (2012), however in an attempt to gain understanding on perceived learning and transfer, probes were used to gain more

detail. Topics addressed in the interviews were based on previous intervention research and aimed to explore perceived life skill learning and examine the impact and extent of life skills on academic grades. Questions such as: what did you think about the seven skills? Did you transfer the life skills? How did you feel about transferring the skills? How do you think you transferred the skills? and Did you learn other skills by being a part of the programme. The interviews lasted between 30 minutes and 45 minutes and were voice recorded.

Finally, in the introduction to the interviews, all participants were informed and assured of the complete confidentiality and anonymity of their responses. This was deemed most important as the interviews were conducted on school premises. Whilst this was convenient for the students and provided them with a familiar and safe environment, some participants were initially concerned that their teachers may be given information arising from the interviews.

5.2.1.4 Interview analysis

All interviews were transcribed verbatim and checked with audio files to ensure accuracy. The author and two supervisors read and sorted the data set and content analysis was used to identify specific themes. Interpretations were then made about the meaning of specific quotes.

In order to determine methodological rigour, validation checks were conducted throughout the study, and data was triangulated from several sources including school staff, parents, and the participants. The author was also present in the school one afternoon every week, for one academic year. This enabled a trusting rapport to develop between the researcher and the participants. The intervention group were respectful throughout the programme but they did not see the researcher as a member of school staff, which allowed for honest and trusting interview responses. For example, the boys openly discussed the subjects where they were struggling academically and behaviourally. The boys would often provide insight to the relationships they had with various teachers. These comments were not forth coming initially but as the programme progressed the boys began to place trust in the author and understood that their comments would not be reported back to staff members.

5.2.2 Results

Table 5.2 – Means and Standard Deviations

The table shows the means and standard deviations for the life skill questionnaire data completed by the intervention group

	Mean	Standard Deviation
Discipline		
Pre TAP	4.58	1.31
Post TAP	4.79	1.03
Reflection	3.47	1.07
Teacher Pre	3.42	1.43
Teacher Post	5.16	0.83
Communication		
Pre TAP	5.16	0.96
Post TAP	5.37	0.68
Reflection	4.03	1.14
Teacher Pre	3.53	0.96
Teacher Post	4.74	0.65
Teamwork		
Pre TAP	4.84	1.26
Post TAP	5.05	0.85
Reflection	3.79	1.08
Teacher Pre	3.68	0.95
Teacher Post	4.68	0.67
Self-confidence		
Pre TAP	4.79	1.44
Post TAP	5.11	0.88
Reflection	3.68	1.53
Teacher Pre	3.42	1.07
Teacher Post	4.74	0.93
Concentration		
Pre TAP	3.79	1.08
Post TAP	4.47	1.07
Reflection	3	1.37
Teacher Pre	3.47	1.39
Teacher Post	4.37	1.12
Persistence		
Pre TAP	4.95	1.28
Post TAP	5.05	0.85
Reflection	3.58	1.22
Teacher Pre	3.42	1.17
Teacher Post	4.42	0.90
Goal Setting		
Pre TAP	4.47	1.37
Post TAP	0.51	1.09
Reflection	3.05	1.18
Teacher Pre	2.26	0.56
Teacher Post	3.74	0.81

When exploring whether the data meet the assumptions of parametric statistics, it was identified that while there was homogeneity of variance across conditions, the data were not normally distributed. Field (2013) suggests that ANOVA and t-tests are robust enough statistics to withstand the violation of the normality assumption, therefore, the data were analysed using parametric statistics.

5.2.2.1 ANOVAs

The results from the one-way repeated measures ANOVAs revealed a significant main effect of time for each of the seven variables; discipline ($F_{(2, 36)} = 15.76$, $p < 0.01$, $\eta_p^2 = 0.47$); communication ($F_{(2, 36)} = 19.06$, $p < 0.01$, $\eta_p^2 = 0.51$); teamwork ($F_{(2, 36)} = 10.02$, $p < 0.01$, $\eta_p^2 = 0.36$); self-confidence and positive self-talk ($F_{(2, 36)} = 10.34$, $p < 0.01$, $\eta_p^2 = 0.37$); concentration ($F_{(2, 36)} = 18.6$, $p < 0.01$, $\eta_p^2 = 0.51$); persistence ($F_{(2, 36)} = 25.24$, $p < 0.01$, $\eta_p^2 = 0.58$); goal setting ($F_{(2, 34)} = 19.05$, $p < 0.01$, $\eta_p^2 = 0.51$). As the results all indicated a significant main effect of time, post hoc t-tests were conducted to identify the source of any differences. This means that the ANOVA tests revealed all seven of the life skills significantly changed during the programme. Therefore further tests (post hoc t-tests) were conducted in order to identify where these changes/differences were made.

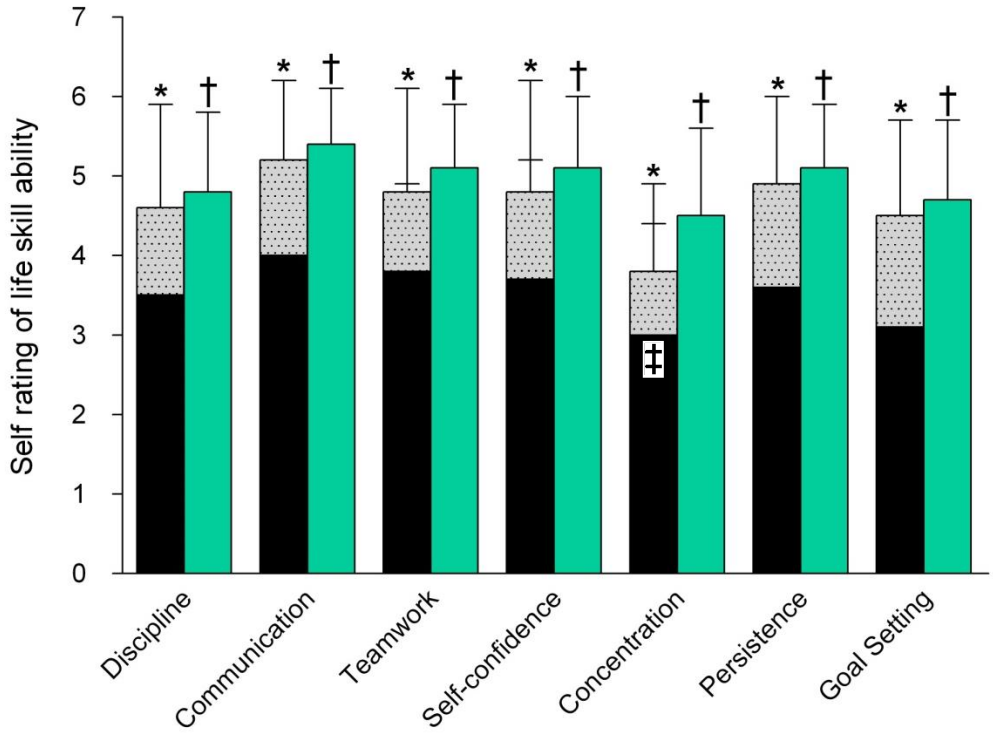

Figure 5.2 – Perceived Ability to use Life Skills

Participants' perceived ability to use life skills pre TAP ( ), post TAP ( ) and reflectively ( ). *significant difference between pre and reflection (p< 0.016), † significance difference between pre and post (p< 0.016), ‡ significance difference between pre and post (p< 0.016)

5.2.3 T-tests and interview data for each life skill

5.2.3.1 Discipline

Statistical analysis for discipline showed a non-significant difference between pre and post scores (t (18) = 0.747, p > 0.016 (0.47), η_p^2 = 0.03, *d* = 0.18) but a significant difference between reflection and pre (t (18) = 3.75, p < 0.01, η_p^2 =0.44, *d* = 0.93), and reflection and post (t (18) = 8.55, p < 0.01, η_p^2 = 0.802, *d* = 1.26). This means there was no significant difference in the boys perceived rating of discipline between the start of the programme and the end of the programme. However, there was a significant difference between the boys' reflection score (based on their ability to use the skill at the start of the programme) and at the end of the programme. The teacher also rated a significant difference between the boys' discipline pre and post scores (t = 5.38, p < 0.01, η_p^2 = 0.62, *d* = 1.54). The school identified discipline as a major problem with the majority of the participants. Teaching staff believed most of

the participants lacked discipline mainly in the classroom and the participants were regularly put into after school or lunchtime detentions. However, post TAP results show improvements in discipline across the school. When asked to provide an example of using discipline in other academic environments, one participant said:

> I learnt to be more disciplined and in lessons, it was easier because teachers are quite strict. I was in History and my teacher is strict and he was getting angry and shouting even though I hadn't done anything. The discipline sessions helped me and then I just didn't say or do anything back to him and it benefitted me that way (P11).

Another participant provided a more universal example to all his lessons by saying 'I learnt that discipline is needed in every lesson because if you don't listen to teachers then you won't get far with your work' (P3). Several of the students identified discipline as an important skill to use in the classroom in order to improve behaviour. The school monitored detention prevalence and found that during TAP the number of detentions significantly reduced. Year on year data shows a group detention reduction of 44%. The participants also perceived their ability to use discipline to significantly improve during TAP. It appeared the participants quickly engaged with the concept of discipline and enjoyed the martial art lessons used in order to practice and facilitate learning opportunities. Results indicated that the participants used discipline generally across the whole school environment.

5.2.3.2 Communication

Statistical analysis for communication showed a non-significant difference between pre and post scores ($t(18) = 1.29$, $p > 0.016$ (0.22), $\eta_p^2 = 0.08$, $d = 0.26$) but a significant difference between reflection and pre ($t(18) = 4.03$, $p < 0.01$, $\eta_p^2 = 0.47$, $d = 1.08$), and reflection and post ($t(18) = 5.55$, $p < 0.01$, $\eta_p^2 = 0.63$, $d = 1.47$). This means there was no significant difference in the boys perceived rating of communication between the start of the programme and the end of the programme. However, there was a significant difference between the boys' reflection score (based on their ability to use the skill at the start of the programme) and at the end of

the programme. The teacher also rated a significant difference between the boy's pre and post communication scores (t = 4.15, $p < 0.01$, $\eta_p^2 = 0.49$, $d = 1.49$). The school identified communication as an issue with many of their students, especially between students and staff. During TAP the participants explored various methods of communication and examined how each method could be used within the classroom. However, it was verbal communication that the participants worked on more extensively. When asked to provide an example of when they had transferred the skill into the classroom, one student said 'in maths I talk to the people around me to help them workout the answers, or sometimes they'll help me' (P10).

Another student, whose communication in the classroom was deemed to regularly be problematic and the cause of many of his detentions, provided the following example, 'I learnt to talk and not shout, let other people speak. I used it in maths, we do group work' (P16). The results showed a perceived significant improvement in the use of communication and participants were able to provide examples of transfer. Observations throughout TAP also showed an improvement in communication between both themselves and with the researcher.

5.2.3.3 Teamwork

Statistical analysis for teamwork showed a non-significant difference between pre and post scores (t (18) = 0.81, $p > 0.016$ (0.43), $\eta_p^2 = 0.03$, $d = 0.2$) but a significant difference between reflection and pre (t (18) = 3.12, $p < 0.01$, $\eta_p^2 = 0.35$, $d = 0.9$), and reflection and post (t (18) = 4.15, $p < 0.01$, $\eta_p^2 = 0.49$, $d = 1.3$). This means there was no significant difference in the boys perceived rating of teamwork between the start of the programme and the end of the programme. However, there was a significant difference between the boys' reflection score (based on their ability to use the skill at the start of the programme) and at the end of the programme. The teacher also rated a significant difference between the boys' pre and post teamwork scores (t = 4.14, $p < 0.01$, $\eta_p^2 = 0.49$, $d = 1.23$).

Teamwork was an interesting concept when introduced to the participants. They were aware that teamwork is an important skill in P.E and they knew how to use the skill during P.E but had a limited insight on how teamwork could be used in the classroom. The concept of teamwork was discussed in detail during the first three weeks of the programme and despite the initial lack of knowledge, the participants

perceived their ability to use teamwork within the school domain to significantly improve during TAP. One participant provided a specific example of transfer by saying 'in R.S [Religious Studies] we did a big poster in groups of 6 and we had to work as a team to complete different parts of the poster' (P10). Another participant provided a specific example of using teamwork but also discussed using teamwork in a more general sense, he said:

> I learnt that I need to work with other people around me and not just think that the work needs to be done by me. I have used teamwork when we had to do a task as a group about trying to untangle ourselves by holding hands (P3).

All the participants thought teamwork was important in P.E but many of the participants felt the opportunities to use teamwork within the classroom were limited. Several thought their teamwork had improved more in P.E lessons than it had in other academic domains. This suggests that transfer of skills is not only linked to the modelling and practice of life skills but is also dependent on schools providing opportunities for students to use the skills in other academic situations.

5.2.3.4 Self-confidence and positive self-talk

Statistical analysis for self-confidence and positive self-talk showed a non-significant difference between pre and post scores (t (18) = 1.1, $p > 0.016$ (0.29), $\eta_p^2 = 0.06$, $d = 0.28$) but a significant difference between reflection and pre (t (18) = 3.16, $p < 0.01$, $\eta_p^2 = 0.36$, $d = 0.74$), and reflection and post (t (18) = 4.12, $p < 0.01$, $\eta_p^2 = 0.49$, $d = 1.18$). This means there was no significant difference in the boys perceived rating of self-confidence and positive self-talk between the start of the programme and the end of the programme. However, there was a significant difference between the boys' reflection score (based on their ability to use the skill at the start of the programme) and at the end of the programme. The teacher also rated a significant difference between the boys' pre and post self-confidence and positive self-talk scores (t = 4.76, $p < 0.01$, $\eta_p^2 = 0.56$, $d = 1.32$).

