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**Changes in experiences and engagement of  
adolescent girls in Physical Education classes,  
during a school-based physical activity  
programme: a qualitative longitudinal study.**

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I confirm that I, Fiona Mitchell, have composed this thesis. It is  
my own work and has not  
been submitted for any other degree or professional qualification.

.....

**Fiona Mitchell**

**May 2012**

## Thesis Abstract

There is a growing body of literature investigating age-related declines in physical activity (PA) participation among young people and especially girls, who have lower rates of PA than boys throughout the teenage years. Low PA is particularly apparent within the context of the school physical education classes – termed here as the Physical Education (PE) environment. My PhD thesis aims to explore the reasons for some girls' disengagement in PE classes. Using a longitudinal qualitative approach the study tracks the experiences of a sample of 'disengaged girls' from four case study schools in Scotland taking part in a school-based physical activity programme, *Fit for Girls* (FfG). My research investigates the impact of the programme on their engagement through recording and analysis of the changes that take place in their attitudes and behaviour over the course of two years.

The study involved the design of a questionnaire to identify a cohort of disengaged girls for baseline focus groups. Twelve focus groups (n=41 girls) were carried out during 2008/09 (three in each case study school) to capture girls' opinions, perceptions and experiences of PE classes. Twenty disengaged girls were then selected across the four schools, based on their willingness to participate and self-disclose PE experiences. The girls were recruited for three phases of longitudinal in-depth interviews, over a one year period. The aim of these was to track changes in girls' engagement and experiences in the PE environment. My theoretical framework is based on Welks (1999) Youth Physical Activity Promotion model (YPAP), a socio-ecological approach which divides the influential correlates of physical activity into 1) individual-level *predisposing factors*, 2) *enabling factors*, including personal attributes and environmental variables and 3) *reinforcing (social) factors*.

The results indicate that individual predisposing factors, such as perceptions of competence and identity in the PE class along with the social context (peers and teachers) contribute to girls' disengagement in PE. This suggests that aspects of the wider psychosocial environment in which PE takes place may be more important than the physical activity itself, impacting on levels of participation and enjoyment. There were subtle, as well as clear changes in engagement among many of the girls. However, for others no change was evident. Individual girls' experiences across time or 'journeys' illustrate the importance of the relationships between the individual, social and PE environment in facilitating and sustaining positive change.

## Glossary of terms

The following definitions will be used throughout this thesis:

**Physical activity:** a generic term for any bodily movement produced by skeletal muscles that leads to an expenditure of energy. Physical activity (PA) may include planned activities such as sports or jogging but it also includes other daily activities such as housework (Learning and Teaching Scotland, 2009).

**Physical education (PE) environment:** The term will be used to describe the structural, physical and social environment in which curricular PE takes place.

**Experience:** To be involved in, or affected by something and to feel a particular sensation or emotion towards it. Girls' 'experiences in PE' will refer to things that have happened to girls' within the PE environment and the emotions they feel towards the subject.

**Engage:** To involve someone or oneself in an activity, or become involved or take part in an activity. The term 'engagement' in the context of PE will be used to refer broadly to participation, interest, attitudes and perceptions of PE.

**Disengaged:** To free or detach oneself and withdraw from something. The term 'disengaged girls' in the context of PE will be used throughout to refer to girls who are detached from the PE environment- girls that don't enjoy, participate and have negative feelings towards the environment.

**Please note the following terms:** Primary 7 (P7) is the last year of primary school for Scottish students (age10/11). S1 relates to

Scottish students first year at secondary/high school (age 11/12). S2 is the second year (age 12/13) and so on. S6 or sixth year (age 16/17) is the final secondary school year.

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## **Preface- Inactivity and adolescent girls**

There is an increasing body of literature investigating age-related declines in physical activity (PA) participation among young people (Coleman, Cox and Roker, 2008). Longitudinal research consistently shows physical activity levels declining steeply during adolescence (Aaron *et al.* 2002). The low physical activity participation rates are especially noted in girls, who reportedly engage in less physical activity than boys throughout the teenage years (Whitehead and Biddle 2008). This significant decline in levels of activity in adolescent girls is most evident between the 8-11 years and 12-15 years age groups (**sportscotland** 2007). Cross-sectional population studies also support these findings, with evidence from the Scottish Health Survey showing that PA levels in Scottish girls begin to decline around age eight (Scottish Executive, 2009). Results from the 2005 Scottish Health Survey indicate that, by their mid teens (13-15), less than half of Scottish girls achieve the recommended level of physical activity for health (at least 60 minutes of physical activity 7 days per week), compared with two thirds of boys (Scottish Executive, 2005). There is also evidence for a secular decline in PA among girls - by 2008, only one third were achieving the level of physical activity recommended for health, while boys activity levels remained around two thirds (Scottish Executive, 2009). Recent data from the 2011 Scottish Health Survey (Scottish Executive, 2011) indicates 13-15 year old girl's participation remains low, with only 36% girls achieving the recommendations.

Research showing girls' PA levels declining during adolescence has been supported by an abundance of studies, including the Health Behaviour in School-Aged Children: World Health Organization Collaborative Cross-National Study (HBSC)(Currie *et al.* 2008). This is an issue of concern in Scotland and, as a result, teenage girls

have been identified as a priority in the National Physical Activity Implementation Framework 2008-2011 (Lowther and Reid 2008). Thus, the Scottish Government are aspiring to provide at least two periods of quality physical education (PE) for all children. According to the Report of the Review Group for Physical Education<sup>1</sup> (Scottish Executive, 2004a), quality experiences in physical education lay the foundations for active lifestyles, sporting and dancing excellence, and provide routes for talented young people who will be the sporting and dancing role models of the future. The rationale is that if girls are more active during school time, this will encourage them to have lifelong participation in physical activity.

### **Purpose and significance of my research**

Against this policy and research background, the Fit for Girls (FfG) programme was jointly developed between **sportscotland** and the Youth Sport Trust (YST). The three year programme was launched in 2008 and has been delivered to almost all 380 secondary schools in Scotland, with the aim of increasing physical activity levels among girls aged 11-16 years. A core focus is to bring about sustainable change in schools that builds a positive future for girls' participation in lifelong PA. This programme provides the background context for my PhD research as my selected four case study schools are participating in the FfG programme. This enabled me to track the processes of change that occur as an outcome of the programme. My research focuses specifically on selected 'disengaged girls' and explores qualitatively the reasons for disengagement in the wider PE environment. In addition, it investigates the potential effect that a school-based PA programme may have on such girls.

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<sup>1</sup> The Review Group on Physical Education was set up in response to a recommendation in the national strategy for physical activity (Scottish Executive, 2003a), which recognized the specialist nature of physical education and the need for high quality teaching, learning and curriculum frameworks as the basis for tackling problems with inactivity and lack of interest among students (Thorburn, 2009).

My research explores an area of concern in the UK and internationally and is currently a national priority in Scotland. Therefore, my qualitative work uniquely contributes by investigating how girls' low participation might be tackled in Scottish schools. Much of the previous work includes large scale quantitative studies which can be useful for identifying factors associated with activity levels of particular groups of young people. However, one limitation is that they do not reveal the varying degrees to which these variables influence physical activity behaviour at an individual level, and do not provide the underlying reasons for engaging, or not engaging in physical education and physical activity. Thus, this is where qualitative work can effectively contribute to understanding the underlying reasons for girls' engagement in PE and PA. Although previous qualitative work is pertinent to understanding girls' disengagement, much of the research has focused on identifying adolescents as either active or inactive. Consequently, it has been suggested that more should be done to explore the perspectives and experiences of the adolescent who has successfully moved from inactivity to activity (Brooks and Magnusson, 2006). My thesis aims to do this by longitudinally tracking girls' experiences in the PE environment as they are involved in a school PA programme. This is fundamental for gaining insights into the *processes of change* when girls successfully move from inactivity to activity. Tracking this process of change is crucial for identifying how and why some girls become engaged in PE and why some do not. Moreover, by effectively identifying what the key features of a successful programme are, these findings have relevance to other PA environments.



## **An autobiographic note**

My academic background has provided me with the knowledge and skills of conducting both qualitative and quantitative research on issues related to psychology generally, and sport and exercise psychology specifically. My MSc thesis qualitatively explored the role of exercise dependence as secondary to an eating disorder, in one young woman. This in-depth case study approach revealed interesting insights into one woman's relationship with exercise, and how such behaviour was used to retain control over body weight. Carrying out this in-depth qualitative research left me keen to continue with such methods in the sport and exercise psychology field. Thus, I was interested in exploring the motivations and barriers other young women experience related to their physical activity attitudes and behaviours. The idea of studying 'disengaged' girls PA and PE experiences was of great interest and importance to me, as I was someone who had very mixed PE experiences whilst at secondary school in Scotland. In my early secondary school years PE was one of my favourite subjects which led me to compete at various interschool running and sports events. My core PE and Standard Grade class consisted of mainly 'girl friendly' activities and individual sports, such as athletics. However in the later years, when I was undertaking my Higher Grade in PE (HGPE), the lack of females choosing the subject meant that I was suddenly in a mixed class with only two other girls. My experiences became more negative as we were being graded on 'boys' activities, of which we had no or little experience. My memories of these years are of boys dominating competitive game based activities, while we were left trying to learn the basic skills. Reflecting on these experiences allows me to understand how disengaged girls may feel in the PE environment with the hope that some of the barriers could perhaps be overcome.