A number of the participants initially identified themselves as having high self-confidence but when self-confidence was discussed and practiced, they realised

that they actually doubted themselves more than they thought they did. Positive self-talk was a new concept for a large proportion of the group and a skill which several of the participants initially failed to use in the sports hall. Getting the participants to use this skill required regular motivational encouragement both from the researcher and the football coach. When asked to provide examples of transfer a few participants identified self-confidence and positive self-talk as a skill that helped to improve their academic performance:

> I learned not to get frustrated in the things that you do. It helped me in Spanish like I would not remember the words and it would be very difficult, I used positive self-talk and it helped (P6).

As well as helping in classroom activities, many of the participants identified using self-confidence and positive self-talk before and during examinations: ‘ I used self-confidence in a maths exam and I had to believe in myself to get a good grade and I moved up two sub levels. The self-confidence pushed me’ (P5). Self-confidence was a life skill that could be used in any academic domain and the participants had many opportunities to practice positive self-talk. Despite self-confidence and positive self-talk being the last skill the participants learnt in the programme they still perceived their learning and use of the skill to be statistically significant.

5.2.3.5 Concentration

Statistical analysis for concentration showed a significant difference between pre and post scores (t (18) = 3.15, $p < 0.01$, $\eta_p^2 = 0.36$, $d = 0.63$), a significant difference between reflection and pre (t (18) = 3.53, $p < 0.01$, $\eta_p^2 = 0.4$, $d = 0.65$), and reflection and post (t (18) = 5.27, $p < 0.01$, $\eta_p^2 = 0.6$, $d = 1.2$). This means there was a significant difference in the boys’ perceived rating of concentration between the start of the programme and the end of the programme. There was also a significant difference between the boys’ reflection score (based on their ability to use the skill at the start of the programme) and at the end of the programme. Concentration was the only life skill to show a significant difference between pre and post scores. The teacher also rated a significant difference between the boys’ pre and post concentration scores (t = 3.392, $p < 0.01$, $\eta_p^2 = 0.39$, $d = 0.72$). During TAP, the

importance of concentration was discussed and the participants were introduced to techniques they could use to prevent becoming distracted, especially in classroom environments. The following participants identified the transfer of TAP and provided the following examples:

> Before TAP I was not concentrating well in lessons I was not achieving well in my lessons. When we did all the sessions I became more confident in concentrating on the tasks we did so I took what I learnt in TAP to my lessons and became good at concentrating well (P13).

> Full concentration was required in my test to remember facts to help get a good grade. I have succeeded in Maths, Science, Art, ICT and Geography by being at the top of the class because I concentrate (P12).

> I learnt not to get distracted in some of my lessons when someone is being naughty, I would laugh or start to talk to the person that is being disruptive. I don't now (P6).

Concentration was a skill many of the participants initially did not appreciate. When discussing the use of concentration in the early stages of TAP, the vast majority of the participants claimed lessons were too boring and this caused them to become distracted. Rock climbing sessions were used in order to highlight the importance of focusing and staying on task. Concentration was a skill all the participants identified as a skill they thought they had learnt and successfully transferred into the classroom. Concentration is a skill, which could be implemented in all areas of school life, and this provided the participants with many opportunities to practice and transfer the skill.

5.2.3.6 Persistence

Statistical analysis for persistence showed a non-significant difference between pre and post scores (t (18) = 0.52, $p > 0.016$ (0.61), $\eta_p^2 = 0.01$, $d = 0.09$) but

a significant difference between reflection and pre (t (18) = 4.75, $p < 0.01$, $\eta_p^2 = 0.56$, $d = 1.1$), and reflection and post (t (18)= 7.64, $p < 0.01$, $\eta_p^2 = 0.76$, $d = 1.41$). This means there was no significant difference in the boys' perceived rating of persistence between the start of the programme and the end of the programme. However, there was a significant difference between the boys' reflection score (based on their ability to use the skill at the start of the programme) and at the end of the programme. The teacher also rated a significant difference between the boys' pre and post persistence scores (t = 3.78, $p < 0.01$, $\eta_p^2 = 0.44$, $d = 0.96$).

During the interviews at the end of TAP, several participants identified using persistence to keep going when they struggled to answer difficult questions in a variety of classes and environments. One participant answered: 'It's needed, to be persistent when you fail to answer questions correctly. History, Spanish, PE are where I need to use persistence the most' (P12). Other participants identified situations that were more specific when they had used persistence: 'In Science. In my tests I was struggling because it didn't come anything into my head so I thought and said I CAN DO IT, KEEP TRYING and it helped me (P19) and: 'I learnt to keep going and not give up easily. In Drama, I have to use it by correcting myself if I don't do the stage direct or speak in the correct tone or voice' (P17).

Persistence was a word the vast majority of participants had no concept of at the beginning of TAP and during the programme many of them acknowledged persistence was a skill that they did not often use. One participant actually said 'at the beginning of this [TAP] I wasn't very persistent at all. This helped because in a classroom, when I find something hard now I keep trying' (P11). Encouraging the participants to stay on task and use persistence in the sports hall was difficult. They often found the frisbee tasks tedious and that it was difficult to stay focussed: 'When we used persistence in Frisbee it was hard because you had to keep doing the same thing and try improve and not give up' (P18) or found persistence difficult to understand: 'Persistence like I didn't really understand that' (P8).

However, many of the participants did begin to appreciate the value of persistence and the rewards it brought (i.e. acknowledgement and praise from teachers), especially in the classroom. When discussing the benefits of persistence one participant said 'on my report it showed that I have improved, a couple of times, two teachers have said I have improved' (P6). He also acknowledged that persistence

had allowed him to achieve higher grades: 'I feel proud that I can do it, that I can achieve more in lessons and get higher levels'.

5.2.3.7 Goal Setting

Statistical analysis for goal setting showed a non-significant difference between pre and post scores (t (18) = 0.87, $p > 0.016$ (0.39), $\eta_p^2 = 0.04$, $d = 4.05$) but a significant difference between reflection and pre (t (18) = 4.34, $p < 0.01$, $\eta_p^2 = 0.51$, $d = 1.1$), and reflection and post (t (18) = 6.52, $p < 0.01$, $\eta_p^2 = 0.7$, $d = 3.12$). This means there was no significant difference in the boys perceived rating of goal setting between the start of the programme and the end of the programme. However, there was a significant difference between the boys' reflection score (based on their ability to use the skill at the start of the programme) and at the end of the programme. The teacher also rated a significant difference between the boys' pre and post goal setting scores (t = 5.99, $p < 0.01$, $\eta_p^2 = 0.67$, $d = 2.18$).

Goal setting was a skill that many of the participants had not used regularly within school. The majority of the participants initially struggled to set themselves a short-term goal. Most goals were long-term and career orientated such as 'I want to be a footballer' or 'I want to be a lawyer'. TAP introduced the students to short-term goals and how to set, maintain, review and achieve goals. A number of the participants had identified goal setting as a skill they had learnt and used in school, one participant said:

> I learnt that there is always something you can achieve. Before the programme started, I was not able to give goals to myself. During the sessions, I built my confidence in being able to make short-term goals and achieving them in the long term (P13).

Another participant identified exactly why he had set himself a goal: 'I used goal setting in the classroom to set up my goal to behave' (P8). Despite the t-tests showing a significant change in perceived skill ability from the start of the programme to the end, a number of students believed that school did not provide them with sufficient opportunities to set goals. One participant said 'I think in lessons, I don't think I use it that much 'cause it depends on the topic you are doing

in your lessons I don't use them that much' (P7), another participant also agreed: 'like lessons are only an hour so I can't really use it' (P18).

5.2.3.8 Teacher, parent, and student comments

During the interview with a participant's parent, it was clear that her son had engaged well with the programme and had made big changes over the year. When asked what she thought of TAP she replied: 'It was amazing; it helped him so much, especially in his Science'. When ask to elaborate on how TAP had helped her son she said:

> I asked him when he came home like 'what you done today' and he would say boxing or I learnt this or I learnt a new activity that we won't do in usual P.E lessons and I asked him what it was about science and why his grades weren't as good and he said well I don't always find it interesting. I don't find the lessons interesting and I don't like the ways we are taught so I don't pay as much attention as I should admittedly, he actually said that and it seems that through giving him a range of activities and paying special attention and focus and him being engaged in different roots in the programme, it has helped raise the stats [grades] it's so obvious to me, I don't think, if the programme wasn't there then maybe, maybe he would improve but not as much (Parent 1).

When the female P.E teacher was interviewed about the programme, she also recognised there had been a change in attitude from the boys:

> To get these boys and some of them really are disaffected in lessons, this is quite a challenging group but to get them committed every Wednesday and numbers did blip sometimes but generally there is a consistent pattern with them and one of the students in particular, the change has just been amazing in terms of when we look at him at the start of the programme and

> we look at him now and the conversations we are having and he is, don't get me wrong he is still sent out of some lessons but it's a lot less and he is a big part of that 44% BTS [behavioural monitoring]being reduced (Teacher 1).

When asked why she thought the programme helped to facilitate transfer of life skills, the following response was given:

> You have to make a connection with a curriculum area and not just P.E 'cause that's the danger because they think P.E is a sport and it's a practical thing that is separate from other lessons, the success behind this project was definitely taking the sport sessions, using it to say right we're having a focus group now, look at where this affects you on the curriculum or look at where this affects you in science and making that connection and making that link and that was the thing, if you keep it within the P.E department and if you're raising attainment in P.E then fine but if you are looking at impacting on something across the whole school or the wider curriculum you need to, the students need to be able to establish connections because they can't, they won't make connections themselves (Teacher 1).

Developing links and connections between life skill use in the sports hall and in the classroom was an important part of TAP. The focus groups conducted throughout the programme played a major role in developing the participants transfer links and they all recognised the importance of the focus groups in the end of programme interviews. When asked if they thought the focus groups had any impact, the following responses were given:

> Yeah the feedback 'cause it shows like if you've learnt in the lesson like if you knew what you was doing in the sessions like to succeed, if you didn't really understand goal setting you could in the focus groups say I didn't really understand this so you understand better…. (P2).

> Umm, yeah because you got to empathise with people, see things from different perspectives and see how other people use them and it could affect how you use it, like you could use it, the communication incorrectly and someone else says they use it this way, it could affect you to use it in the right way (P7).

> Umm, yeah a bit 'cause people like, people say how they achieved their stuff, like all the team work and stuff and like then yeah, in lessons and not just in sport and P.E, just like all their lessons together (P3).

One participant simply said 'hearing other people's ideas made you think about it more' (P4). It appears the interaction and sharing of ideas amongst peers was an effective way of discussing and providing information on transfer. It seemed the participants valued their peers comments and suggestions during the focus groups. Some of the participants who did not have their own ideas on transfer were able to listen to ideas from their friends and acknowledge that transfer could be achieved.

5.2.4 Discussion

The purpose of phase two was to examine if the participants thought life skills could be learnt through an extra-curricular sports-based programme. TAP investigated students' perceived learning of seven life skills taught over a yearlong intervention using both qualitative and quantitative data collection techniques. TAP allowed the participants' time to learn, practice, and transfer the life skills, it also sought to examine whether life skills are taught or caught.

This part of the study revealed some insightful findings in terms of how students perceive their ability and their perceived learning of the life skills taught during the programmes. Overall, results showed that the participants perceived their ability to use the seven life skills to have significantly increased during TAP. Interestingly, all the participants had overrated their perceived ability to use the skills at the beginning of TAP compared to their reflective ratings. The participants reported a significantly lower score reflectively than they had at the beginning of the

programme. This confirms initial fears that adolescents do not necessarily know what they have not been taught. Many of the boys rated themselves highly during the pre scores, particularly for their persistence and concentration. However, when they had to use the skills during TAP they realised they had overrated their ability to use the skill and found it difficult to practically apply the skills in the sport sessions. It was only with additional knowledge, modelling, practice and discussion of transfer did they efficiently learn and transfer the skills.

TAP has demonstrated that participants perceive they can learn life skills through sport participation but it can be argued that this is only the case as long as the programme is designed to facilitate such learning. As Danish and colleagues (2004) state there is nothing magical about sport; sport can only be used as a vehicle to facilitate life skill learning. The participants had not and would not have established the links between using skills in sport and in the classroom had they not been told about the skills. Many of the participants disliked the focus groups at the beginning of the programme. Focus groups were conducted every three weeks in order to discuss the life skills and how they could transfer such skills into other domains. A focus group was a new skill and it took several weeks before all the participants felt comfortable talking in front of their peers. However, the participants realised the value of the focus groups in aiding and facilitating transfer.

Transfer of life skills was an important aspect of TAP. The participants identified they had learnt the life skills in both the questionnaire and interviews and then provided examples to show they had used the life skills in other academic domains in the interviews. The participants mainly used the skills in classroom lessons but also used the life skills to improve their behaviour and attitudes around the school more generally. TAP showed that life skills can be transferred into other life domains if transfer is discussed and facilitated appropriately. All the participants individually acknowledged at least one skill they had learnt during TAP and had transferred into other academic or life domains. The focus groups appeared to allow the participants who had considered transfer and had ideas on how to use the skills in other areas of the curriculum to share their knowledge with their peers. Observations suggest the participants valued and listened to their peers and respected each other's suggestions on transfer more than they would have done if the researcher had imparted the same information.

It appears some of the life skills were more easily used within other academic domains than other skills. Many of the participants had used the sport sessions to practice using the life skills, had thought about the transfer process but then found the school provided them with little opportunity to use the skills, especially with goal setting. This was an interesting finding considering the school highlighted the skills as important for their students. Whilst the findings show significant perceived learning of all seven of the life skills, the results on transfer are a little less conclusive. Not all participants had transferred all of the skills with many of the students identifying goal setting and teamwork as particularly difficult skills to transfer. The fact that many of the intervention group participants failed to transfer goal-setting skills and found it a problematic skill to use in the classroom is of interest.