## Summary of individual chapters

The background and significance of my research was included to provide context for the following chapters. Chapters 1 and 2 are structured to show the range of indirect influences which may affect adolescent girls' experiences engagement in the PE environment. By reviewing the history of PE the first chapter explores how PE has evolved as a subject. Debates around the nature and role of the subject are also included relating to physical education's contribution to public health. These policy and curriculum changes are then related to issues of engagement and the experiences girls may have in the PE environment. Building on the higher order indirect influences discussed in chapter 1, the aim of chapter 2 is to focus the reader towards the direct factors in the PE environment. These are broken down into the individual, social and PE environment as influences which affect girls' engagement and experiences in the subject. The purpose is to review the literature and identify what work is needed to further understand girls' engagement and experiences in the PE environment. Chapter 3 provides an overview of the main theories used in physical activity research and discusses which are most relevant for this population. This ends with a description of the social-ecological approach, the theoretical framework adopted in my research. As my research explored how a PA intervention affected disengaged girls in the PE environment, a review of school-based PA programmes is included. This forms chapter 4. The Fit for Girls programme is also discussed in more detail here. Chapter 5 discusses the youth social ecological model this thesis adopts. As this approach considers the individual, social and environmental influences for understanding behaviour, this frames the research questions, which are central to my study.

Chapters 6, 7, 8 and 9 describe the research methodology, including a discussion of different perspectives (Chapter 6). Chapter 7 is designed to inform the reader of the national evaluation of the Fit for Girls programme, including data collection. The data presented in this thesis was collected as part of this evaluation. Following this, the research design is described (Chapter 8) along with the data analysis process (Chapter 9). Chapter 10 provides an overview of the case study schools.

The discussion of results chapter follows and provides a brief overview of the results chapters. Chapter 11 contains the data from the baseline focus groups and the first stage of individual interviews. The aim of this chapter is to show the barriers to girls' engagement in the four PE environments, and is framed within the socio-ecological framework (the individual, social and PE environment). This chapter also discusses how these influences can affect disengaged girls engagement and experiences in PE classes. The aim of chapter 12 is to show the changes (or lack of) in the disengaged girls' engagement. By presenting the data from interviews stage 2 and 3 in two parts, the changes that each school made to increase girls participation are discussed (part 1) and the changes evident in the girls over the longitudinal data collection period are discussed (part 2). Chapter 11 and 12 include data from the 20 girls selected for the longitudinal research. For a more in-depth context specific understanding of individual girls changes in engagement, three girls stories (Eva, Sharon and Cathy) are provided in Appendix H. Finally, conclusions to the research are provided in chapter 13. This aims to address the specific findings related to the research questions, then concludes with a broad discussion of the implications of the study.

Although this thesis focuses on girls' experiences and engagement in PE, the research is written from a health psychology perspective with

implications for public health, rather than a physical education one. Therefore, the broader aim is to understand inactivity in adolescent girls, within the context of the physical education environment.



## **Chapter 1- Girls and Physical Education: Policy, curriculum and girls engagement**

The definition of physical education (PE) that will be used throughout this thesis is from Learning and Teaching Scotland (LTS)<sup>2</sup>;

*“curricular input that engages the pupils in active learning experiences through the medium of activity and sport. It is proposed through PE, young people can develop the capacities, tools and values allowing them to participate in lifelong physical activity”* (Scottish Government, 2011).

Scotland has one of the highest mortality rates in Europe from diseases linked to obesity and lack of activity such as coronary heart disease, strokes and cancer (Scottish Executive Health Department, 2003). Moreover, there has been a rapid increase in overweight and obese children in Scotland, which can have an adverse effect on their physical and psychosocial health (Hughes *et al.*, 2007). This problem is augmented by the fact that a growing number of young people seem to be opting out of PE and physical activity (Samdal *et al.*, 2006; Scottish Executive, 2004a; Scottish Executive Health Department, 2003). Schools, therefore, play an important role in educating young people about leading a healthy lifestyle and encouraging them to take part in PE and physical activity. As such there is an expectation that PE should play a major role in making a contribution to the health and wellbeing of young people (Scottish Executive, 2004a; Scottish Executive, 2004b). However, this view fails to take into account the growing disquiet in recent years as to whether PE should be accountable for children’s health (Kirk, 2006). This has led to significant debates about the nature and purpose of PE.

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<sup>2</sup> LTS is the national body responsible for reviewing the curriculum, developing assessment to support learning and providing national guidance and advice to the education system on the use of ICT to support learning and teaching.

This chapter will provide an overview of the history and changes of physical education. Following an account of historical changes to the subject, the focus will shift to Scottish policy, status and curriculum changes, to set the context for my research. Thus, the aim is to show how these developments have shaped current debates about the role of PE in public health. Such discussions are important for understanding how higher order, indirect influences, might affect girls' experiences in the PE environment.

### **1.1 The history of Physical Education**

Those who have written about the history of PE recognise that there have been a variety of significant changes during the last century (Randall, 1961; Wright, 1996; Scraton 1992; Thorburn, 2009; Kirk, 1992, 2006; Connell, 1983). One of the most notable is changes to the curriculum and the pedagogic content offered to girls. For example, prior to the 1870's girls PE consisted of callisthenics (exercises with poles/wands and dumb-bells) and musical drill. Following this, gymnastics and aesthetic exercises were adopted from the Swedish Gymnast Per Ling, and delivered to private girls schools across the UK (Randall, 1961). Such aesthetic activities were to encourage 'ladylike' qualities of beauty and deportment (Scraton, 1992). However, more significant changes began to emerge in the turn of the twentieth century, when organised games for girls were introduced in the English and Scottish PE curricula. These were, however adapted, softer versions of those offered at equivalent boys schools. According to Scraton (1992) this emergence of opportunities for girls was affected by, and dependent upon gender and class ideologies. As such, the middle and upper classes were offered the opportunities to exercise before the working class. In addition, the gender ideologies meant all girls practiced

physical activity according to appropriate gender specific behaviours, roles and characteristics.

In addition, to games based activities being introduced into the curriculum, much of the literature shows that the majority of PE teachers in girls schools, at this time were female (Connell, 1983). However, following the war, the mass expansion of the secondary school system required large numbers of male physical educators for the first time (Kirk, 1992). This likely impacted girls experiences of the subject, as the men brought different perspectives to physical education, pursuing the idea that PE games should be competition-based rather than the diluted versions offered by the female teachers (Kirk, 2006). David Munrow was the Director of Physical Education at the University of Birmingham in 1955, and captured the radical shift that was underway in physical education:

*“The men have made overt acknowledgement that other skills are as important and have ‘diluted’ the gymnastic skill content of gymnasium work so that now boys may be seen practising basket-ball shots and manoeuvres, carrying out heading practices or practising sprint starting ... The women, in the main, have...’diluted’ the traditional gymnastic skills by a quite different device. They have ceased both to name and to teach them. Instead, a description is given, in general terms, of a task involving apparatus and individual solutions are encouraged. A much wider range of solutions is thus possible; some may include traditional skills but many will not.”* (Munrow, 1955, p.276)

According to Kirk (1992) many male PE teachers supported scientific principles and skill development as the best form of education, for which popularity grew as the numbers of male PE teachers increased. Feminist writers such as Wright (1996) have criticised this ‘dominance of a masculine agenda.’ She claims that the focus around organised sport and the human movement sciences has marginalized other pedagogies and forms of physical activity, such as gymnastics and dance, which are more likely to be associated



with women. Wright claimed the value of individual achievement through aggressive competition becomes the 'normative standard' within a context of male dominance and contributes to the (re)production of notions of women being 'weaker' and 'lacking' in relation to male superior strength and skill (Wright, 1996).

### **1.1.1 Physical Education developments in Scotland**

In addition to the pedagogic and curriculum changes above, the most notable development in Scotland was the Education of Scotland Act (1945), when PE became a compulsory part of schooling for the first time. Following this, the 1960's brought significantly more changes to Physical Education in Scotland. These were instigated by the establishment of the Scottish Sports Council (now **sportscotland**, the national agency for sport in Scotland) to advise the government on future policy on sport and PE. Thus, by the mid 1970s, curriculum and assessment in Scottish secondary schools were under review. Between the late 1970s and early 1980s PE was reported to be lacking in educational significance and this was reflected in the low status PE teachers were afforded in schools (Brewer and Sharp, 1999) in common with other practical subjects such as Music, Drama and Art. Additionally, the low status experienced by PE teachers in schools was reinforced by the fact that no statutory time allocations were given for PE, which is still the case today despite the recent recommendation for two hours of quality PE a week (Scottish Executive, 2004b).