That is not to say sport cannot be used to teach goal setting. Successful programmes such as GOAL and SUPER place great emphasis on young people learning goal setting through sport and using the skill in other domains. The boys in TAP highlighted that they had learnt goal setting but some required more time to fully understand and transfer the skill and some needed more opportunities to use goal setting within the school environment. Whilst the ability to set goals may be an important skill for young people, it appears unlikely that young people are required to set goals in an academic environment on a daily basis. Overall, the findings of this study demonstrate that young people may experience difficulty using and transferring some skills and therefore one argues that teaching children a range of life skills may be more beneficial than focussing on a select few.

It is possible that schools and their PE departments could replicate the main elements of this study. Danish and colleagues (1993) found the main barrier to transferable skill programmes is that participants do not know and are not made aware of the skills they have learnt. The intervention group in this study recognised the skills they were being taught but had not realised they could be used within the classroom. The intervention group participants also acknowledged that it was not the sports that were deemed important to them but rather the skills they had learnt and the manner in which they learnt them. They agreed that making them aware and discussing such skills in focus groups helped them to transfer the skill into the classroom. It is possible that PE teachers could teach students important life skills that could be used across the curricular in an attempt to reduce underachievement.

5.3 Phase 3

5.3.1 Introduction

It is widely recognised that organised sport provides favourable conditions for young people to engage in positive youth development (Larson, 2000) and is a significant factor in adolescent's development of identity and self-esteem (Danish, Forneris and Wallace, 2005). Danish and colleagues (2005) state the greatest risk to young people is the belief that playing with a ball alone is enough to make a difference. Using sport to teach young people various life skills has become popular over the previous decade. However, little research has looked at the transfer of life skills into other academic and life domains. During the programme, the participants were encouraged to discuss transfer from the sports hall into the classroom on a regular basis. Therefore, this study sought to address a clear gap in the literature by qualitatively examining adolescents' perceptions of life skill transfer and establishing enablers and barriers effecting skill transfer from the sports hall into other academic domains.

5.3.2 Method

5.3.2.1 Data collection

Semi-structured interviews were conducted with eighteen of the intervention group participants during the last two weeks of the school year, as one participant was ill during this period and was not available for interview. All interviews were conducted in a private meeting room on the school premises and recorded using a digital voice recorder (VN-5500PC, Olympus Inc, Pennsylvania, US). In the introduction to the interviews, all participants were informed and assured of complete confidentiality and anonymity of their remarks. This was deemed most important as the interviews were conducted on school premises.

The participants were reminded of the definition of life skills and which skills were taught during TAP. They were also reminded of the transfer concept and encouraged to think of opportunities where transfer had occurred. After collecting verbal consent from each participant, the interview began by discussing what the participant thought about the TAP programme and why they attended each week. The interview then explored the life skills (i.e. which skills the participants' thought

they had transferred in to the classroom and which ones they thought they could not/ had not transferred). The participants were then encouraged to discuss the enablers and barriers of life skill transfer. Probes were asked throughout the interview to determine meaning and understanding and to explore various responses in more detail. Some of the probes used included; 'Tell me more about that?' 'How did that make you feel?' 'What do you mean?' or 'Have I understood that correctly?' Finally, to conclude the interview, provide a summary for the interview, and gain any additional information on the programme, the participants were asked: 'If you were asked to design a programme like TAP what would you have done differently?' Interviews lasted, on average, about 30 minutes but ranged from 25 minutes to 45 minutes.

5.3.2.2 Interview analysis

The interviews were transcribed verbatim. In order to ensure anonymity, all participants were assigned participant numbers (Participant One = P1 etc.). Interview transcripts were read and audio files checked numerous times in order to ensure accuracy. Interview data were then analysed using deductive-inductive content analysis (Miles and Huberman, 1994). This analysis was used as the interview questions were based on previous research; however, the categories involving life skill enablers and barriers emerged inductively from the participants' responses. Initially this involved reading and coding each of the 18 transcripts several times. Two members of the research team then read and sorted the data sets until raw data themes were developed. Content analysis was used to identify specific themes such as the barriers and enablers of transfer. Interpretations were then made about the meaning of specific quotes.

In order to enhance methodological rigour, validation checks were conducted throughout the study. The first author was also present in the school one afternoon every week, for one academic year. This enabled a trusting rapport to develop between researcher and participants. The participants were respectful to the researcher throughout the programme but they did not view the researcher as a member of school staff, which allowed for honest and trusting responses. In addition, TAP also triangulated data sources from school staff, parents, and the participants.

5.3.3 Results

Five higher order themes were identified (see table 5.1); i) support from peers, ii) pride, iii) opportunities, iv) rewards, and v) transfer experience. These themes are collectively known as the SPORT model. The barriers and enablers for each theme will now be discussed and illustrated with quotes.

Table 5.3 – SPORT Model

Theme analysis of interview data

Higher Order Theme	Second Order Theme
Support from peers	Focus groups Friendship
Pride	Sense of personal achievement Proud parents
Opportunities	To learning experiences To transfer opportunities Sport choices Teacher attitudes Boring lessons
Rewards	Motivation to learn Individual development School based rewards
Transfer experience	Ability to transfer skills Life skill use in another domain

5.3.3.1 Support from peers

Peer support was an enabler many of the boys identified, particularly the support they all gave and received during the focus groups. The focus groups provided the participants with several elements of Gould and Carson's (2008) model including support and reinforcement of transfer, as well as providing a forum to discuss initial failures or setbacks in relation to transfer and providing some

participants with an awareness and comprehension to transfer the life skills. One participant said:

> The focus groups helped people, like people said how they achieved their stuff, like all the teamwork and stuff and like then yeah, in lessons and not just in sport science and P.E, just like all their lessons together (P3).

Another said:

> You got to empathise with people, see things from different perspectives and see how other people use them and it could affect how you use it, like you could use it, the communication incorrectly and someone else says they use it this way, it could affect you to use it in the right way (P7).

The focus groups allowed participants to listen to each other. The interaction and sharing of ideas amongst their peers was an effective way of discussing and providing information on transfer. The participants appeared to value the comments, suggestions, and support from their peers during the focus groups. Some of the participants who did not have their own ideas on transfer were able to listen to ideas from their friends, comprehend transfer, and acknowledge that transfer could be achieved. One of the boys said:

> The feedback from the focus groups was great ‘cause it shows if you’ve learnt anything in the lesson, like if you knew what you were doing in the sessions to succeed, and if you didn’t really understand goal setting you could in the focus groups say I didn’t really understand this so…. (P2).

The focus groups allowed the intervention group participants to reaffirm their own ideas: ‘I got to hear like other peoples’ ideas and stuff like what they were thinking and if they were thinking the same thing as me’ (P10) and ‘hearing other people’s ideas made you think about the skill more and like, how I could transfer it’

(P4). Another participant thought the focus groups provided him with an opportunity to reinforce his learning of the skill: 'The focus groups helped us, we did them a couple of times so we learnt the skill off by heart, and like now we know all this stuff off by heart' (P8).

The participants also received peer support throughout the programme. It appears the participants also spoke to each other outside of the programme and supported each other in other academic environments. The boys saw TAP as a fun programme and as a gang they were proud to be a part of:

> I liked having something to do every Wednesday it was a routine. Something I knew would be safe to do, on the school grounds, no danger or and like if anything happens, if anything happened to me, umm I was with friends. I liked it, the programme, it was really fun and it made me feel like I was part of a big team and it was a really happy thing to do. If I was sad and it was a Wednesday I just knew I would be happy by the end of the day (P4).

And:

> Everyone in the group were always saying are you coming to TAP and everything, and everyone was really happy that they were going. It changed them so that everyone is really positive now. Before they were like ah I got science and now they are like yeah I got science and it's the same with other lessons. It's a different atmosphere around everyone (P8).

In summary, peer support was deemed to be an important enabler in promoting life skill transfer from the sports hall to the classroom. It seems the participants were able to help each other both during the focus groups and within the classroom environment. This appeared to provide the participants with confidence in their ability to use skills in other environments (Gould and Carson, 2008). In particular, it appears the boys found their peer's testaments of skill transfer to be more valuable in facilitating transfer than anything the coaches could have told them.

Initially the boys did not value the focus groups. During the first focus group it was clear that the participants found the environment embarrassing or intimidating. However, the boys quickly formed what they called ‘a good gang’, friendships were established, and interaction in the focus groups increased significantly. These themes support the notion that youths can develop meaningful relationships through their involvement in sport (Weiss *et al*, 1996).

5.3.3.2 Pride

The participants all demonstrated a sense of achievement during the interviews and this appeared to be a powerful enabler in facilitating and reaffirming life skill transfer. They felt proud that they had completed the yearlong intervention, learnt new skills and all the participants were all able to identify personal improvements: ‘I feel happy and a different person like I have achieved something new’ (P13). One participant was also proud that he had been selected to be part of the programme:

> I felt privileged to be part of the group because um, some people don’t get to do this kind of stuff like rock climbing and football and frisbee and goalball and all that kind of stuff and martial arts and American football. It feels good, you’ve done something for the whole year and you’ve been doing something like all these sessions and it’s not just a club, it is an actual thing that you got chosen for and I feel proud (P8).

The participants were also pleased that their achievements had been recognised by their parents. Some parents were happy with their child’s improvement in their academic work: ‘I was really happy that my grades improved and my mum and dad were really happy as well because I improved, they were really happy’ (P19). Whilst other parents were proud with the changes their child made in their behaviour: ‘My parents have said like they are proud of me because I am getting better instead of just being naughty in every single lesson’ (P3) and ‘My parents are really pleased with me. I used to get a lot of bad calls home saying I wasn’t doing my work and I was being disruptive but now I don’t get that many’

(P9). One participant was equally proud of himself for showing an improvement to the Boxing athlete/coach who worked with the boys on their goal setting:

> When Hannah came in the first time she said that by the next time we see her, by the next time she saw us, we had to improve in the lesson we are not good at or achieve the goal that we had set, and it showed in my report that I have improved. I feel proud that I can do it, that I can achieve more in lessons and get higher levels (P6).

Whilst another student was proud of the recognition he had gained from his teacher:

> My French teacher was like you've been much more concentrating and she said why is that? And I said it's because I have been doing sports science and she was like what's that so I had to tell her and I felt really proud (P17).

In summary, the participants felt proud that they had learnt a series of new skills and had been introduced to new sports such as rock climbing, martial arts and frisbee over a yearlong programme. The boys seemed particularly proud and pleased by the recognition they received from their parents. They became animated when discussing how pleased and proud their parents were at their achievements and this seemed to be a powerful enabler and reaffirmed to them the importance of continued transfer.

5.3.3.3 Opportunities

All of the participants highlighted learning opportunities they had experienced during TAP and discussed how this was an important enabler in facilitating transfer. When asked what they thought of the programme, one of the boys simply said: 'It gave us the opportunity' (P4). Awareness of current skills and knowledge of how and in what context skills were learnt were deemed to be important factors in life skill transfer according to Gould and Carson's (2008) model. TAP deliberately made students aware of their skills and discussed the context in which they could be used in sport and how that differed from using the skills in an academic environment.

The majority of the participants were able to recognise skills they had learnt in the sporting environment and then transferred into other academic environments, mainly the classroom. One participant said: 'I think it was a good experience and learning new sports and new skills, being confident and transferring it into your lessons and improving on your levels' (P13). Another participant also perceived TAP to have had an impact on his academic grades:

> Since the start I have been going up in grades and I am getting better at things because we were learning, every lesson we learn a new topic that the sport was linked to erm, like a word or a meaning like persistence or communication. That helped with most things that I do in the classroom (P5)

One participant in particular, discussed how the deliberate teaching of life skills facilitated transfer:

> TAP helped us not just in the sports, it tried to helped us in everything, in our lessons, it taught us stuff like discipline teamwork, concentration and stuff. Then we used it in class and yeah I didn't know a lot about things and when the coaches came in and told us then I started getting used to it and it was just easier to do it. I didn't know how to do all this stuff and now because TAP came here and told us what to do and how to do it it's now easier 'cause I like know how to do it (P3).

Whilst learning opportunities were a commonly mentioned enabler, it appears that in some cases the participants deemed the learning opportunities insufficient: 'We could've done more sessions on the same skill, like goal setting we could have done three weeks on that. Like more so we know exactly how to use it' (P9) and 'I didn't learn as much as I thought I would about self-confidence. If there was more sessions I could use it more often and it would be easier' (P16). Such comments suggest that some skills such as goal setting and self-confidence were more difficult to understand and the participants felt they needed more time in order to fully learn, understand, and transfer the skill into other environments.

As well as learning opportunities, several of the participants perceived the opportunities to transfer the skills in other domains as an important enabler. TAP made the students explore how the academic environment and the sporting environment provided situations in which the same life skills could be used. Participants need to be aware of the similarity of situations (Gould and Carson 2008) in order for transfer to appear feasible. One participant stated; 'I feel that I can use all the skills that we learnt and I can take them into lessons and not just in school but out of school as well' (P3).

More commonly expressed however, was the limitation to use certain skills in the classroom. The most frequently mentioned barrier was the lack of opportunities to use goal setting and teamwork outside of the sports hall. This was identified by one participant: 'Team work, I don't know how you could use that in the class unless it's with problem solving but you can't exactly use it anywhere else except for sports' (P1) and 'Some of the skills are harder like goal setting. I don't use them that much. I don't really set goals I just like do stuff. Yeah, either there's no opportunity or I just don't set them' (P16). One participant was more specific about the reasons why the school environment did not facilitate the transfer of goal setting: 'I use goal setting mainly I think for long term, so I think right I am going to do this, so like I plan it out in my head but lessons are only an hour so I can't really use it' (P18). This was an unexpected finding as the school had highlighted goal setting as an important skill for their students, yet the participants felt that the school environment provided them with limited opportunities to use and transfer such skills into classroom domains.

The use of sport as a vehicle to teach the boys life skills was what kept them engaged. Teaching the boys and allowing them opportunity to participate in new sports proved to be an enabler of life skill transfer. One participant in particular identified the use of sport as an important enabler:

> A lot of people like sport so like when you're doing sport they will be more interested and keep coming back, instead of doing theory work or writing stuff like people get bored, they aren't really persistent but with sports most people like sports so like they'll be more persistent with it and they won't get as bored as easily (P2).

Another participant said ‘it was better doing sports to learn the skills ‘cause it’s like P.E and it’s more fun as well’ (P11). However the choice of sports used in the programme may have had some impact on the learning of the life skill. The same participant also said ‘I wasn’t really good at frisbee and I would have put in some different sports, like basketball and I would have done tennis ‘cause I like them sports’. Although sport was seen as an important enabler that promoted engagement with the programme, when the boys were asked if they would do anything differently if they were asked to design the programme, they give the following responses:

> It depends if you like the sport ‘cause if it’s something that you don’t like then it would be harder to learn the skill. I would change the sport to something better maybe. Like American Football I didn’t like that as much as I thought I would so I would like change it to basketball or something (P16).

Another participant said:

> I am more into football so for persistence I would have probably have done football, most of it would probably have been to do with football because I like football or basketball but I liked the variety of different sports and new sports (P17).

The participants also identified some barriers concerning their engagement in school and the lack of opportunities to use skill when they become bored. Boring lessons were a common theme that many of the participants highlighted as a transfer barrier:

> ‘Maybe there is not the excitement, like in rock climbing there was like a thrill but in lessons when it’s just teachers speaking, it’s boring and there is nothing really intriguing then my mind does wander and I forget about the skills’ (P11).

One participant recognised that boring lessons are problematic but do not necessarily need to be a barrier: ‘In some of my lessons if it was really boring I wouldn’t listen but now I try to listen before I wouldn’t listen, and misbehave but now I don’t’ (P6).

Teacher attitudes within the classroom were also identified as a barrier to life skill transfer. Several of the participants felt that their teachers prevented them from using the skills effectively within the classroom:

> The teachers made it harder to use the skill, by, some teachers they deliberately ignore you whilst your hand is up in the air waiting to answer a question even though you’ve been there for like an hour using persistence and the person next to you has been there for five seconds and they answer them and then you get angry that you have been waiting more (P12).

One participant again highlighted some teacher’s attitudes as difficult whilst in the classroom but also explained how TAP had helped him to overcome this barrier:

> Some teachers would just like annoy you. They would literally ahh, they were so annoying yeah and they would, in your face, shouting for nothing and usually you would get angry and say something back and get a big detention or something but because of the discipline like, it made you think nah there is no point so it made me better and more aware of my teachers (P11).

In summary, TAP provided the participants with a new way in which to learn life skills and discussed the concept of life skill transfer from the sports hall into the classroom. The participants identified the learning and transfer opportunities provided during TAP as enablers as this equipped them with the knowledge of life skills, how to transfer such skills and how they could impact upon their academic work. However, several of the boys identified barriers such as insufficient learning of some life skills, limited opportunities to use the skills within the classroom environment and negative teacher attitudes. It appears that several of the participants found the concept of goal setting difficult and need more time to fully understand

and learn how to use the skill effectively. Many of the participants also stated they could not use goal setting or teamwork in the classroom.

5.3.3.4 Rewards

Intrinsic rewards and receiving extrinsic rewards appeared to be important facilitators of TAP. Gould and Carson (2008) identified that individuals must have a belief that the acquired skills are valued in other settings. Many of the participants talked about their motivation to learn new skills and participate in new sports as well as their belief that the skills could be used in other academic environments. This appeared to have a significant impact on their engagement with TAP as they felt that by using the skills they were experiencing a reward. For example, one participant said:

> I wanted to learn something new things like new sports and skills I haven't done before like goal ball and like self-confidence, like being confident in your lessons and sports, discipline to respect to each other and umm, team work to like work with other people, concentration to be like, to concentrate on your lessons and be good at the lesson (P13).

Other examples of the participants' motivation to learn were the rewards it brought in the classroom: 'It helped me with my lessons. I wanted it to go on 'cause it was kind of fun, it was enjoyable, the activities that were happening, and I knew that I was learning something and getting something from it' (P9) and:

> At first I wasn't really sure about it because, 'cause I wasn't really that confident but then when we started doing the first few sessions then I thought it was fun as well and it did help my skills as well so I just went and it helped overall' (P11).

This suggests that as long as the participants feel they are learning a new skill or sport and value the use of the taught skills in other settings, enjoy the sessions, and feel they are gaining some form of intrinsic rewards within the classroom, they will stay engaged in the programme.

Another enabler mentioned by many of the participants was the extrinsic rewards they received within the school environment. It emerged that the boys were aware of rewards they received when they transferred life skills into the classroom: 'In Spanish and English I was always bad but since the start of TAP I have started concentrating in every single lesson. I have just started to do my work and get merits and less detentions' (P3). Another participant said: 'Now if I get tired or can't be bothered, I kept on going so I could get a merit or something, if I self-discipline myself maybe I get praised or something' (P8). One of the boys simply said: 'I feel good 'cause teachers give you more merits; I get more merits off some teachers now' (P9).

Similarly, a different participant said:

> 'Before TAP I used to get a lot of detentions and get into trouble and now I can see that am more focused on task so I am getting more merits and less detentions with teachers. I feel good about myself 'cause I know I'm improving at school' (P2).

In summary, the participants identified several themes related to engagement that enabled transfer such as motivation to learn skills, the use of sport as a vehicle to teach life skills and individual development. However, sport choices and boring lessons were perceived as common barriers. When the participants were asked if they would change anything about the programme, several said they would change some of the sports. This was an individual preference and although it did not prove to be a strong barrier in this study, it might be worth considering in future studies.

5.3.3.5 Transfer experience

Many of the participants highlighted transfer experience as an enabler for future life skill transfer. Once the participants had successfully transferred one skill into a different academic environment, they were then motivated to transfer skills more regularly which was highlighted as an important factor in Gould and Carson's (2008) model. The participants were able to identify and recognise changes in their own behaviour and skill use and linked such changes to the programme. When asked

about using the skills in other academic situations, they provided the following responses:

> Well TAP helped because sometimes I would go to the lesson and not concentrate and try and be the class clown and make people laugh but now I think back to the session we had of rock climbing and I would say right we need to concentrate and get on with the work and now it happens easier (P2).

> I thought TAP was helpful towards my learning and my lessons at school. We learnt about persistence. Persistence is helpful in some of my lessons, really helpful in maths; I don't really give up easily on a question now. I have transferred that skill from sports into my lessons and it has helped a lot. I will keep on transferring it now (P7).

The boys felt that by participating in TAP and playing sport, the programme had helped facilitate improvements in the classroom, particularly with their ability to complete academic work. TAP also made them aware of their behaviour inside the classroom. One participant even spoke of feelings of relief: 'I felt relieved using the skills 'cause like without TAP I wouldn't be focusing as much as I can in lessons now, it's amazing' (P8). Making the participants aware of their behaviour and discussing life skill transfer proved to be a powerful enabler as all of the boys were able to identify aspects of improvement and they enjoyed the benefits that it brought.

5.3.4 Discussion

Phase 3 explored the perceptions of eighteen participants who had been involved in the intervention group. TAP was based on the perspective that sport alone does not teach youths life skills and therefore, TAP sought to deliberately teach the participants seven life skills through engagement in various sporting activities. Transfer is a fundamental characteristic of any life skill and a characteristic that requires more research (Gould and Carson, 2008); TAP aimed to provide some insight into this concept. More specifically TAP hoped to investigate the concept of

life skill transfer from the sports hall into the classroom, and identify any perceived enablers and barriers.

Five higher order themes were identified (see table 5.1):

- Support from peers
- Pride
- Opportunities
- Rewards
- Transfer experience

These five themes are collectively known as the SPORT Model. Gould and Carson's (2008) model was used as a framework and guided the transfer aspect of the programme. The model proved to be a useful tool at the design stage of TAP. It was discovered that providing a programme that will appeal to the target audience is an important enabler to any intervention and it was particularly important in TAP. The programme was a yearlong intervention and the participants engaged with the full programme mainly because they enjoyed coming to the weekly sessions. Several of the participants discussed how other students had asked about the programme and wanted to know if they could join. The member of staff involved in the programme has not anticipated the number of students that came knocking on her door, asking what they had to do to be part of the programme. The participants felt as though they had been a part of something special, a programme they were specifically chosen for, and this proved to be a powerful enabler.

A number of transfer barriers were highlighted such as boring lessons and negative teacher attitudes and whilst there are no easy solutions to these barriers, it is worth noting when designing future school-based, life skill interventions. Although there were examples and pockets of barriers identified with TAP, many more enablers were discussed and highlighted during the interviews. Future interventions, particularly school-based programmes should seek to eliminate many of the barriers identified in this study. Unlike the findings from previous research that suggest life skills do not necessarily need direct teaching (Jones and Lavallee, 2009), this study argues young teenage boys need to be systematically taught about life skills and they

need to explore ways in which such skills can be transferred into the classroom. The need for systematic teaching of life skills supports the earlier research by Danish and Nellen, (1997); Goudas and Giannoudis, (2008); Jones and Lavallee, (2009) and Petitpas *et al*, (2005). One can conclude that the participants in this study did not have any awareness of life skills that could be learnt through sport participation and transferred into other academic domains. This may change as the participants gain more experience but for younger participants we support the notion of systematic teaching of life skills.

The findings of this study can also be supported by the theoretical constructs of the 5 C's model devised by Lerner and colleagues (2005). For a more detailed discussion of the 5 C's model, see Chapter 1.1.2. The model suggests when all five concepts are present then a young person will demonstrate positive behaviour (Lerner *et al*, 2005). The first concept in the 5 C's model is competence. The results demonstrate that the participants in the intervention group where able to develop their cognitive competence by improving their academic grades (see Chapter 5.1). The perceived improvement in the use of the seven life skills (see Chapter 5.2) also suggests that the boy's in the intervention group may have also improved their interpersonal skills such as communication and teamwork.

The second concept within the 5 C's model is confidence. The boy's in the intervention group reported a significant improvement in their perceived ability to use and apply self-confidence and positive self-talk in various domains. Lerner and colleagues state that 'an internal sense of overall positive self-worth and self-efficacy' is important for positive youth development (Lerner *et al*, 2005: 23). The boy's increase in perceived ability to use the life skills suggests that they developed the confidence to use the skills during the programmes.

The third concept is connection. Lerner and colleagues state that positive bonds with people where both parties contribute to the relationship are important. When planning the programme, the author was aware that a relationship with caring adults was likely to be an important factor. Research by Petitpas and colleagues (2005) highlights that context (sport), internal assets (life skills) and external assets (caring adults) are important aspects of any life skill programme. The role of external assets was also deemed important by Weiss and colleagues (2013) and whilst we recognised the importance of this relationship, the boys themselves did not recognise it. They recognised the relationship with each other as important but did not

acknowledge any relationship with caring adults during the interviews. It is a limitation that this study did not explore that relationship further, however, the relationship with peers during the learning and transfer phase of life skills is an interesting finding that warrants further research.

The forth concept is character, where the respect for societal and cultural rules, possession of standards for correct behaviours, a sense of right and wrong (morality), and integrity are important (Lerner *et al*, 2005: 23). At the start of TAP it was clear, the behaviour of some of the participants' was not deemed to be acceptable by the school. The boys' perceived an increase in the ability to use discipline within the school environment. This was supported by evidence that the number of detentions that the participants in the intervention group received declined by 44% when compared to the previous year (see chapter 5.2). This suggests the boys established a greater respect for the school's norms, values and rules during the programme.

The fifth and final concept is compassion or caring where young people are able to demonstrate a sense of sympathy or empathy for others (Lerner *et al*, 2005). It was difficult to establish if the boys were able to display compassion or caring towards each other but what was apparent from the data collected in the interviews is the boys in the invention group became friends and they felt as though they are a part of group. This was articulated by one of the boy's who said: 'I was with friends. I liked it, the programme, it was really fun and it made me feel like I was part of a big team' (P4). The boys were encouraged to work together throughout the programme through the playing of various sports and the interactions in the focus groups. It was observed that friendships did develop in the early stages of TAP and this promoted the caring aspect that was important. The findings from this study support the notion that positive youth development will occur if the concepts included in the 5 C's are present and developed as part of a programme.

5.3.5 Chapter summary

This chapter has presented the results from the intervention in three separate phases. Phase 1 monitored the trajectory of academic grades for both the intervention group and the comparison group. The results found that the intervention group ended the programme above teacher prediction whereas the comparison group ended the year still below teacher expectation and therefore, still underachieving. This

suggested the programme had influenced the academic achievements of the intervention group. Phase 2 sought to explore whether the intervention group perceived to have learnt the seven life skills during the programme. The findings indicate that the intervention group thought they had learnt the life skills through sport and could use the skills in the classroom. Phase 3 examined the role of transfer in further detail and results show that the intervention group participants were able to identify enablers and barriers that facilitate or hinder life skill transfer. This information has not been explored before and provides insight for schools and clubs who look to use sport as a vehicle for positive youth development and life skill learning. The findings are discussed in further detail in Chapter 6.

6 CONCLUSION

A teacher effects eternity. They can never tell where their influence ever stops
(Henry Brooke Adams)

The purpose of this chapter is to provide an in-depth discussion of the findings presented in Chapter 5. Firstly, this chapter explains how this study extends current understanding and how TAP contributes to theory, research and practice. Secondly, recommendations for future research and practice are discussed, with a particular focus on PE teachers and PE teaching. Finally, the limitations of this study are highlighted.

6.1 Aims of the Study and Key Findings

The overarching aim of the Transfer-Ability Programme was to develop an understanding of the impact a sport based, life skills intervention may have on academic performance. More specifically, TAP wanted to determine whether young people can learn life skills through sport participation and then transfer the life skills into other academic domains, such as the classroom. These aims were then used to formulate four specific research questions. The key findings that relate to these aims are presented below:

Q1 What is the impact of a sports programme on participants' academic performance in Science?