PE was also criticised as being a subject with no formal assessment, relying on 'fleeting evidence' and a reliance on general impressions, with a lack of specific criteria and specific observation (Reid, 1996). The James Munn committee set up in 1975, recognised that a move towards certification in PE would provide a sound curriculum and forms of assessment and examination. This educational

endorsement of physical education in the Munn Report was well received by teachers who were concerned about the marginal role of the subject (Brewer and Sharp, 1999). However, rather than an increase in the profile of 'core' PE for all students in early to middle secondary schools years, this led to the introduction of examination awards at Standard Grade level (Thorburn, 2009). Standard Grade PE (SGPE) meant that PE was now considered 'educationally respectable' and finally improved the problem of its marginal status in relation to other academic subjects (Reid, 1996). As a result, by the late 1980s there were two forms of PE; core PE, which typically provided pupils with just over an hour a week of the subject, and certificated PE, which was chosen by those in S3 onwards who wished to complete an examination award in the subject (Thorburn, 2009).

Following this, in 1994, Higher Grade PE (HGPE) was introduced as the next level of certification for PE, for S5 students in Scotland, and was approved as an entrance requirement for University study. Carroll (1994) has suggested that this move towards a certificated PE curriculum meant that PE became formally involved in the functions of the school, moving from a marginal role to a more central one. However, as a result, involvement in the ideologies of assessment meant it lost its 'sense of freedom', accepting external control to achieve clarity of its role, personal development for teachers and possibly even the survival of the subject (Carroll, 1994). Thus, there were emerging discussions around the nature and purpose of the subject.

### **1.1.2 Time for more change: a new Curriculum**

Since devolution in 1999, there have been further significant changes to PE in Scotland. In addition to the goal of providing at least two

hours of quality PE for all children, there have been three main developments at the national level:

- 1) The introduction of Curriculum for Excellence (Scottish Executive, 2004b) which has seen Physical Education play a leading role within the new core curriculum area of Health and Well Being.
- 2) The Scottish Primary Physical Education Project (2006) which has led to over 1000 teachers enrolling on the postgraduate certificate in primary physical education at Glasgow and Edinburgh University.
- 3) The Active Schools Programme (2004) which offers school-community pathways for all children and young people.<sup>3</sup>

The Curriculum for Excellence (CfE) provides curricular guidance for the 3-18 age range and replaces the previous 5-14 curriculum. Learning outcomes have been set for physical education, physical activity and sport, physical activity and health and dance. PE is now situated within the core curriculum area of health and well-being instead of the expressive arts area of the curriculum. There are three main areas within the CfE development which relate to physical education:

1. CfE defines curriculum as the 'totality of experiences' which are planned for children and young people through their education, wherever they are being educated (Scottish Executive 2004b).

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<sup>3</sup> The delivery of increased physical activity and sports opportunities at a local level is the responsibility of the Active Schools Managers and Coordinators. A sportscotland partnership Manager supports each local authority's Active Schools Network by providing strategic input into the local authority's plans for Active Schools.

2. Physical education is the only subject area within CfE with a specific timetable target: i.e. every child and young person is entitled to at least two periods of good quality physical education every week.
3. Physical education has been located within the core curriculum area of health and well-being and has been explicitly grouped with the physical activity and sport and physical activity and health aspects of health and well-being. These extend beyond specified physical education curriculum time.

The new curriculum aims to offer opportunities for all children and young people to be healthy and active, thus working towards increasing activity levels of young people, particularly adolescent girls, in Scotland.

## **1.2 The role of PE in public health**

Implementation of the CfE has resulted in physical education being held accountable for making considerable contributions to education, health and well-being of all children and young people in Scotland. Indeed, PE was seen to be 'an area of the curriculum which, exceptionally, needs greater priority to support the health and well-being of young people' (Scottish Executive, 2004c, p.1). However there is some dispute as to what the nature and purpose of PE should be. For example, O'Dea (2005) questions whether PE should be held accountable for the public health agenda in promoting lifelong physical activity. According to some (Miles, 2007; WHO, 2004), two hours of PE per week, as recommended by the PE Review Group (Scottish Executive, 2004a) may provide a limited solution to meeting the current recommendation of one hour of physical activity per day. This leads onto the first of the main

concerns about PE's role in public health; can two hours of PE a week make a difference to young peoples' health and wellbeing?

As many countries (e.g. Australia, New Zealand) already promote 'Health and Wellbeing' within PE classes (Burrows & Wright, 2004; Hardman & Marshall, 2000; Johns, 2005; Tinning *et al.*, 1996), questions have been raised as to how this has been achieved and if Scotland will be able to do likewise. Miles (2007) insists that there will need to be changes in practice and approach (how and when it is delivered) to do this, as two hours of physical activity per week provided within PE lessons alone, will not have a significant impact on health. Others suggest that, for some children, PE may deliver the only moderate-to-vigorous physical activity (MVPA) they experience during a week (Tudor-Locke *et al.* 2005). Therefore, PE could potentially compensate for a lack of physical activity outside of school (Slingerland, 2011). Moreover, a recent review suggests that if PE provides enough curricular PA, this could make a considerable contribution to the daily-recommended MVPA. However, the authors caution that more studies with objective methodologies are needed to support this (Slingerland, 2011). As a result, if PE activity is combined with other forms of physical activity, PE lessons can contribute towards the recommended levels. Furthermore, for the very least active children who should initially aim to achieve 30 min of activity per day (Biddle *et al.*1998), PE can provide the majority of this volume. As Fairclough and Stratton (2005) note:

*"The apparent disparity between recommended physical activity levels and limited curriculum PE time serves to highlight the complementary role that education, along with other agencies and voluntary organizations must play in providing young people with physical activity"* (Fairclough and Stratton, 2005: p. 20).

Therefore, it is not solely the role of PE to meet these health targets, but rather increasing the amount of PE curriculum time in schools is a positive step towards contributing to health-related goals.

A second question has arisen around the nature and purpose of PE, relating to whether PE teachers should use their time to deliver on health outcomes. According to Gard (2004) PE is now seen to be relevant to youths body shapes and obesity levels and so physical educators have to think critically about this issue and what their role may be. Indeed he states '*we [PE teachers] may end up having to explain our failure in a job for which we did not apply*' (p. 7). Conversely, others believe physical educators are in a position to help deliver towards the outcomes needed for lifelong physical activity. According to McKenzie *et al.* (2000), along with their teaching role they are well placed to encourage out of school physical activity, help students become independent participants and inform them about initiatives in the community. Also, they may have a direct impact by promoting increased opportunities for physical activity within the school context. These could include activities before school (Strand *et al.*, 1994) and during break time (Scruggs *et al.*, 2003), as well as more organised extra-curricular activities at lunchtime and after school. PE teachers across the UK may already offer such extra-curricular opportunities. However perhaps more needs to be done to encourage teachers to use time in this way. This would supplement PE time and provide physical activity opportunities in a less structured and pedagogically constrained manner (Fairclough, 2005).

Finally, others (Cale and Harris, 2011; Gard and Wright, 2001; Horell *et al.* 2011; O'Dea, 2005) have suggested that if PE does shift its focus towards the promotion of 'Health and Wellbeing' this might make the new definition for PE problematic. For example, focussing

on objective measures of fitness alone in the PE class has the potential to influence the natural discourse of what PE actually is. When this happens, PE becomes more about increasing PA levels and heart rate, than it does about being physically educated (Horrell *et al.* 2011). Thus, there appears to be a certain amount of resistance from the PE field that PE teachers should play a major role in health and wellbeing. One of the reasons for this resistance is the contention that PE teachers are not considered health professionals, and their role in the prevention of ill-health and obesity should not be an appropriate purpose or rationale for Physical Education (Cale and Harris, 2011; O'Dea, 2005). Gard and Wright (2001) are also critical as to how physical education 'legitimises itself on the basis of claims about obesity and overweight' (p. 537). Further, Evans *et al.* (2004) suggest that "*physical education has no more capacity or responsibility to make children....eat well and be thin than have a maths teacher the capacity to or responsibility to make pupils multimillionaires*" (p 386).

However, this is in contrast to Haywood (1991; p. 151) who states:

*"Physical educators should accept the challenge of improving public health- when adults cannot calculate, read or spell society usually debates how and what to change in school programs, therefore, we must also ask what went wrong with school physical education when too many adults are sedentary."*

Sallis and McKenzie (1991) see childhood obesity and inactivity as a challenge for physical educators to develop health-related programs. Schools have a responsibility to teach young people about health and PE teachers are seen to have the expertise to contribute to this. Some suggest it is not necessarily about 'fixing the obesity problem', rather it's about providing educationally appropriate messages as well as opportunities for PA (McKenzie, 2007). Cale and Harris (2011) conclude that:

*“whilst the complexity and sensitivity of the issue is acknowledged, it is recommended that every child of every size matters and can benefit from regular engagement in physical education and physical activity, and therefore, as a profession, we have a responsibility to provide this and ensure that the experiences we offer are meaningful, relevant and positive”* (p. 13).