- The intervention group made a significant improvement in academic performance between time point one and time point two, time point two and time point three, and time point one and time point 3 (see figure 5.1)
- The comparison group made a significant improvement in academic performance between time point two and time point three and time point one and time point three but not between time point one and time point two (see figure 5.1)
- All of the intervention group finished the academic year either at or above teacher prediction

- Four of the comparison group finished the academic year at teacher prediction but eleven finished the year still below teacher prediction and therefore, were still deemed to be underachieving

Q2 What is the impact of a sports programme on participants' perceived use of the life skills?

- The intervention group perceived to have overestimated their ability to use the seven life skills at the beginning of the programme
- The intervention group perceived to have significantly increased their ability to use all seven life skills during the programme

Q3 To what extent (if any) do the participants perceive they transferred the life skills from the sports hall into other school domains?

- The intervention group were able to provide examples of when they had transferred the life skills into the classroom or other academic domains
- Links between life skill use in the sports hall and the classroom should be made to help facilitate life skill transfer in young people

Q4 What factors do the participants' perceive to be enablers and/or barriers of life skill transfer from the sport halls into other school domains?

- The intervention group were able to identify five main themes relating to the enablers and barriers of life skill transfer. These themes were Support from peers, Pride, Opportunities, Rewards and Transfer experience
- The five themes are collectively titled the SPORT model

To summarise, this section began by restating the research questions that TAP sought to address and explore through various quantitative and qualitative methods. The key findings from Phase 1, Phase 2 and Phase 3 (see Chapter 5), were then presented. The next section of this chapter discusses the contribution that this study can make to existing theory and introduces the SPORT for transfer model.

6.2 Contribution to Theory

Gould and Carson (2008) identified eight directions for future research; these directions highlighted the need for:

1. Quantitative and qualitative research
2. The development of valid measures
3. An examination of programme type differences
4. Evaluation research
5. Longitudinal research
6. Studies focusing on identifying theoretical explanations for the life skill development through sport participation link
7. The utilization of experimental designs
8. The examination of the transferability of life skills

This study addressed several of above directions; in particular the following were addressed:

- Quantitative and qualitative research
- An examination of programme type differences
- Evaluation research
- Longitudinal research
- The examination of the transferability of life skills

This study used a mixed methods approach in order to gain a more holistic understanding of the intervention groups' perceived learning and transfer of the seven life skills taught during the programme, whilst still being able to statistically determine the impact TAP had on academic performance. As suggested by Gould and Carson (2008), no one method will allow us a full understanding due to the complexity of life skill learning and transfer. In fact, Gould and Carson (2008) state the use of one method alone will not advance knowledge and the use of one method could even be counterproductive to knowledge development. By using a mixed methods approach this study was able to quantify the impact on the participants'

academic performance and their perceived learning of the seven life skills pre, post and reflectively. This study was also able to qualitatively explore and understand the intervention groups' perceived transfer of the life skills from the sports hall into other academic domains, adding to the limited existing knowledge on life skill transfer. Data was collected from multiple sources, in order to determine if all data sources led to similar findings and/or understanding of the impact TAP had on the participants' academic performance.

TAP was designed after many hours of research on existing life skill programmes and utilised the findings from previous experimental designs. A deductive approach was initially used in order to design the aims, goals, and structure of the programme. In doing this research it was discovered that existing life skill programmes varied noticeably in their aims and structure. TAP was an intervention that sought to develop life skills with one main goal: to positively impact on academic performance. Although no previous studies could be found with the same overarching aim as TAP, the findings of this study concur with other studies (e.g., Danish, 2002a and Danish and Nellen, 1997) that suggest the deliberate teaching of life skills in an active environment is beneficial to the participants' learning.

It was highlighted in the literature review (see Chapter 2.3) that life skills can be either be taught or caught in sport environments. These opposing concepts suggest that life skills are either deliberately taught to sport participants or participants automatically pick up life skills whilst doing sport. The caught approach assumes that individuals do not need to be taught life skills and such skills can then be transferred and used in different domains and situations. The traditional idea of catching life skills was challenged under the assumption that life skills have to be taught in the same way as physical skills; through modelling and repetition (Danish and Nellen, 1997). The taught approach is essentially where the coach/teacher facilitates the deliberate learning of life skills to athletes/students. This study used the taught approach as it was deemed the most appropriate approach for young adolescents. It was thought that young people need guidance, to be taught what life skills are and how to use them in different life domains.

The deliberate teaching of life skills appeared to be an important aspect of TAP. The interview data revealed that both the participants in intervention group and the PE teacher involved in the study thought the taught approach had facilitated learning and transfer of the seven life skills. The PE teacher recognised that the

intervention group had understood and had some knowledge of the seven life skills being taught. For example, the boy's knew about discipline and teamwork and were able to explain how the skills could be used in PE lessons and sport environments.

Many of the boys had highlighted that they had already used some of the skills, such as teamwork, in PE on a regular basis. What the boys had initially struggled to understand was how the life skills used in sport and PE, could also be used in other academic lessons. This required the participants to learn the skills in more depth. For example the boys knew about communication but did not realise that communication included verbal, non-verbal, visual and written forms. They also knew about setting themselves targets and goals but did not realise goal setting included short-term and long-term goals and they did not know how to set realistic goals. At the end of the programme, the PE teacher said that an important aspect of the programme was that the boys were made aware of the links between PE and the rest of the curriculum and how life skills could be used across the school domain. This suggests that future programmes also need to include discussions regarding the transfer of life skills. The findings from this study indicate that the taught model alone is not enough. Future school based, life skill programmes should systematically teach life skills and facilitate discussions around life skill transfer

It is also possible that the boys in the intervention group caught various life skills by participating in the sporting activities. The boys may have learnt skills such as time management, commitment, and problem solving skills that were not part of the life skills taught in the programme. It could be that the intervention group just picked up or caught these skills through their participation without the skills being identified or discussed. Therefore, one argues that the taught aspect of the programme may not have been the only method that the intervention group learnt skills. However, it is likely that the taught method was the most effective way of facilitating life skill transfer. When the boys in the intervention group were asked, during the interviews, if they had learnt any other skills, they unanimously replied no, they had not learnt any other skills. This supports the notion that although life skills may possibly be caught during sport participation, such skills are unlikely to be recognised and transferred, unless the life skills are taught.

The findings from this study suggest that the cause of underachievement may not be due to factors discussed within the literature review (see Chapter 2.1) but due to a lack of life skills. The most cited causes of underachievement are fixed variables

that cannot be changed such as gender and ethnicity or factors that cannot be easily addressed such as family structure, socio-economic status, poverty and social class. This has caused problems when trying to eradicate underachievement based on these factors. However, it may be possible that factors such as family structure, poverty and social class mean children are not provided with the appropriate life skills they need to succeed in academic environments.

The participants involved in this study were from various ethnic backgrounds and included students receiving and not receiving free school meals (free school meals are used an indicator of socio-economic status). The cause of underachievement was not clear in this study unless underachievement was caused as a direct result of the participant's gender. However, the cause of underachievement was not a concern, this study wanted to explore the role of life skills and to determine if life skill transfer may be a possible solution to underachievement. The programme provided the boys in the intervention group an opportunity to learn and explore seven life skills that were related to the school environment and were life skills the school thought the boys were lacking.

Children live complex lives and a number of uncontrollable factors could have impacted upon the participants' academic performance. However, the results presented in Phase 1 show the intervention group as a whole increased their academic performance to a level where they were no longer underachieving. The comparison group however, were still underachieving at the end of the programme. This suggests that underachievement may be about a lack of life skills needed in the school environment and not necessarily about factors such as ethnicity and socio-economic status. Although these factors may influence the type and number of life skills a child is taught during their childhood. The findings from this study suggest that life skills could present a new approach to underachievement, particularly when trying to reduce underachievement in UK schools.

This section has explained how this study has contributed to the literature by addressing several of the gaps highlighted by Gould and Carson (2008). This section has also demonstrated that the taught concept may be the most appropriate method to use with adolescents and young people and is the most likely method to facilitate life skill transfer from one environment into another life domain. This study has shown that young people are unlikely to make the links between skills learnt in PE and skills that can be used in other school environments. It appears that students think skills

learnt in PE can only be used in PE. Finally, this section suggests that teaching young people life skills related to the school environment may eradicate underachievement. It is possible that P.E teachers, especially in the UK, are missing opportunities to teach their students important life skills that could be used across the curricular. The next section highlights the ways in which TAP has contributed to existing research.

6.3 Contribution to Existing Research

This thesis contributes to existing research by demonstrating that young people can learn life skills in a sporting environment and then use the life skills across various academic domains. Phase two explored whether the intervention group perceived their ability to use the seven life skills to have increased throughout the programme. The findings from Phase 2 suggest that the boys perceived their life skills to have significantly improved during TAP, highlighting that such skills can be taught in sport. These findings support those of earlier work (Danish and Nellen, 1997; Goudas and Giannoudis, 2008; Jones and Lavallee, 2009 and Petitpas *et al*, 2005). Phase two also explored whether the intervention group thought they had used the life skills in other academic domains.

Although the intervention group participants were eligible for the study as they were deemed to be underachieving in Science, the seven life skills were not selected to help the boys in only Science. The school management team selected some of the life skills as it was thought the boys lacked specific skills that they thought were important in the school environment, such as discipline and persistence. Other skills such as goal setting and self-confidence were selected through existing life skill research, such as the GOAL and SUPER programmes (Danish and Nellen, 1997; Danish, 2002a; 2002b; 2002c). However, no other study could be found that sought to teach so many life skills and was designed to specifically improve academic performance. The use of the Science grades in TAP was only used to recruit the boys (the school has the largest number of underachievers in Science) and to monitor academic trajectory across the school year.

During the interviews undertaken at the end of TAP, the intervention group highlighted a number of curricular subjects in which they thought they had used the life skills taught during the programme. Some of the boys said they had used skills

such as discipline, goal setting, and concentration in all of their lessons. Other examples included using concentration in examinations, and using teamwork when completing group tasks more effectively. Further examples show the boys used the skills in English, Science, Mathematics, Information Computer Technology (ICT), Religious Studies, History, Spanish, PE, Art, Drama and Geography. This suggests that the life skills included in TAP did not just have a direct impact upon the boys' Science grades but also helped more generally over the whole curriculum. It may be possible that the programme had a similar impact on academic performance across the whole curriculum or it may even have had a more significant impact on certain subjects. Future research should seek to determine if certain life skills have more or less of a significant impact on certain subjects or if the impact is similar across all subjects.

Within the literature review (see Chapter Two: 2.2.4), it was argued that sport might have a positive impact upon academic performance (Bailey, 2006; Trudeau and Shephard, 2008 and Rasberry *et al*, 2011). It was also argued that life skills are important for youth development and may also have a positive impact on academic performance (Jones and Lavallee, 2009) (see Chapter Two: 2.3.5). It is important for future research to continue to explore such statements. Was it the use of sports that was important, as suggested by Marsh's (1993) Athletic Participation model, or was it the teaching of the seven life skills that was important in TAP? It can be claimed that by using both the possible impact on academic performance would be more likely but sport was mainly used during the programme as a vehicle to engage the boys in the intervention group and to teach them life skills in a practical environment rather than a classroom.

Petitpas and colleagues (2005) highlighted that context (sport), internal assets (life skills) and external assets (caring adults) are important aspects of any life skill programme. Particular attention was paid to the context and ensuring the internal and external assets would be effective when planning TAP. The female PE teacher involved in the programme was to be the external asset to the participants when the author was not present in the school. The role of external assets is deemed to be particularly important (Weiss *et al*, 2013) and whilst the author recognised the importance of this relationship, the boys themselves did not recognise it. They recognised the relationship with each other as important but did not acknowledge any relationship with caring adults during the interviews. It is a limitation that this study

did not explore that relationship further, however, the relationship with peers during the learning and transfer phase of life skills is an interesting finding that warrants further research.

More generally, this study has informed future research when designing school based research methodology. It is possible that other school based interventions, particularly life skill programmes may benefit from using the same methodological procedures that were used in this study. The use of longitudinal research would provide schools with sufficient time to engage with their pupils and then allow students to practice/ implement the programme outcomes. The use of mixed methods would also provide an in-depth and holistic understanding. Qualitative data such as the interviews and focus groups conducted with the students, the teacher and the parent provided insightful, rich data about the use of life skills and the experiences the students encountered when transferring the life skills. The quantitative data such as the academic grades and life skill research provided statistical information on the impact of the intervention. It is possible that other school-based interventions would equally benefit from using mixed methods and including a range of data sources.

To summarise, this study has made several contributions to existing research, TAP has demonstrated that young people can learn life skills in a sports environment and then transfer the life skills into other academic domains (i.e., the classroom). TAP supports the findings from previous research (Danish and Nellen, 1997; Goudas and Giannoudis, 2008; Jones and Lavallee, 2009 and Petitpas *et al*, 2005) and agrees that young people need to be deliberately taught life skills. The role of external assets (caring adults) is deemed to be particularly important when working with young people but this relationship was not recognised by the participants in this study. However, the boys identified the relationship with each other as an important enabler. Future research should seek to explore the importance of relationships with caring adults and amongst peers. Finally, whilst recent research has started to explore new areas of life skill interventions such as the thoughts of the coach, and qualitative research has looked at the impact on athletes, there are still significant gaps within existing life skill research. Future research recommendations are presented in section 6.7. The next section of this chapter discusses the contribution TAP has made to practice and provides guidance to schools that may wish to deliver a similar intervention.

6.4 Contribution to Practice

This study has implications for government and policy, the PE National Curriculum and PE teachers, and schools who may wish to develop a similar programme to TAP. These implications are discussed below.

6.4.1 Government and policy

As highlighted in Chapter 1, the current Coalition government has made several changes to school sport and PE provision in England and Wales. In 2012, Jeremy Hunt who at the time was the Secretary of State for Culture, Olympics, Media and Sport, expressed the governments desire to promote a competitive spirit within schools and to make PE lessons more performance driven and to contain a competitive nature. This was to be encouraged through the introduction of the School Games initiative, where Olympic- style events allow schools to compete against each other.

Bailey and colleagues (2009) critically reviewed the claims that PE can develop physical, social, affective and cognitive skills, qualities and knowledge. The review was supportive of the potential of PE however; it was not supportive of the overall developmental benefits students gain in their PE lessons. The review argues that only physical skills are enhanced through PE. Whitehead and Woodhouse (2010) claim PE teachers still focus heavily on physical skills and whilst these skills underpin PE, PE teachers are not helping their students towards a full and effective future if the broader aims and skills of PE are neglected. However, the government's plans for more competitive PE lessons will only serve to make PE teachers focus solely on their students' physical skills, possibly at the sacrifice of holistic learning.

Jacobs, Knoppers and Webb (2013) have suggested that the educational policy and PE teacher education programmes throughout Europe do not equip teachers with sufficient knowledge to systematically integrate social development into their lesson plans. PE teachers are not formally trained to socially and psychosocially develop children and the NC provides little guidelines on how to accomplish such teaching. This is worrying as it is unlikely that the UK government will provide additional support to trainee PE teachers and with the introduction of competitive PE, it appears social, affective and cognitive skills will not be a priority for PE teachers.

As discussed in the introduction of this thesis (see Chapter 1), UK governments have tried to use sport to 'fix' problems such as social welfare, public health and national regeneration for many years. The political interest in sport began over fifty years and in that time many strategies, policies and interventions have come and gone. Government parties have also tried to change the perceptions, importance and values associated with PE in both primary and secondary schools in England and Wales. Although further research is needed to determine the impact of life skill learning and transfer on academic performance, the findings of TAP suggest that life skill training for the PE teachers should be supported and encouraged. Whilst the NC expresses that PE teachers should make links between PE and other subjects and areas of the curriculum, the NC does not provide support or details on how teachers should do this. Despite the lack of guidance and training, PE teachers should not be deterred from delivering life skills training to their students if they desire to do so. The SPORT model for transfer (see section 6.5.3) may provide schools and PE teachers with support when delivering sports based, life skills programmes/ life skill based PE lessons.

6.4.2 The PE National Curriculum (NC) and PE teachers

It is widely recognised that PE teachers should develop physical and sporting skills, teach children how to play a variety of sports, motivate students to be active and prepare students for life-long participation in physical activity. However, is the teaching of sports and games the only role a PE teacher has? Although their love of sport and physical activity is probably what drives many individuals to become PE teachers, the National Curriculum (NC) states they do have other roles to fulfil. Whitehead and Woodhouse (2010), argue that a PE teacher is not just a PE teacher and that every PE teacher has wider responsibilities to their pupils and the school. The aim of the PE teacher in England, as stated by Whitehead and Woodhouse (2010: 220) 'is to enable all pupils to become successful learners, confident individuals and responsible citizens'. In order to achieve this, the UK government have identified six personal learning and thinking skills (PLTS) that should be promoted in PE (Whitehead and Woodhouse, 2010). The six PLTS are:

1. Independent Inquirers
2. Creative Thinkers
3. Reflective Learners
4. Team Workers
5. Self-managers
6. Effective Participants

The government claims that the PLTS framework allows individuals to develop the essential skills of: managing self; managing relationships with others; and managing own learning, performance and work. The UK government argues these skills will enable young people to enter work and adult life as confident and capable individuals. The aim of the framework is that every student between the ages of 11-19 years old should apply skills from each of the six groups to a wide range of learning contexts.

The NC recognises the wider roles of PE and PE teachers by stating that: 'learning and undertaking activities in physical education (PE) contribute to achievement of the curriculum aims for all young people to become:

- Successful learners who enjoy learning, make progress and achieve
- Confident individuals who are able to live safe, healthy and fulfilling lives
- Responsible citizens who make a positive contribution to society'.

(DfES, 2007: 189)

The NC also states (DfES, 2007: 195): that 'during the key stage pupils should be offered the following opportunities that are integral to their learning and enhance their engagement with the concepts, processes and content of the subject. The curriculum should provide opportunities for pupils to:

- Get involved in a broad range of different activities that, in combination, develop the whole body
- Experience a range of roles within a physical activity
- Specialise in specific activities and roles

- Follow pathways to other activities in and beyond school
- Perform as an individual, in a group or as part of a team in formal competitions or performances to audiences beyond the class
- Use ICT as an aid to improving performance and tracking progress
- Make links between PE and other subjects and areas of the curriculum'.

(DfES, 2007: 195)

If the role of PE is to deliver the National Curriculum then it is the role of the PE teacher to make links between PE and other subjects and areas of the curriculum. The findings of this study suggest that PE teachers may be well placed to teach their students various life skills that they can use in other subjects and in other areas of the curriculum. In order to do this PE teachers would have to make their students aware of the skills they are learning during their PE lessons and make sure links between PE and the rest of the curriculum are developed. Discussions about the transfer of life skills will also need to be incorporated into PE lessons. The findings from TAP suggest that boys prefer to learn such skills whilst active rather than learning skills in a classroom environment but that is not to say a similar sports-based programme would not be as equally effective with girls. Hills (2006) explored girls' perceptions of PE and maintains that generally, girls are now participating in more physical activities and are enjoying playing sports that have typically been regarded as male sports such as football. If PE lessons focus on life skills and holistic learning rather than just physical skills as suggested by Bailey (2009) then girls may be more inclined to participate in physical education classes. What is clear from this study is that PE is well placed to teach wider skills as long as PE lessons are designed to do so.

Therefore to briefly summarise, the findings of this study suggest that PE teachers should look to develop various life skills in their students and incorporate life skills training into their PE lessons. Despite a lack of teacher training and support from UK governments, if PE teachers develop their students' use of life skills and make the links between skill use in PE and skill use in other academic domains, then they will be going some way to deliver the aims set out in the National Curriculum.

6.4.3 Guidance for schools

This study ensured that the teaching staff at the Case Study school had not been made aware of TAP's intentions. It was essential that teachers across the school did not concentrate their efforts or provide students on the programme with additional support. At the end of TAP, a variety of teachers who taught the boys on a regular basis, recognised that students in the intervention group had learnt new skills and had improved their concentration and communication in the classroom. The most notable change however, was an increase in discipline, with a 44% reduction in detentions when comparing the group from Year 7 to Year 8. The boys themselves had recognised a difference in their own behaviour and attitude to school and they also thought their parents had noticed a difference. Whilst interviewing one parent, it was clear that although she knew little about the purpose of the programme, she spoke very positively about her son's engagement with TAP and had recognised significant improvements in his academic performance. Using sport and P.E lessons to make students aware of different life skills and discussing how to apply such skills to other academic domains may help them to succeed across the whole school domain. It is possible that within school, it is P.E teachers who are best suited to teaching life skills, especially with students who enjoy and value their P.E lessons.

The qualitative findings from TAP have led to the development of a model that can be used when promoting life skill use in an academic setting. The transferability of life skills was examined, as suggested by Gould and Carson (2008) and the findings led to the development of the SPORT Model for Life Skill Transfer. It is possible that other schools that wish to implement similar life skill interventions could use the SPORT model. The model includes five factors that schools may want to consider and develop in order to facilitate the successful transfer of life skills from one academic domain into another. These factors are Support from peers, Pride, Opportunities, Rewards, and Transfer experience. The following section may provide schools with information they may wish to consider when designing and implementing life skill programmes. The SPORT model should be implemented in consideration with the 5 C's of positive youth development.

6.4.3.1 Information for Schools implementing life skill programmes

The support the intervention group participants got from their group peers was an important aspect of the programme. The boys highlighted both the support and the idea's they received from each other during the focus group as a facilitator of transfer. The support they also received from each other during the school week and away from the programme helped them to engage within their academic subjects and continued their engagement with the programme. It is important that students experience an element of self-discovery learning that is supported by their peers. Allowing students to think and discuss life skill transfer amongst themselves appears to make transfer seem more achievable and provides students with ideas and options on how and when to use the life skills in other domains.

Pride also appeared to be influential and a motivator for life skill transfer. The participants in the intervention group initially expressed feelings of pride just for being selected for the programme. TAP was highly regarded around the school and many students wanted to be part of the programme as it was seen as a cool thing to do after school. This helped to maintain the interest of the intervention group of the full academic year.

During the interviews, the intervention group regularly discussed feelings of pride as an enabler of transfer. The boys explained that they experienced feelings of internal pride when they had successfully transferred the skill but they were also proud when external others highlighted their improvements. The majority of the intervention group participants felt proud when their parents had become aware of improvements in their behaviour and/ or academic performance. Some of the boys also felt proud when teachers had recognised their improvements. Making sure that students feel proud of their achievements and have an opportunity to recognise the personal developments they experience is important as it is these proud feelings that provide the students with the motivation to continue with a programme.

The boys in the intervention group discussed the opportunities that they had been given by participating in the programme. They explained which opportunities enabled transfer and how some of the opportunities prevented transfer of the life skills from the sports hall into the classroom. These opportunities included:

- Learning experiences
- Transfer opportunities
- Sport choices
- Teacher attitudes
- Boring lessons

It was apparent during the interviews that the boy's in the intervention group valued the learning of the life skills during the programme and enjoyed the environment in which they were taught the life skills. Every sport session provided the boys with an opportunity to learn and practice a life skill. Every third week they would discuss amongst themselves, in a focus group setting, how they could use the skill in the classroom and were regularly encouraged to transfer the skill into other academic domains. Due to the longitudinal nature of the programme, the boys were able to experience many transfer opportunities and this appeared to be an important facilitator of life skill transfer.

Using sport as a vehicle to teach life skills was important in order to engage the intervention group in the programme. It became apparent early on in the programme that many of the boys were becoming or had already become disengaged with school, particularly in the classroom. The behaviour of many of the boys in the classroom was a concern for the school. Behaviour reports for several of the participants commented on the lack of engagement in activities in the classroom and with their homework tasks. Talking to the boys themselves it was clear that many of them did not think they should listen to their teachers and/or had little respect for many members of the teaching staff. What was apparent was that the boys enjoyed their PE lessons. At the beginning of TAP, fourteen of the boys (out of the twenty boys that started the programme) were attending trials for various teams that the school had including football, cricket, rugby and athletics. That is not to say that the boys would not have engaged in a programme that was not sports based but by using activities that they enjoyed and valued was definitely an important facilitator of programme engagement and life skill transfer.

As well as enablers of life skill transfer, the intervention group were also able to identify factors that could prove to be barriers of life skill transfer. The participants found that certain teacher attitudes were a barrier for transfer. Some of

the boys explained that they found some teachers did not allow them or provide them with opportunities to use the skills in their classrooms. The participants identified negative teacher attitudes throughout the programme and it was often discussed to why some teachers had negative attitudes towards certain students and what the intervention group participants could do in certain circumstances. Also identified by the boys, as a barrier to life skill transfer, was boring classroom lessons. Several of the boys discussed their lack of enthusiasm and the difficulties they experienced in classrooms which they did not find interesting and found it difficult to transfer the life skills in these circumstances. They found they could not fully concentrate as they 'switch off' or disengage with the lesson. Although the boys in the intervention group identified negative teacher attitudes and boring lessons as a barrier, it did not prevent life skill transfer and many of the boys thought they could deal with these situations better at the end of the programme than they could at the start of TAP. Students should be provided with numerous opportunities to learn life skills, and to experience transfer. In order to maximise life skill transfer, negative teacher attitudes and boring lessons should be avoided, if possible, but more importantly students should discuss how to effectively deal with such situations.

Rewards were important to the participants in the intervention group and they came in both intrinsic and extrinsic forms. The boys were initially motivated to engage in the programme due to the opportunity to play sport on a weekly basis. However, as the programme began in earnest, the boys found the intrinsic rewards they were receiving enhanced their motivation to learn more life skills. The intervention groups' motivation to learn also stemmed from their recognition of individual development. The boys in the intervention group were able to identify when they had transferred the life skills and recognised the improvements they had personally made. Such improvements appeared to have had an impact on their engagement with the programme and their desire to learn.

In addition to intrinsic rewards, the intervention group also enjoyed receiving extrinsic rewards. These rewards were often school-based rewards that the boys received from their classroom teachers such as merits for good work and/or behaviour, verbal comments made directly to the boys, and written comments in their classroom workbooks. Interestingly the boys also thought by receiving fewer detentions from their teachers that they were receiving a reward by not being punished. The school-based rewards were well received and welcomed by the

intervention group and it appears that such rewards reinforced their engagement and learning within the programme. Providing students with extrinsic rewards may help to motivate and prolong engagement but intrinsic motivation should be promoted, if and when possible. Helping students to identify their individual development may promote their motivation to learn more life skills.

The final enabler of transfer that the boys' in the intervention group identified was the transfer experiences they encountered on the programme. The programme was specifically designed in order to teach the boys the seven life skills, allow them time to practice the life skill in a sporting environment, discuss amongst themselves how and when transfer might be possible and advantageous, and finally TAP allowed the participants plenty of time to practice and experience using the life skills within other academic domains. The yearlong intervention was long enough for the boys to realise that life skill transfer was possible and achievable and provided them with support throughout the learning process. Allowing the students to have sufficient time to learn and transfer life skills into another domain is important. If schools do deliver life skill training as part of their PE lessons then they need to ensure that students are not rushed when learning the skills, allowing plenty of time to discuss transfer and allowing the students to transfer the skills as and when they feel confident to do so.

To summarise, this section has looked at the contribution TAP has made to current practice. This study has provided schools and teachers with a model they can implement in order to promote the transfer of life skills from the sports hall into the classroom. If schools want to deliver similar programmes or deliver certain aspects of TAP in their PE lessons then the model will provide an insight of the elements that facilitated life skill transfer in this study. It is important that schools plan a programme or a series of PE lessons that are relevant to their own students. TAP was designed with a specific aim and a group of students in mind. Schools should tailor their own programmes rather than try to replicate TAP in its entirety. Whilst the previous sections have identified the ways in which this study has made a contribution to theory, research and practice, the next section provides a critical evaluation of the programme.