This chapter has shown how the status of PE has evolved over time. Indeed, the literature seems to suggest that PE has always had a certain stigma attached to it, as not being ‘educational enough’ that it has tried hard to shed. An important change was the certification of the subject and its resulting educational significance within the school curriculum. PE in Scotland is subject to future change through the introduction of CfE, yet the evidence supporting such change appears to be rather ambiguous. Consequently, another debate has ignited, in relation to PE’s role in promoting health and health-enhancing behaviours.

### **1.3 Young peoples’ engagement in physical education**

PE in the UK today is still under scrutiny for too great a focus on competitive games in the curriculum (Fairclough *et al.* 2002). Indeed, many secondary school physical education programs have been critiqued in the past as being ‘relatively ineffective in promoting skill development and positive attitudes’ (Kirk, 2005). Further, Penney, *et al.* (2006) have suggested that a sport-based PE curriculum, which consists of compartmentalised activity blocks lasting a short number of weeks, has little evidence of connective learning. Such pedagogical approaches have often been cited as major reasons why students feel disengaged from physical education at this age (Thorburn, 2009). For example, the PE review group (Scottish Executive, 2004a) found pupils did not consider the traditional competitive games based approaches relevant or meaningful, suggesting disengagement from PE and PA was related to the



activities presented in the curriculum. Thus the PE review group suggested that in order to increase participation in PE and PA, schools in Scotland should offer more choice from a wider range of activities. In response to this, Gray *et al.* (2008) investigated pupils' perceptions and experiences of team invasion games in one Scottish secondary school and three of its feeder primary schools. The study indicated that primary 7 (age 9/10) pupils valued competitive team games more than the older S4 (age 15/16) pupils. Moreover, the females in the study were significantly more negative about the value and enjoyment and had lower perceptions of competence for the competitive games based activities. Moreover, Gray *et al.* (2008) suggest that the way teachers deliver PE can have a significant impact on pupils' attitudes towards the activity, participation and performance.

Moreover, according to Fairclough *et al.* (2002), in order to promote lifelong physical activity, a broader base of PE activities needs to be offered to reinforce the fact that it is not necessary for young people to be talented sportspeople, but rather to be active and healthy. The curriculum therefore should include a diverse range of activities so students can choose activities they enjoy and want to peruse. Further, it is likely that the way in which exercise and sport is experienced in childhood impacts upon physical activity patterns later in life in terms of attitudes, enjoyment and setting of lifetime habits (Department of Health, 2004). Such early learning experiences are crucial to continuing involvement in physical activity (Kirk, 2005).

#### **1.4 The 'problem' with girls**

Over the last few decades, research has consistently shown a percentage of girls are not engaging with PE in school, resulting in a number of relatively inactive girls within the PE class (Simons-Morton *et al.* 1990; Simons-Morton *et al.* 1994; McKenzie *et al.*, 1996). Thus

a considerable body of work exists which illustrates girls' disengagement from PE classes (Hastie, 1998; Nilges, 1998; Scraton, 1992). However, within the literature, girls are often identified to be 'the problem' (Flintoff and Scraton, 2001; Rich, 2003, 2004; Wright, 1996). As discussed earlier in the chapter, girls were traditionally encouraged to remain 'feminine' in the PE class. According to Scraton (1992), PE in the 1870's was underpinned by the gender ideologies of middle class femininity, motherhood and sexuality. However, as Wright (1996) has pointed out, organised sport and team games are perceived to be more masculine in nature. The introduction of such activities has resulted in male dominance in PE becoming the 'normative standard', with girls now expected to show strength and skill rather than feminine characteristics. It is possible that a 'masculine standard' reduces girls' participation in physical education and physical activity, leading to disengagement in the subject.

This recent shift in discourse around sport/activity type and gender practice highlights that the 'problem' may lie within the curriculum and pedagogic content rather than the girls themselves (Ennis *et al.* 1997; Flintoff and Scraton, 2006; Sandford and Rich, 2006; Griggs, 2008). Although there has been a proliferation of work carried out on girls and physical education, there appears to be a dearth of empirical research that has been conducted in Scotland to examine *why* girls choose to participate, or not participate in PE and PA. Thus the issue of disengagement remains. Girls not taking part or engaging in physical education is a reason for concern, and more qualitative work needs to uncover 1) why this is the case, and 2) how effective physical activity programmes are in increasing girls participation and engagement in PE, in order for this issue to be tackled. This thesis aims to address these issues by providing in-

depth qualitative accounts of adolescent girls PE experiences during a school- based PA programme.

The following chapter will review what is already known about the main barriers to and influences on girls' engagement in PE. Although the broader theme of girls and lifelong physical activity has been discussed, the following chapters will now focus specifically on adolescent girls' experiences and engagement within the PE context.

## **Chapter 2 Factors Influencing girls' engagement and experiences in the PE environment**

The last chapter provided an overview of policy and curricular changes to PE. Such changes are important for understanding how the subject may provide the context for and so indirectly affect girls' current experiences and engagement. For example; the influx of male teachers to the profession following the war resulted in competitive games dominating the curriculum. These activities are still a large part of the Scottish curriculum today. The chapter also discussed the current debates around the nature and purpose of the subject, with PE seen to have an increasing role in public health. Focussing in from these higher order influences, this chapter will now discuss the research that has looked at the 'direct' factors influencing girls' engagement and experiences in the PE environment. These direct factors relate to the individual and the environment they are experiencing and will be divided into; psychological, social, and finally environmental influences.

The majority of research examining variables associated with young people's participation in sport and physical activity has been cross-sectional, which aims to identify variables associated with PA behaviour (Sallis *et al.* 2000; Cavill and Biddle, 2003; Sallis *et al.* 1999). These are commonly known as 'correlates' or 'determinants' of physical activity. Although there has been some dispute about which term is more appropriate (Bauman *et al.* 2002), the two are often used interchangeably in the literature to describe statistical associations or predictive relationships between variables. Both terms are used in this chapter when reviewing the literature to ensure consistency with the original terms employed by authors. However, when discussing my own work I will use the terms 'factors' and 'influences' to ascertain the effect on PA behaviour, as this

qualitative thesis will not identify any statistical associations between variables.

One of the most comprehensive reviews identifying correlates of physical activity is that by Sallis, Prochaska, & Taylor (2000). They examined the relationship between psychological variables and physical activity among children aged 3–18 years. One hundred and eight cross-sectional and prospective studies from 1970 to 1998, from school and community samples were included in the study. Fourteen variables were confirmed to be consistently associated with adolescent physical activity. In particular, there were positive associations between physical activity and perceived competence, self-efficacy and attitude or outcome expectations among adolescents (12-18 years). This suggests that individuals who are physically active have higher levels of perceived competence (a subjective assessment of ability), self-efficacy (a situation specific construct that deals with confidence, competence and capability for an action or behaviour) and a positive expectation about the outcome of physical activity, compared to those who are not physically active. Cavill and Biddle (2003) report similar findings in their more recent comprehensive review. However, they highlighted the need for caution when applying the findings to a British context as previous research has established cultural, racial and ethnic differences in physical activity factors (e.g. Gordon-Larsen *et al.* 1999; McKenzie *et al.* 2002; Schmitz *et al.* 2002). Both reviews also identified an abundance of research from the United States and a shortage of physical activity studies conducted elsewhere.

A body of work (Barr-Anderson *et al.* 2008; Robbins *et al.* 2003; Biddle *et al.* 2005) has focussed on identifying the barriers to adolescent girls' PE and PA participation. For example, an American study of seventy seven girls aged eleven to fourteen employed Likert

scale questions to assess barriers to physical activity participation and school-based sports. Noteworthy barriers were feelings of self-consciousness and a 'lack of motivation' to be active (Robbins, Pender and Kazanis, 2003). Similar findings for barriers to girls' participation in physical activity and PE have been shown in other countries (Mulvihill *et al.* 2000; Tappe *et al.* 1989; Allison *et al.* 1999), highlighting associations of psychosocial and environmental factors with physical activity participation. One such study has been carried out in Scotland by Biddle and colleagues (Biddle *et al.* 2005). They administered a questionnaire survey to 366 girls, carried out focus group interviews with 182 girls and diaries were completed by 629 girls. The qualitative work aimed to investigate more fully girls' attitudes towards sport and physical activity and to examine in greater detail issues relating to higher or lower participation levels. Girls were chosen from schools located in large urban, other urban, small town, accessible and remote rural areas of Scotland. This key study drew out a number of important findings related to PE; firstly, the environment in which PE takes place was noted as important, with results showing that the influence of school on girls' sport and activity levels depended on the location, size of school and the facilities on offer. Activities on offer in school were also important, with girls reporting little alternative fitness-related activities available for those who did not like competitive sport.