6.5 A critical evaluation and reflection of the intervention

This section aims to provide a critical evaluation of the intervention and highlight some of the challenges and difficulties experienced throughout the research process. Specifically, this section will evaluate the dose, cost, fidelity, delivery of the intervention, and the problems with using underachievement as a measure.

As with any intervention, the dose provided to the participants must be evaluated. The dose of TAP was deemed sufficiently long enough to answer the research questions this study was seeking to answer. The programme was long enough:

- To build a rapport and gain the trust of the young participants
- For the participants to feel comfortable with each other
- For the participants to learn the seven life skills
- To become cost effective for the school in terms of time saved in detentions and time spent dealing with problematic behaviour from the participants in class
- For a change in academic achievement to be observed

A change in academic achievement was observed at the end of term one (time point two), however all of the students were still underachieving at time point two. Therefore TAP needed to continue until the next wave of academic data was collected at time point three, to determine if the participants could obtain a grade that matched their predicted level and no longer deemed to be underachieving in Science.

With regards to fidelity, TAP was delivered as described in this thesis, as the author was present throughout the whole process. The author designed the programme and was present at every sport session. This situation meant the author was both the deliverer and the researcher throughout the programme. There was an invested interest for the intervention to be delivered as described. Future studies should look to train PE teachers to deliver the programme and assess if fidelity remains.

The dual-role of researcher and programme deliverer resulted in several challenges and limitations. Research is rarely a linear, seamless and neat process and it was apparent early in the process that TAP was not going to be an exception.

Finding a school was problematic and time consuming. In total, twenty-one secondary schools across London and surrounding counties were contacted. Fifteen schools did not provide a reply, four schools declined to participate, and two schools demonstrated an interest. The school that was selected was the most appropriate in terms of the number of underachievers. It was due to the difficulties in finding a school and the time consuming process that compromises were made when the school insisted on allocating the participants to the intervention and comparison groups.

Cross-infection was deemed to be highly unlikely during TAP as the programme was really one that had to be experienced. It is possible that the boys in the intervention group did discuss the programme with the boys in the comparison group, although it is unlikely that conversations alone would have had an impact on the comparison groups' ability to use the seven life skills. The teachers at the school were also unlikely to cross-infect the study, as many of the teachers were not aware of TAP. The PE department was particularly isolated within the school structure and as a result many teachers showed little interest in what the PE team were delivering. The senior management team was aware of TAP but had little motivation to promote the programme across the school, as they were reluctant to highlight underachievement within the school. It was also important that the participants were not labeled as underachievers. As a result, the participants positively received the programme and cross-infection was highly unlikely due to the programme design.

As with many PhD. studies, resources were limited, which is why the author had a dual role. As a result, the cost of TAP was minimal. The coaches and the researcher in this study were not paid. The only cost incurred was for the sports facilities at Brunel University and small quantities of specialist equipment such as a goalball and frisbees. As it is not the intention for schools to replicate this study in its entirety, schools could use the equipment and facilities they already own. If the teaching of life skills were incorporated into the daily teaching of physical education, then there would be no extra cost to the school or the PE teachers in terms of time or labour costs. The only cost that the school would have to consider is the initial training costs for the PE teachers in order for them to become competent in teaching life skills. The intervention however, would be based on an economy scale, the more students who receive the intervention the more cost effective the intervention will become. It is also worth noting that a programme similar to TAP has the potential to

impact upon a variety of academic subjects, not just Science making the programme exceptionally cost effect when considering the potential benefits.

6.5.1 Problematizing the concept of Underachievement

It was highlighted in the literature review (see Chapter Two) that underachievement is does not have a universal definition and there are several issues that must be considered when trying to determine if and when underachievement is present. Underachievement was used in this study due to the attention surrounding male underachievement and the prevalence of underachievement in UK schools. As the PhD was funded by Brunel University, it was a requirement of the bursary/ funding that the project was based on underachievement. However, the inclusion of underachievement did present several problems.

The school selected all the eligible participants in this study based on gender, age and the fact that all the participants were underachieving by at least one sub-level in Science. The participants' Science teacher's identified the boys as underachieving because their assessment grades and academic work was regarded to be of a standard below teacher prediction/ expectation. However as the literature review demonstrated, teacher predication is a subjective measure that can be influenced by many factors (see Chapter Two, section 2.1.4).

Underachievement is often based the discrepancy between actual achievement and potential achievement but how potential ever be predicted accurately? How can teachers accurately predict what a child is capable of achieving? It has been argued that it is not logical to separate potential behaviour from actual behaviour (West and Pennell, 2003). Despite the fact that underachievement is problematic, teachers can and often do calculate whether their pupils' achievement is or is not in line with their potential ability. However, such judgements are regularly subjective and perceptions of underachievement vary systematically by age, sex and ethnicity (West and Pennell, 2013). Not only are schools using mental-ability testing to determine underachievement despite methodological uncertainties, they also 'invest and expect a great deal from them' (Smith, 2007: 114). It appears that despite the shortcomings in accurately predicating underachievement, schools will continue to be interested in the concept for many years to come.

In hindsight, underachievement is far more complex than I had first anticipated. I attempted to provide an overview of underachievement in the literature

review (see Chapter Two) although it is by no means a comprehensive list. This study may have been less problematic if low achievers were used as opposed to underachievers. Using low achievement would be a less problematic concept to use as low achievement based on academic results and does not rely on teachers' subjective predictions. Smith (2007) argues for schools to move away from using underachievement and concentrate more effectively on low achievement. However, Smith (2007) also states that the impact schools can realistically have on low achievement is questionable. Therefore underachievement provides an easier challenge for schools to overcome.

6.6 Limitations

This study experienced the realities, difficulties and complications of conducting research with adolescents in an education setting. Whilst promising, the findings presented in Chapter 5 should be read with some caution as the study had several limitations that need to be acknowledged. Firstly the eligibility criteria for the study resulted in a small sample size. Although the sample size was appropriate to address the qualitative research questions (some may argue that the sample size was actually large for qualitative analysis), the sample size was relatively low for quantitative analysis. The small sample size and the use of one school have made the results from this study impossible to generalise to larger populations.

Working in an education environment can often be problematic, in reality the school and its staff were found to be very supportive and engaged, however compromises were made and some challenges were experienced throughout the programme. Many of the challenges faced were not the fault of the school or the researcher but occurred as result of conducting research within a school. During the programme, teachers were undertaking strike action against pension changes and as a result the school was closed on several days throughout the year. This resulted in one session being cancelled, which delayed the start of the sport sessions. One session had to be cancelled as the school was closed due to adverse weather conditions, and one session was cancelled due to facility issues. Whilst these cancelations were challenging in terms of scheduling, it did not have a negative impact on the intervention.

Due to the nature of the programme, the school wanted to take control of randomly assigning students to the intervention and comparison group. This resulted in design issues when analysing the results. The intervention group and the comparison group were not identically matched and did not start the year at the same performance level. As discussed briefly in the results section (see Chapter 5, Phase 1) it was considered that using an ANCOVA would provide a control for the pre-existing differences between the baseline grades of the comparison group and the intervention group (see Chapter 5, Fig. 5.1) for baseline differences). However an ANCOVA had to be ruled out due to uneven group sizes, non-linear relationships and the lack of an independent covariant (Tabachnick and Fidell, 2013). It is entirely possible that the discrepancies between the intervention and comparison group were a result of random allocation but it is possible that the school ensured the participants who were underachieving the most were deliberately assigned to the intervention group. It is a limitation of this study that the school controlled the assigning of participants. Future research should seek to allocate students using a matched-pairs method.

Phase 2 of the study introduced some new limitations, particularly when the participants provided examples of life skill transfer. All the participants were able to identify experiences of using each life skill in the classroom, whilst this initially seemed positive, on reflection it did not mean life skill use was directly linked to TAP. It is highly possible that the participants had used the life skill in the classroom but it is also possible such use was not a direct transfer from the sports hall into other academic domains. It is possible that discussions alone on life skill transfer may be sufficient and therefore further research is needed to explore the role of sport sessions and identify the different processes of life skill transfer.

Phase 3 also brought several limitations. In particular, the interview data only came from 18 participants, whilst this is a large qualitative sample, the sample size does not allow generalisations to be made. It should not be assumed that interventions similar to TAP would yield similar findings. TAP hoped to explore the perceived enablers and barriers of life skill transfer from a sporting environment into an academic context. Findings however, come from the participants' retrospective recall of the programme and may not be a true representation of enablers and barriers.

Another limitation of this study was that the intervention group may have experienced a *halo effect* due to increased attention from teachers, coaches and the main researcher. It is possible that increased attention from adults alone may have had some influence on the adolescent male students. With this in mind, the fact that the author of this study conducted most of the sport sessions and the interviews may also have proved to be a limitation. Although every effort was taken to avoid leading questions the qualitative findings should be read with some caution. It is possible that the boy's had wanted to please the researcher with their responses. When asked if they thought they had transferred the life skill from the sports hall into the classroom, many of the responses appeared to be very positive such as 'I feel that I can use all the skills that we learnt and I can take them into lessons and not just in school but out of school as well' or 'since the start of TAP I have started concentrating in every single lesson'. It is possible that due to the young age of the participants, they wanted to please the interviewer and provided answers they thought the interviewer wanted to hear rather than what they really thought.

It was hoped that the dual-role would allow rapport to develop between the researcher and participants. However, this relationship between participants and researcher raised questions with regards to the trustworthiness of the data and the potential problems linked to over-rapport. In an attempt to prevent over-rapport, a member of the research team acted as a 'critical friend' as suggested by Sparkes and Smith (2014). This researcher had no contact with the participants or the school and was able to help guard against researcher bias. Due to the age of the participants, rapport was vital and whilst the author recognises the limitations of rapport, particularly with young people, rapport was an important and preferable aspect of TAP, particularly during the interview phase of data collection. However, this rapport may have led to a cause/effect situation, where the participants only engaged in the programme because they had a positive relationship with the researcher. This relationship needs to be explored further as it may have future implications on reliability and fidelity.

The study was not able to determine the extent of the halo effect, if any, but it is advised that it should be taken into consideration. It was hoped that the academic grades for both the intervention group and comparison group would have been available at the end of Year 9. However, the school did not have the resources to provide this and due to time constraints the grades were not available to be part of

this thesis. As it is possible that a halo effect may have contributed to the positive findings and future research should seek to explore and determine the extent of a halo effect. Gaining academic grades at the end of Year 9 would have also provided more information on the long-term benefits of the programme. This information would have helped to determine if the life skills learnt in TAP were sustainable. In summary, this chapter has presented the limitations of this study, the next section makes suggestions for future research.

6.7 Further Research

Pfeifer and Cornelißen (2010) highlighted the need for European research to be conducted and this study sought to address the gap in UK literature. However future research is needed in order to generalise results on a national scale. This study was based on selective criteria. The intervention was developed based on media coverage and the UK political agenda surrounding male underachievement in particular, therefore only male students were included. That is not to say that a sport programme would not benefit academic performance in female students. Future studies should seek to address the link between school sport participation and academic performance for both sexes within UK schools.

Whilst the results of TAP are promising, further research on transfer is merited. TAP looked specifically at young people learning life skills in a school sports environment and transferring such skills into an academic sphere such as the classroom. Further research should seek to examine the extent of life skill transfer into other life domains. The participants in TAP were also younger than those in previous life skill programmes/interventions. TAP shows that participants who are 12-13 year olds can understand, learn and transfer life skills from the sports hall into the classroom as long as such skills are systematically taught. The participants were also able to identify enablers and barriers that facilitated or prevented transfer. Future research should seek to examine the optimal age in which life skill transfer can have the most impact on academic achievement. We also support Jones and Lavallee's (2009) recommendation that future research should look to determine the importance of experience in life skill awareness and transfer.

TAP did not control for ethnicity but future research should seek to determine the effect of ethnicity and race on academic achievement. As highlighted in the literature review (see Chapter 2) the effects of ethnicity and ethnic subgroups is well documented and it is possible that TAP had a different impact on academic performance for different ethnic groups. This is even more possible if the students are experiencing negative teacher attitudes, which was also discussed in the literature review. In addition to ethnicity, TAP did not control for socio-economic status. This was also discussed in the literature review as a possible causation of underachievement. Out of the nineteen intervention group participants that finished the programme, only seven of the participants received free school meals (FSM). FSM is a basic indicator of low socio-economic status. This suggests FSM was not an influential indicator when selecting the participants. However, future research should seek to examine the effects of socio-economic status in more detail.

Whilst Gould and Carson (2008) highlight the importance of quantitative research to determine the scale and scope of individual personal development, limitations do arise when discussing such findings. Understanding the level of benefit individuals experience would allow for the development and implementation of more beneficial and realistic programmes. Not all individuals will have the same experience and/or experience the same level of benefit on the same programme. Gould and Carson (2008: 69) argue that *finding the mean percentage of participants who experience specific types of personal gains (e.g. enhanced self-esteem, leadership skills, and work ethic) from the youth sports experience would be valuable.* Whilst this is a valid recommendation and such knowledge would be valuable, there is no standard tool for measuring such benefit, making it impossible to generalise findings from other studies. Therefore, future research should look to develop a gold standard measuring tool that could be used to determine the level of benefit each participant experiences on a life skill programme. In agreement with Gould and Carson (2008) both self-report measures and observational instruments that can be used in various sport contexts are needed in order to further our understanding of life skill programmes and the benefit young people may experience by participating in such programmes.

Whilst the sport sessions were an important part of TAP, future research should examine the role of sport and attempt to determine if sport is needed at all. This study was able to engage the boys in a way that would have been difficult in a

classroom environment. It was the sports and the active sessions that the boys in the intervention group enjoyed the most and the sport sessions were what kept them engaged throughout the whole academic year. However, it is possible that the participants may also have found the third session of each life skill (i.e., the focus group session) beneficial on its own, without the sporting element. Future studies should seek to establish what structure works best for teaching life skills. It maybe that young people today would engage equally well with a programme that is delivered on-line. The participants would still be able to give each other support on online group forums, through various social media channels such as Facebook and Twitter, and the teaching of life skills could be delivered through on-line workshops and podcasts.