In the same study, the girls also perceived the competitiveness of activities to increase when boys were present, which was viewed unfavourably. Girls reported the sport environment in schools to be 'too competitive' and 'too much of a boy thing'. 'Being forced' to take part in PE was noted as impacting negatively on girls' participation with girls commenting that they do not think keeping fit and healthy, or being good at sport is an important part of their teenage lives (Biddle *et al.* 2005). The study also indicated that many of the girls

were extrinsically motivated (motivated by rewards which provide satisfaction and pleasure that the activity itself may not provide) to achieve a 'desirable body type'. However, the authors proposed that *"any potentially beneficial effects on body image may have been diluted by stronger peer and social influences on what is perceived to be desirable"* (p. 55). Although the authors reported that girls' perceptions of their body improved, it is unclear whether the girls perceived their body image more accurately, or they perceived that they had become fitter/lost weight. In addition, girls' expectations of what constitutes a desirable body reportedly increased over time. Such increased expectations of a 'desirable body' warrants further investigation as it may mean girls are putting increasing pressure on themselves to look a certain way. Finally, Biddle and colleagues' (2005) research shows that girls were less likely to feel self-conscious when taking part if they reported enjoyment as their main motivation and had a friend present (particularly in younger secondary school girls).

This recent contribution to the limited research on adolescent girls in Scotland clearly highlights the numerous barriers to girls' engagement in PE. Further work in Scotland conducted in the Physical Activity in Scottish Schoolchildren (PASS) study (Inchley, Kirby and Currie, 2008) has substantiated these findings, showing that girl's participation in sport and PA is a multi-factorial issue which relates to the individual, the social setting, the PE environment and wider societal and cultural influences. This study will be discussed further below.

## **2.1 Psychological factors affecting engagement and experiences in the PE environment**

The psychology of physical activity has an extensive literature base (Biddle and Mutrie, 2008; Sallis *et al.* 2000; Whitehead, 1995;

Crocker *et al.* 2000; Mulvihill *et al.* 2000; Biddle *et al.* 1997; Allison *et al.* 1999; Garcia *et al.* 1998) and much of this has been devoted to the study of correlates of behaviour among young people. Theoretical perspectives from general, social and health psychology have been adopted to predict physical activity behaviours (Biddle *et al.*, 1997). There is increasing support for the importance of psychological correlates for predicting physical activity behaviour among adolescents. However as most of the research has been carried out in structured youth sport settings (Weiss and Williams, 2004) there is a need to explore how such factors (perceived competence, self-efficacy and attitudes towards activity) may apply to adolescent girls' experiences and engagement in the PE environment.

Typically, the literature on psychological correlates of young peoples' PA has centred on variables relating to attitudes, barriers, motivation, and self-perceptions, including self-esteem or body image and physical self perceptions (Welk and Eklund, 2005; Crocker *et al.* 2000). In addition, self-efficacy is seen to be an important determinant of physical activity behaviour in children and adolescents (Trost *et al.* 1999; Loucaides *et al.* 2007) particularly in adolescent girls (Biddle *et al.* 2005). Self-efficacy is also closely linked to an individual's perception of competence; their ability to demonstrate competence in a specific activity, task or area (Harter, 1978). As shown in chapter 1, competitive sports are still a large part of the current Scottish curriculum (although it is hoped the introduction of CfE will encourage schools to offer more activity choice). Typically, competitive sports have an emphasis on skill and ability compared with lifestyle physical activity (Gilson *et al.* 2005). Therefore, perceptions of competence are an important construct for understanding girls' motivation in the PE environment. The next section will review the literature which has investigated perceptions of competence in the PE class.



### **2.1.1 Perceptions of Competence in the PE class**

Previous work by psychologists has suggested that an important factor in young peoples' motivation to participate in sport is their perceptions of competence compared to their peers. Lee, Carter and Xiang (1995) propose that perceptions of competence in children are underpinned by a child's understanding of the relationship between effort and ability. The authors suggest that before age 10, effort and ability go hand in hand, so they believe if they try hard, they can accomplish most physical tasks. However, by ages 8-12 individuals start to recognise that they may not be able to accomplish tasks, regardless of the effort they put in. According to Lee *et al.* (1995) this cognitive development coincides with when youths begin to participate in organised sports, and they have a basis for comparing their ability against others. Comparing ones ability with peers is one of the tenets of Goal Perspectives theory (Nicholls, 1978, 1989). This theory suggests that individuals approach learning tasks in two different ways depending on their view about the concept of ability. If perceptions of competence are self-referenced (task orientation) the individual does not distinguish effort from ability, and success or competence is defined by self improvement or completion of a task. Alternatively, if comparisons are made with others (ego orientation) about ability then success is defined based on the performance of others.

Interesting findings relating to adolescent girls' perceptions of competence are shown in the five year PASS project (Inchley *et al.* 2008). This research tracked a cohort of girls and boys from their final year of primary school (P7) at age 11 to the fourth year of secondary school (S4) when aged 15. The study revealed high perceived competence was associated with higher levels of physical activity among both boys and girls (Inchley *et al.* 2011). However, there was a significant gender difference across all the year groups,

with boys reporting higher levels of perceived competence than girls. Moreover, the girls who reported low perceived competence were also the least active across all five years. Other UK findings relating to competence are illustrated in a study by the Institute of Youth Sport (1999). Various motivational and activity groupings (based on scores on self perceptions of competence, physical self concept and dispositions towards participation) for physical activity were identified in data gathered from boys and girls aged eleven to fourteen across fifty secondary schools in England. The young people were categorised into five distinct groups based on their responses to the questionnaire. One group (group E) scored the lowest, in terms of perceived competence, motivation, physical activity levels and physical self worth. This group consisted predominantly of girls (67%) compared to boys (33%), and made up 14% of the whole sample. This study is important as it clearly highlights the gender disparity for perceptions of sport competence within the PE environment. As perceived competence is a predictor of physical activity behaviour, work must be done to uncover why girls in the UK have low perceptions of competence in the PE environment compared to boys.

This idea of 'gender competence' (gender differences for perceptions of competence) is reflected in Jay Coakley's (2001) work. He suggests that when females participate in sport their performance is often undervalued, referring to this male dominance in sport as 'gender logic'. This is characterised by negatively orientated statements such as throwing, running or jumping 'like a girl' if a bad performance is displayed. This can be damaging to girls participation (Coakley, 2001). This 'gender logic' has also been demonstrated in Young's (1990) work *Throwing like a Girl*, which discusses 'feminine body compartment' (which derives from the woman's experience of the body as a thing at the same time as she experiences it as a capacity) in an attempt to explain the differences between the way

boys and girls throw a ball. Young describes girls as restricted in taking up space and inhibited in bodily movement, "*Girls do not bring their whole bodies into the motion as much as the boys do. They do not reach back, twist, move backward, step and lean forward. Rather the girls tend to remain relatively immobile except for their arms which are not extended as far as they could be*" (p. 145). A body of research exists which supports this; Adler and Adler (1992,1998), Sutton-Smith (1979) and Maccoby (1990, 1998) argue that preadolescent girls' games involve partial body involvement, simple turn-taking and emphasize cooperation and intimate relations. In contrast, boys are seen to engage in highly physical, competitive and complex games that are played in large groups and require much playground space.

Young also employed the term 'inhibited intentionality' (p. 149), which refers to the tendency for females to underestimate their physical ability in sports, relating to the construction of the masculine body as active and the feminine body as passive or weak. From an early age girls are taught by society that they are weak and therefore experience their bodies as "*a fragile encumbrance, rather than the media for the enactment of their aims*" (Young, 1990, p. 147). This suggests that girls and women underestimate their physical abilities, and therefore inhibit their movements in physical activity and sport. Consequently, this results in girls achieving less than they are able, and so exhibiting 'weakness'. The assumption that girls are weaker than boys could possibly also lead adults to treat children in different ways, which may result in boys being encouraged more than girls to be active (Evans, 2006). Boys may also reinforce this belief, reporting girls to be 'poorly skilled' and lacking the natural ability to be successful in most traditional sport activities (Lee *et al.* 1995). This will be discussed further in section 2.2.2, teacher influences in the PE environment.

Qualitative researchers have endeavoured to understand why girls exhibit lower levels of gender competence in physical activity and sport settings. More specifically, efforts have been focussed on investigating how girls' perceptions of competence can affect their experiences in the PE class. For example, a lack of confidence and a perceived lack of physical ability can lead to those who are less skilled avoiding certain activities (Finch and White, 1998; Mason, 1995). In addition, Orme (1991) and Coakley and White's (1992) work, showed teenage girls were unable to perform skills that they perceived they should be able to perform, suggesting girls actual competence for such skills is low and/or they have high expectations of what they should be able to do.