Future studies should look to include a number of control groups and match the intervention group participations to these control groups so each group starts at the same achievement level. Also, having various control groups would allow researchers to identify the important parts of the study. For example, having one control group that participates only in the focus group element of the programme, having another control group that participates in the sport sessions but does not engage in the life skill element of the programme, having a third control group that participates in a different activity such as drama or music but is still taught the life skill element of the programme, and finally, including a control group who has no intervention at all.

Finally, TAP sought to examine the impact of life skill transfer from the sports hall into other academic domains (i.e., the classroom). Future studies should look to examine the influence life skills may have on other areas of life. For example, the impact a life skill intervention may have on friendships and in peer groups, at school, at home, and other activities and hobbies young people may participate in.

This section has identified many areas where future research could focus its attention. In summary, future research should seek to conduct more follow-up research to determine both the long-term effects of school sport interventions on academic performance and the possible impact of the halo effect, and determine what role sport plays in teaching young males life skills. The next section provides a final summary of this study.

6.8 Concluding Remarks

Chapter 1 provided the reader with an introduction to the study and highlighted several concepts that were important in the planning and implementation of TAP, such as government policy and school sport, school sport interventions, and the role of physical education. Chapter 2 examined underachievement in UK schools and presented some of the main causes of underachievement. Chapter 2 also reviewed the impact may have on academic performance and presented existing research on life skills programmes/interventions. Chapter 3 introduced the Transfer-Ability Programme, presented information on the intervention group and the comparison group participants and the school. The programme schedule was also supplied in this chapter.

Chapter 4 examined the philosophy and paradigms that shaped this study and the methodological choices that were made in order to analyse the data collected during TAP. Chapter 5 presented the findings of this study in three separate phases. Phase 1 determined that the intervention group and comparison groups' trajectory of academic grades for the full duration of TAP. Phase 2 qualitatively and quantitatively addressed the intervention groups perceived learning of the seven life skills. Phase 3 qualitatively presented the intervention groups' perceived enablers and barriers of life skill transfer.

Finally, Chapter 6 has discussed and expanded upon the results presented in Chapter 5. The contribution that TAP has made to theory, research and practice has been explained and the SPORT model for transfer has been presented. TAP has informed future practice and supplied guidance to schools that wish to implement a life skill intervention. The limitations of this study have been documented and recommendations for future research have also been presented.

It was never the aim for TAP to be replicated in full. This study was designed with a specific aim and the life skills were specifically chosen to develop the ability of twenty males students to use the skills. The students were deemed to be lacking in these specific skills by their school. It is hoped future research will continue to examine the role of life skills and the influence they may have on academic performance. This study has highlighted the importance of wider learning in PE, and how a sports based, life skill intervention may influence academic performance. It is hoped that UK governments understand the potential of PE beyond the development

of only physical skills. Above all though, it is hoped that PE teachers and schools embrace elements of the TAP and begin to look at life skills within their PE lessons.

6.9 Final Comment

I have learnt many things about research and myself whilst completing this study. I am now aware of the complexity surrounding underachievement and I fear I may never understand the concept in its entirety. I have developed a greater methodological insight and have improved my critical awareness. This study even pressed for me to reconsider and then change my worldview. I have learnt the realities of conducting school-based interventions, which at times was challenging but ultimately rewarding.

I came into this study wanting to explore and expand the literature on sports based, life skills interventions with regards to academic performance. Although I feel I have contributed to existing knowledge, I am sure my work in this area is far from complete. I have finished this journey asking more questions than I have found answers and believe this is just the beginning of a career long research interest.

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Appendices

Appendix 1 – Semi-structure Interview Guide

Introductions, basics, introduce TAPe recorder etc, permission to TAPe, happy to do interview

Can you tell me what you thought about the sport programme?

Follow up questions

What you do think the programme was trying to achieve?

Follow up questions

Did you make any new friends by doing the programme?

How did that make you feel?

Why did you come to the programme every week?

What do you think you learnt by being part of the programme?

What did you think about the seven skills?

Did you transfer the life skills?

Do you think you were able to use any skills learnt in the sport sessions in the classroom?

Why, how, please explain, please talk a little about that, how did you feel

Which ones, why, how why not?

How do you think you transferred the skills?

If transfer did occur, what made it possible for you transfer the skills

If not….What might have helped you to transfer skills

Did you learn other skills by being a part of the programme?

If you were to design the programme would you have done?

Probes to use with interview guide:

How are you going to try to deal with the situation?

Tell me more about that

How did that make you feel?

I don’t quite understand, what do you mean?

Can you give me an example of what you are talking about?

I think I understand what you mean.

Talk more about that, will you?

I'd like to hear you talk more about that.

I'm not sure I understand what you mean by 'hanging out'. Can you help me understand what that means?

I'm having trouble understanding the problem you've described. Can you talk a little more about that?

I want to make sure I understand what you mean. Would you describe it for me again?

Appendix 2 – Transferable Skill Questionnaire – Participant

Please complete the following questions by circling the number you think best suits the skill level you think you have now. This is your *own* personal view of your own skills. Please be honest with yourself, no members of staff will see this form.

	Very low					**Very good**
Discipline	1	2	3	4	5	6
Communication	1	2	3	4	5	6
T**eamwork**	1	2	3	4	5	6
Self-confidence	1	2	3	4	5	6
Concentration	1	2	3	4	5	6
Persistence	1	2	3	4	5	6
Goal setting	1	2	3	4	5	6
Short term goals	1	2	3	4	5	6
Long term goals	1	2	3	4	5	6

Appendix 3– Transferable Skill Questionnaire – Teacher

Please complete the following questions by circling the number you think best suits the skill level each student has now. This is your *own* personal view of the student's skills. Please be honest- no other staff member will see this.

	Very low					**Very good**
Discipline	1	2	3	4	5	6
Communication	1	2	3	4	5	6
T**eamwork**	1	2	3	4	5	6
Self-confidence	1	2	3	4	5	6
Concentration	1	2	3	4	5	6
Persistence	1	2	3	4	5	6
Goal setting	1	2	3	4	5	6
Short term goals	1	2	3	4	5	6
Long term goals	1	2	3	4	5	6

Appendix 4 – Ethics Approval

Head of School of Sport & Education
Professor Susan Capel

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Georgia Allen
PhD (Education) Student
School of Sport and Education
Brunel University

8th August 2011

Dear Georgia

RE50-10 A case study investigation in the possible impact of a sport intervention programme on underachieving male youths

I am writing to confirm the Research Ethics Committee of the School of Sport and Education received your application connected to the above mentioned research study. Your application has been independently reviewed to ensure it complies with the University/School Research Ethics requirements and guidelines.

The Chair, acting under delegated authority, is satisfied with the decision reached by the independent reviewers and is pleased to confirm there is no objection on ethical grounds to the proposed study.

Any changes to the protocol contained within your application and any unforeseen ethical issues which arise during the conduct of your study must be notified to the Research Ethics Committee.

On behalf of the Research Ethics Committee for the School of Sport and Education, I wish you every success with your study.

Yours sincerely

Dr Gary Armstrong
Chair of Research Ethics Committee
School Of Sport and Education

Appendix 5 – Research Information Sheet

Research Information Sheet

What is the purpose of the study?
This research study is a case study looking to see if a sport intervention programme will have any academic impact on male youths.

Reasons for the Research:

- For the last several years, boys have consistently achieved lower grades than girls in national tests at the ages of eleven and sixteen
- Governments are still spending lots of money trying to help boys achieve higher grades
- Previous research suggests sport **may** positively impact on academic experiences. This study wants to see if that is the case in a London school with Year 8 boys.

At the end of the project, the information gathered may help schools to provide sport programmes that may positively impact on student's educational experiences and academic achievement.

Why have I been invited to take part?
Your school has been chosen to be the case-study school for this research study. Your teachers have identified you as a potential participant. I will spend the 2011/2012 academic year at the school, talking to staff and male participants, conducting interviews, developing action plans with participants and delivering sport sessions once a week during term-time for the full academic year.

Do I have to take part?
No! Your involvement in this study is completely voluntary. If you choose to participate you can stop taking part at any time and you do not have to give a reason. If you continue to participate you may refuse to answer any questions you do not wish to answer and you will still be able to participate in the study.

What if I decide to participate?
If you chose to participate in this study, you will be required to attend a multi-skill sport session once a week during term-time. Sessions will take place after school. The sessions will last 60 minutes. You will also be asked to take part in an interview in July and take part in regular discussions. However, you can drop out of the study at any point and you do not have to give a reason.

What are the benefits?
The benefit of this study for you may be the opportunity to try new sports and visit Brunel University. The information from this study may also help other children throughout the country.

What are the risks?
We do not anticipate any potential risk or discomfort associated with this study. However, when doing any sports you may become injured- the risk of injury will be no greater than the risk in your P.E classes.

What do I need to do to participate?
In order to participate in this study you will be required to sign an assent form and your parents/carers will be required to sign a consent form. Both forms must be signed before you will be allowed to participate. Your participation will remain confidential and you will not be named in any documentation or published documents. Data will only be observed and discussed by the researcher and supervisors at Brunel University. All data will be kept secure and destroyed after analysis.

About the researcher
My name is Georgia Allen and I am a PhD student at Brunel University. This research is being conducted as part of my PhD thesis. If you have any further questions about this study please contact me on email: georgia.allen@brunel.ac.uk. I have full CRB clearance and coaching qualifications in football, athletics, netball, dance, disc sports and multi-skills. I am also first aid trained and have completed child protection courses. If you wish to contact my supervisor or have any questions you do not want to raise with me then please contact Dr Jacqueline Hebron on jacqueline.hebron@brunel.ac.uk.

Research Information Sheet: Control Group

What is the purpose of the study?
This research study is a case study looking to see if a sport intervention programme will have any academic impact on male youths.

Reasons for the Research:

- For the last several years, boys have consistently achieved lower grades than girls in national tests at the ages of eleven and sixteen
- Governments are still spending lots of money trying to help boys achieve higher grades
- Previous research suggests sport **may** positively impact on academic experiences. This study wants to see if that is the case in a London school with Year 8 boys.

At the end of the project, the information gathered may help schools to provide sport programmes that may positively impact on student's educational experiences and academic achievement.

Why have I been invited to take part?
Your school has been chosen to be the case-study school for this research study. Your teachers have identified you as a potential participant to be part of the control group. I will spend the 2011/2012 academic year at the school, talking to staff and male participants, conducting interviews, developing action plans with participants and delivering sport sessions once a week during term-time for the full academic year.

Do I have to take part?
No! Your involvement in this study is completely voluntary. If you choose to participate you can stop taking part at any time and you do not have to give a reason. If you continue to participate you may refuse to answer any questions you do not wish to answer and you will still be able to participate in the study.

What if I decide to participate?
If you chose to participate in this study, you will be required to participate in a small interview at the start of every half term and at the end of the study. Sessions will take place after school. The sessions will last 90 minutes. You will also complete an action plan for the year and talk about the action plan in the interviews. However, you can drop out of the study at any point and you do not have to give a reason.

What are the benefits?
The benefit of this study for you may be the opportunity to engage in a sports fun day once the study has finished. The information from this study may also help other children throughout the country.

What are the risks?
We do not anticipate any potential risk or discomfort associated with this study. However, when doing any sport events at the university you may become injured- the risk of injury will be no greater than the risk in your P.E classes.

What do I need to do to participate?
In order to participate in this study you will be required to sign an assent form and your parents/carers will be required to sign a consent form. Both forms must be signed before you will be allowed to participate. Your participation will remain confidential and you will not be named in any documentation or published documents. Data will only be observed and discussed by the researcher and supervisors at Brunel University. All data will be kept secure and destroyed after analysis.

About the researcher
My name is Georgia Allen and I am a PhD student at Brunel University. This research is being conducted as part of my PhD thesis. If you have any further questions about this study please contact me on email: georgia.allen@brunel.ac.uk. I have full CRB clearance and coaching qualifications in football, athletics, netball, dance, disc sports and multi-skills. I am also first aid trained and have completed child protection courses. If you wish to contact my supervisor or have any questions you do not want to raise with me then please contact Dr Jacqueline Hebron on jacqueline.hebron@brunel.ac.uk.

Appendix 6 – Assent Form

Participant Assent Form

I have read the Research Information Sheet and I agree to participate in this research study.

I understand my involvement in this research study is completely voluntary. I understand I have the right to withdraw at any time.

I understand that my name will not be used in any documents or reports and all data will be destroyed after five years.

Signature of Research Participant……

Full Name (please print)…….

Date……

Please complete **two** copies of this form

Hand in one form to the researcher at the start of the study

Keep one form for yourself

Appendix 7 – Consent Form

Parental Consent Form

I have read the Research Information Sheet and I agree for my child to participate in this research study.

I understand my child's involvement in this research study is completely voluntary. I understand my child has the right to withdraw at any time.

I understand that my child's name will not be used in any documents or reports and all data will be destroyed after five years.

Signature of Parent……..

Full Name (please print)…….

Date……

Please complete **two** copies of this form

Hand in one form to the researcher at the start of the study

Keep one form for yourself

Appendix 8 – Demographic Data Form

Participant Information

Name……

Age……

Date of Birth……

Address……

……

Ethnicity……

Is English your first language? (please circle) YES
NO

Do you receive free schools meals? YES
NO

Do you live with BOTH of your parents? YES
NO

If No please specify who you live with:

……

How many siblings do you have? 0 1 2 3 4 5 or more

Did your mother go to university?
YES
NO

Did your father go to university?
YES
NO

Do you enjoy school?
YES
NO

Do you enjoy P.E?
YES
NO

Are you considering going to college?
YES
NO

Do you think will you go to university?
YES
NO

What job do you want to do when you are older?

……