By contrast, Brooks and Magnusson (2006) found that girls were positive about demonstrating their competence when they were given the opportunity to engage in new physical activities which uncovered previously hidden physical abilities. Coakley and White (1992) also found that some girls viewed physical activity as an opportunity to demonstrate equality with boys, and Finch and White, (1998) uncovered that learning new skills, winning certificates and recognition was an important facilitator for girls' participation in physical activity. Indeed, in Flintoff and Scrattons study (2001) girls reported being unhappy with the lack of physical challenge in PE lessons, with several girls commenting on the importance of challenges in what they were doing. Activities such as table tennis and trampolining were mentioned as being enjoyable in themselves, but became tedious when high numbers of participants meant waiting for a turn for much of the lesson. This finding is of particular interest as a common assumption is that girls don't like competition or competitive sport (Sleap, 2001), with studies showing that many girls are bored by the competitive games (Orme, 1991) and disappointed by the lack of variety in PE (Mulvihill *et al.* 2000). However Flintoff

and Scratton (2001) findings show that some girls do enjoy having physical and competitive challenges in PE classes; rather it's the environmental constraints (such as large numbers of pupils in classes) which affect engagement. These environmental issues will be discussed further in the PE environment section below (Section 3.1).

### **2.1.2 Identity in the PE class**

Identity is another important psychological factor which can influence an individual's physical activity participation. According to Erikson's psychosocial theory of development (1950), an adolescent must struggle to discover and find his or her own identity, while negotiating and struggling with social interactions, 'fitting in' and developing a sense of morality and right from wrong. Those unsuccessful with this stage tend to experience role confusion and upheaval. The emerging body of work which explores the ways girls negotiate and struggle with physical identity is important for understanding PA experiences. For example, Cockburn and Clarke's (2002) work has been key in exploring sport and PA identity in young women. Their qualitative study investigated the cultural and sub-cultural aspects of teenage girls and young women's lives which influenced their involvement in sport and physical education. More specifically, they investigated the constraints and complications involved in girls' identity formation as physically active teenagers. A purposeful sample of six 13 to 14 year-old girls, across five state schools in England, was included in in-depth individual and paired interviews. Results highlighted that the qualities encouraged in physical education and sport (such as independence, assertiveness, strength, physical skill, to enjoy sport and be active) run counter to the 'acceptable ways' to be a teenage girl, particularly in adolescence when major identity formation takes place. At this time, girls choose one of a number of options, including: opting out of participation altogether, accepting the

stereotype of tomboy, or they compromise their position by participating then changing back to an 'acceptable' feminine image (Cockburn and Clarke, 2002). Other research (Adler *et al.*, 1992; Thorne, 1993) has shown similar findings with girls reporting certain characteristics, such as being physically and athletically talented, to be 'socially unacceptable' for a female. According to Biddle *et al.* (2005) perceived notions about femininity can influence girls PA behaviour, preferences for particular activities and expressions of physicality.

As discussed previously, Young's (1990) suggestion is that girls and women underestimate their physical abilities thereby inhibiting their movements in physical activity and sport. This could also be illustrated by girls creating barriers to participate. One such barrier is for girls to decide they are not a 'sporty girl' and see themselves as too 'girly' to participate in PE. This was shown in a study carried out by Oliver, Hamzeh and McCaughtry (2009). The interviews with eleven girls aimed to understand the barriers to participating in PE among adolescent girls. When taking part in a photo analysis task (which involved them taking photos of things they thought may prevent girls from being active) they explained that being a 'girly girl' (a concept introduced by the girls) might hinder them from taking part in PE as a 'girly girl' does not want to 'sweat', 'mess up her hair and nails', 'mess up her nice clothes' and not 'look perfect'. However, this description was something which was not a fixed category; rather it was reported by Oliver *et al.* (2009) as something which was used as a barrier by the girls if they did not feel like participating. Interestingly, the girls appeared to use their 'girly language' of embodiment as a way to express additional barriers to participation. For example, not liking the choice of activities available, not liking how activities were being played (with boys), getting hurt and being left out were reasons not to take part. Rather than participate in situations they identified as

unsuitable, they chose not to participate. Therefore, for these girls their opportunities to take part in PE were initially constricted *by them*, as in their opinion, they couldn't be girly girls *and* take part in PE and physical activity. This supports the suggestion that girls' participation in physical activity is often limited by perceived gender barriers (Wright, 1999; Flintoff and Scratton, 2001; Azzarito, Solomon and Harrison, 2006). However, interestingly, it was the girls themselves that created these gender barriers in the PE environment.

In Oliver *et al.*'s (2009) study, the researchers worked with the girls to create possibilities to be active. By acknowledging the girls' desires to be 'girly' they created games that such girls would enjoy, so the perceived barriers were no longer an issue. According to the researchers:

*"it was as if the moment we acknowledged their desire to be a girly girl and worked with them to co-create games for them, the content of the games actually contradicted many of their self identified girly girl barriers- that is while they may have been making up games for days where they did not want to sweat or mess up their nice clothes, many of the actual games involved running, jumping, chasing or fleeing- in other words, the possibility of sweating or getting their clothes dirty"* (p. 40).

It appears, therefore, that not only does this study give insight into how girls may use their chosen identity as a way to express additional barriers to participation, it also shows how perceived barriers can be overcome by working with girls to create a more fitting PE environment.

Finally, a number of studies have noted that as teenage girls age, their own changing identity may lead them to express a reduction in the relevance of sport and physical activity. Coakley and White (1992) reported that teenage girls felt sport was irrelevant or at best a

low priority in preparing them for adult roles. This is consistent with a number of studies which identified competing priorities that become more important to the teenage girls than sport and physical activity (Biddle *et al.*, 2005; Cox *et al.*, 2006; Finch and White, 1998; Mitchell, 1997). Gender related issues and identity are clearly important for understanding girls PE experiences. Thus these areas will be explored in my work with disengaged girls.

## **2.2 Social influences in the PE environment; the importance of peers and teachers**

Social influences have been shown to play an important role in adolescents' physical activity behaviour, with most of the research showing family, peers and teachers/coaches to be the main influences (Carr, Weigand & Jones, 2000; Weigand, Carr, Petherick & Taylor, 2001; Bailey *et al.* 2005). Since the focus here is girls' experiences and engagement within the PE environment, particular attention will be given to peer relationships and teacher influences.

### **2.2.1 Peer relationships**

Research has shown interesting results relating physical activity behaviour to peers' activity levels. For example, Strauss and Pollack (2003) investigated the social networks of overweight and normal-weight adolescents in 13-18 year olds, and showed that popularity, measured by friendship nomination from classmates, was a significant predictor for physical activity participation.

More specifically, those who participated in sports and club activities and who spent fewer hours watching television displayed greater friendship attachments than their otherwise comparable peers. This finding is important as it indicates girls who are unpopular with peers are also likely to be inactive. Thus, in addition to physical implications of being low or inactive, there are also social, emotional and mental repercussions.



Peer network approaches also give interesting results. Voorhees *et al.* (2005) studied the relationship between peer-related physical activity social networks and adolescent girls PA levels. By asking adolescent girls to rate three of their closest friends on: activity level, if they were active together, if they asked each other to be active together, and how often they were active together, along with other behaviours. They found younger girls were more active than older girls and importantly, frequency of being active together was a significant predictor of physical activity. Smith (1999) showed that perceptions of peer acceptance and close friendship in the activity context contributed to the prediction of physical activity motivation and behaviour, suggesting it is not just peer characteristics or reinforcement that are associated with youth PA but also the nature of the relationship. Gender differences in peer support have also been shown in work by Kirby *et al.* (2011) with boys reporting higher levels of peer support than girls from primary 7 (age 11) through to S4 (age 16), and by S4, almost twice as many girls (60.8%) than boys (32.6%) reporting low peer support for being active. Peer support and acceptance are therefore important constructs for understanding girls' physical activity.

A key piece of research which explores girls' peer groups and competence within the PE environment is that by Hills (2007). This study is important as it focuses on 12 and 13 year old girls' understandings of physicality with respect to the organisation of physical education and more informal social networks. In addition, it explores the connections between the body, capital, physical activity, and femininity and work on friendship and other social relationships, all of which are important aspects of my thesis. The study revealed that girls' understanding of competence was associated with success in competitive team sports. For example, if you contributed to your

team winning you could increase social status with team mates through cheering, encouragement and being acknowledged as an important player in the team. Alternatively, if you didn't perform well, you could be teased and excluded. Therefore, when discussing physical education with the researcher, the girls expressed preferences for particular activities, depending on their considerations of how their competence would be treated and evaluated by others in the class (Hills, 2007). The study also showed that girls who were physically dominating in the PE lessons were generally socially and physically strong, and therefore were able to control team selection and protect their friends. Some of the girls enjoyed and felt motivated to participate in PE with such friends present as they felt protected. However, there was also an opportunity to be excluded by other girls 'making cliques'. Therefore, although peers in the PE class could provide an environment to facilitate inclusion, they could also increase exclusion. Peer influences can therefore be seen to both facilitate and constrain positive experiences of PE. As O'Donovan (2003) notes, the prioritising of skill in conjunction with status results in an exclusive environment. This can alienate and marginalise particular individuals in relation to participation in physical education as well as in the broader context of peer relations.

Girls' friendship groups clearly play an important role in encouraging physical activity participation. In addition, the presented literature has shown that physical activity and sport can be important for one's belongingness to a group. Indeed, research has indicated that just being included by friends can be considered more important than the activity itself (Harris, 1995). If an individual is made to feel alienated in the PE class, this could put them off PE classes and also further physical activity pursuits. Consequently, who is in the class will ultimately affect an individual's experience of PE.

Coleman *et al.* (2008) also uncovered interesting findings on the influence of friendship and physical activity. They aimed to investigate the social impact of key transitions (for example, leaving high school) in young women's lives on levels of sports and physical activity. Twenty-one individual in-depth interviews and seven focus group interviews were carried out with girls aged between fifteen and nineteen. Findings demonstrated that transitions in a women's life can have detrimental impacts on sport and physical activity participation, due to new priorities and commitments. Although the study did not investigate physical education specifically, the findings are important as the 'never participators' mirror many of the reasons for disengagement reported in the PE environment. In particular, results indicated a disparity between girls who identified themselves as 'always' participators, 'sometimes' participators and 'never' participators in sport and physical activity with the 'always' participators reporting a more positive image of sport and positive perception of their own ability. Although those who never participated generally also had a positive image of sport and physical activity, they felt there were barriers to participating if they did not 'look the part' or did not think they were a 'fit and healthy person'. In addition, the 'never participators' possessed poor perceptions of their own abilities while doing physical activity and few had sporting role models. However, an important finding in this study was that the influence of family and friends had a more significant influence on participation levels than individual psychological factors. This is supported by a number of other studies which have shown that perceptions of what is considered socially desirable are more important than any perceived health or other benefits of being active (Biddle *et al.*, 2005; Cox *et al.*, 2006; Mason, 1995; Orme, 1991). This is particularly important for girls in the PE environment where

peer acceptance and group inclusion is a major motivating force in the everyday lives of adolescents (O' Donovan, 2003).

The case studies included in Coleman *et al.*'s (2008) research also expanded on this finding, with girls emphasising the primary influence of the friendship group over that of the family on occasions. A preceding study by Coleman (2005) cited in Coleman (2008), carried out with younger age groups, reported less influence of friendship groups and self-consciousness, illustrating such characteristics may appear in slighter older females. However while girls' peer support appears to decline with age, it also increases in importance (Inchley *et al.* 2008). Therefore it is imperative that girls have a supportive peer group within the PE environment, for engagement and participation levels.

Since there has been relatively little research exploring the influence of friendships in the PE environment, it would be interesting to explore if similar findings from the sport and physical activity contexts might be found within the PE setting. It is also apparent that we need to consider the wider influence of peer culture on girls' experiences in PE. The desire for peer acceptance and group inclusion is clearly a major motivation for adolescent girls (Cotterell, 1996) and so more qualitative research is needed to further unravel the influence that friendships have on girls engagement and experiences in PE.

### **2.2.2 Teacher influences in the PE environment**

Previous findings (Inchley, *et al.* 2008; Flintoff and Scraton, 2001; Brooks and Magnusson, 2006; Bailey *et al.* 2005) have shown the PE teacher has an important influence on girls' engagement and experiences in the PE environment. Findings from Inchley *et al.* (2008) with adolescents indicated that the PE teacher can be viewed as an important figure, and noted the significance of having teachers

who helped them to learn, showed them how to do new activities and promoted a sense of fun. However, negative perceptions of teachers were expressed in relation to those who were perceived as unapproachable or too critical. PE teachers' attitudes and expectations were also reported as a barrier to participating in PE in Flintoff and Scratton's (2001) study, with particular reference to 'sarcastic teachers' in relation to skill level, presumed low expectations of them or those who just did not seem to care. In addition, the girls in Brooks and Magnusson's (2006) study reported enhanced physical self-confidence, and actually being made to feel that they were "*good enough as opposed to less than*" (p. 878) when they received praise from their PE teacher. This highlights the importance of feedback and praise for increasing girls' confidence and participation. Moreover, a study by Luke and Sinclair (1991), aimed to identify and examine the potential determinants of adolescents' attitudes toward school physical education. It showed that girls report their teachers' behaviour in a mixed PE environment to have a negative impact on their experiences. The behaviours viewed most negatively were: methods of evaluation (for fitness or skill based testing), autocratic teaching style (always being told what to do), the lack of fairness in the co-educational environment and unfavourable personal qualities. Interestingly, the study also showed that females who did not choose PE as a subject were most likely to identify the teacher as a source for negative experiences. It seems that the teacher is highly influential in determining negative attitudes, particularly among girls.

Much of the work on gender and PA has adopted a poststructuralist feminist approach (an approach which usually acknowledges the work of Michel Foucault as having been influential). A poststructuralist approach is particularly concerned with the social construction of gender and relations of power as they are produced

through social practices. Language and other types of symbolic representations are taken to be important forms of social practice which constitute particular sets of meanings, particular identities and social relations (Wright, 1999). Wright advocates this approach, suggesting that, although PE teachers may try to achieve equity by teaching girls and boys in the same way, the research in North America, Australia and the UK implies otherwise. She proposes that the dynamic relationship between the students' and teacher's experiences and expectations, produce social practices which construct traditional gender positions (Evans *et al.*, 1996; Scraton, 1993; Talbot, 1993; Wright, 1996, 1997). Lee (2002) agrees with this suggesting that teachers bring with them perceptions of students based on their gender, race and socio-economic level, which will guide their teaching. Teaching practices can influence students' self-perceptions in positive and negative ways which will, in turn, mediate effort and performance in PE (Lee, 2002; Gray *et al.* 2009).

Social and societal influences are clearly important to girls' engagement and experiences in the PE environment, with teachers and peers both seeming to act as facilitators for engagement and also as barriers. The literature reviewed indicates the PE teachers' behaviour can affect girls' engagement and experiences in the subject. More work is needed to explore these relationships, particularly with disengaged girls.

### **2.3 Physical Education; a good environment for engaging girls?**

This chapter has clearly shown that individual and social factors in the PE environment can have a direct impact on girls' experiences and engagement. However the *social environment in which PE is delivered* (such as class composition) also needs to be considered. In addition, physical (lack of equipment/facilities) and structural (enforced PE kit/activity type) barriers also contribute to girls'

experiences and engagement (Flintoff and Scraton, 2001). These factors are discussed in the following section.

Davison and Lawson (2006) defined the physical environment to be:

*“objective and perceived characteristics of the physical context in which children spend their time (e.g., home, neighbourhood, school) including aspects of urban design (e.g., presence and structure of pavements), traffic density and speed, distance to and design of venues for physical activity (e.g., playgrounds, parks, and schoolyards), crime, safety, and weather conditions”.* (p. 2).

The term ‘environment’ used in this thesis will relate to the school context only.

This chapter will now discuss the aspects of the PE environment which may affect girls’ engagement and experiences. The main social-environmental factor which has dominated much of the literature on girls’ PE experiences relates to class composition. Whilst some of the literature indicates that girls would rather participate in co-educational or mixed gender classes (Stidder, 2000; Derry, 2002; Hill and Cleven, 2005), the majority of the research indicates that girls prefer single sex PE (Browne, 1992; Scraton, 1993; Wright, 1996; Biddle *et al.* 2005; Cockburn and Clarke, 2002; Flintoff and Scraton, 2001; Jackson, 2010). Although there is ongoing debate about how PE classes should be structured to optimise participation, there is a general consensus that each environment can have positive and negative effects on girls’ experiences (Hills and Croston, 2011; Flintoff and Scraton, 2006). Those in favour of co-educational classes advocate that girls should be given equal opportunities for all sports and activities, which will encourage communication and co-operation between boys and girls working together (Hills and Croston, 2011). Alternatively others recognise that girls only PE classes can be a more supportive environment, but perceive there to be less of a challenge and opportunity for girls who are more skilled (Browne, 1992; MacDonald, 1989; Talbot, 1993;

Scraton, 1992). For example, Hastie (1998) found that many of the girls in his study preferred mixed gender teams in PE as it made them work harder. Brooks and Magnusson (2006) showed that boys and girls who became active through a school programme requested more mixed gender sports, following the transition to being active. Therefore it appears that girls who are more competent at PE, or who consider themselves active participators, may prefer co-educational lessons due to the challenging nature and thus are more likely to improve (Williams *et al.* 2000).

The body of literature which focuses on the disadvantages of co-educational PE classes is more extensive. For example, boys dominating activities and their aggressive behaviour have been shown to impact negatively on girls PE experiences (Evans, 1993; Browne, 1992; Coakley and White, 1992). Wright *et al.*'s, (1995) work revealed that boys only included girls if they had "*attitudes and skills similar to the boys*" (p.15). Others (Garcia, 1994; Sadker and Sadker, 1994) suggest that mixed physical education classes can result in girls feeling intimidated by aggressive boys, with girls more at risk in regards to stereotyping, sexism, harassment, and teacher bias. In addition, many girls have revealed they feel embarrassed about making mistakes and 'being watched' by boys in the PE class (Browne, 1992). Lirggs (1994) advocates that same-sex and co-education physical education have markedly different environments, reporting girls to be more engaged, happier, and receive more teacher attention in a gender separate format. Similarly, Hargreaves (1990) suggests that single sex PE classes may be a more supportive environment for engaging girls:

*"[PE is] the only setting for them to gain confidence and enjoyment in their sporting bodies. Closed space for women (and girls) removes fear of harassment, ridicule and inhibition which they might*



*experience in mixed groups and affords important opportunities for female bonding.” (p. 293).*

Furthermore, others have questioned if physical education, as it is currently delivered, is the right environment at all for engaging girls in physical activity, as research has shown out of school physical activity is not necessarily mirrored by activity levels in school PE (Flintoff and Scraton, 2001). In fact, some studies have shown that girls who avoid or opt out of school sport can actually be fairly active out of the school environment (Flintoff and Scraton, 2001).

One such study that has illustrated differences between school-based PE and out of school activity is by Brooks and Magnusson (2007). They carried out an important qualitative study that aimed to explore how active adolescent women relate to and experience physical activity as a leisure pursuit. This included the forms of activity and the key characteristics of physical activity that were defined by the young women as leisure. They also examined 36 adolescent girls' experiences and perceptions of the relationship between physical activity and health and wellbeing through focus group interviews. Although the study was not specifically focussing on PE experiences, results showed there was a clear distinction between attitudes towards school-based physical education and activity outside of school. Further, those activities in which individuals felt they had *control* and a *choice* over were seen as the most enjoyable (control was defined by the young women as 'being able to relax', 'not worry about feeling pressure to attain high standards of 'performance excellence'). Generally, out of school activities were preferred with girls reporting less choice and control in school PE and feeling pressure to perform well. The active young women also commented on their dislike for the competitiveness in traditionally organised team-based sports, although they participated in them if they provided opportunities for fun, relaxation, and social support.

This study is important as it clearly shows it's not just inactive girls or 'problem girls' who may be disengaged in the PE environment, as is generally perceived (Sleap and Wormald, 2001)<sup>4</sup>. More importantly, the study shows that if girls have control and a choice over activities, enjoyment increases. Based on the work reviewed, it would appear that PE curriculum's which include elements of choice and control will be more successful in engaging girls.

Flintoff and Scratton's (2001) work also illustrates girls' disengagement in the PE environment, by exploring young women's perceptions of and attitudes towards PA and PE. Drawing on group and individual qualitative interviews with twenty- one fifteen-year-old young women, it explores the nature, purpose and experiences of their physical activity involvement, both in and out of school, across four schools in England. The main barriers to participating in PE classes were that girls could not see a real purpose for PE, and were quite critical of the nature of PE on offer in their schools. The key criticisms were the PE teachers and the mixed classes. The choice of activities offered within PE was also a main reason for disengagement, with the curriculum in all four schools very team-games dominated. This mirrors the picture locally (Milosevic, 1995) and nationally (Clay, 1997), with few women continuing to play team games after leaving school (Deem, 1986; Green *et al.* 1990). School activities were reported as being 'out of date', and not interesting enough for the young girls, with both the type of activities on offer, and the environment they were delivered in, as 'less than ideal' for many of the girls (Flintoff and Scratton, 2001). Indeed some writers have suggested that while schools may feel they are offering equal

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<sup>4</sup> Its important to note that some boys also have negative experiences of sport and that much of the research into girls, sport and physical activity and PE experiences has focused on the exclusion from a male dominated environment, and there is also a minority of girls develop athleticism and exhibit a sense of pride and accomplishment grounded in their physical competency (Coakley, 1999).

access through activities for both girls and boys, often this results in traditional 'boys' activities being offered to all (Scratton, 1993).

Flintoff and Scratton (2001) suggest this is due to many of the male games played in schools having much greater 'cultural status and value'.

Since many of the girls in Flintoff and Scratton's (2001) study were active outside of school, this study highlights that the environment in which the activity takes place may be a major determining factor in girls' decisions to be active. Finally, a contribution of this paper is its demonstration of young women recognising the gender relations in school PE. These gender relations could result in young women not participating in PE, choosing to do more activities out of school or in single sex groups. Flintoff and Scratton's (2001) paper is key in understanding girls' experiences in PE, as it clearly draws on the individual barriers these girls face in the PE environment, along with the importance of the local context, including the particular culture of the school and PE department, as well as the quality of teacher-pupils relationships.

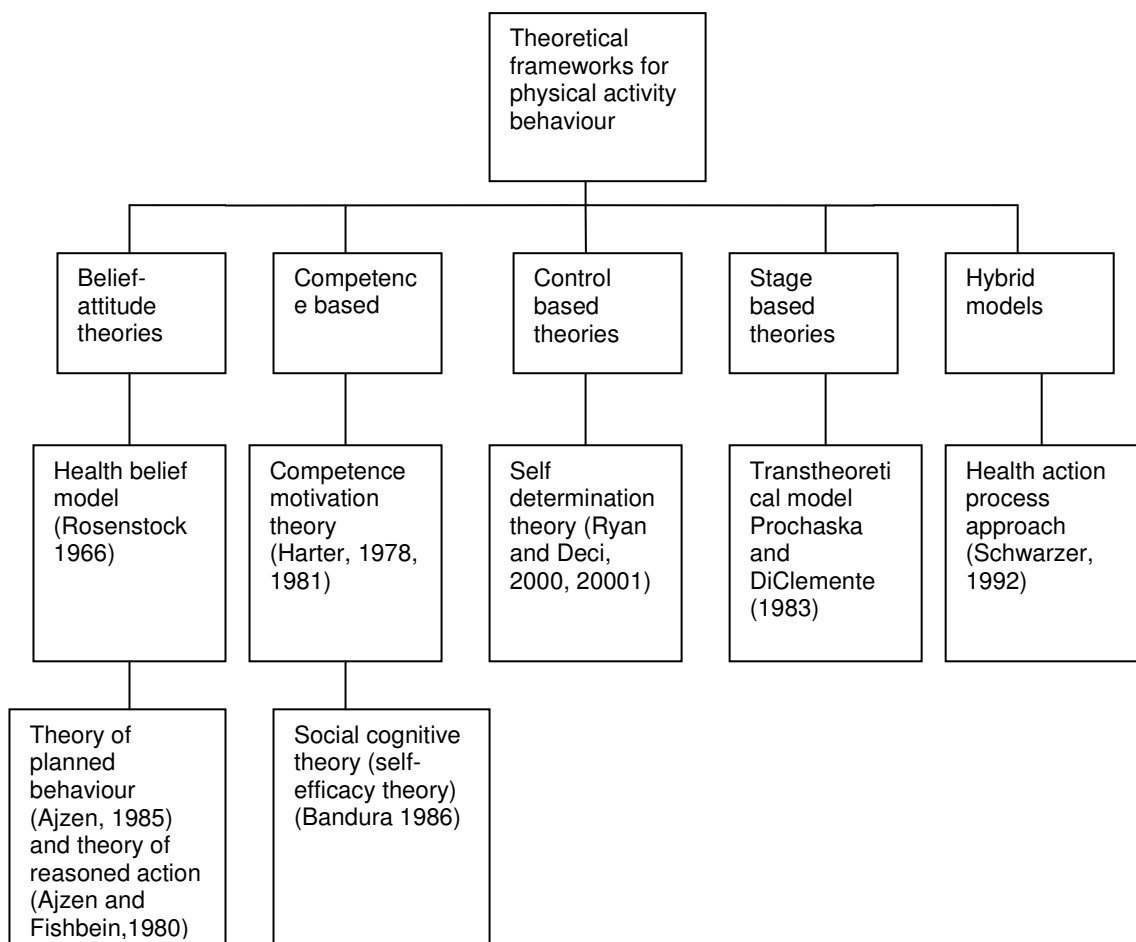
Overall, the research has indicated that adolescent girls may be disengaged with the PE environment, rather than the actual exertion of activity itself (Health Education Authority, 1997). However, not enough is known yet about the influences of environmental factors in comparison with psychosocial factors in determining physical activity levels (Biddle and Mutrie, 2008), therefore, this is something that will be explored further in this thesis. The literature reviewed indicates that more research is needed to understand girls' perceptions of competence in the PE environment, and how this can be affected by others in the PE class. Girls' identities within the PE environment is an area which needs more attention, particularly in relation to 'girly girls' and the barriers faced while participating in PA. Importantly,

more qualitative research is needed to explore the influence that friendships have on girls' experiences in PE, and to further uncover how the teacher may influence girls' engagement. Finally, exploring the PE environment and school curriculum will help us to understand how the PE environment could be changed to provide more positive experiences and engagement. This will help address the calls for more research on the role of environmental variables in adolescent's girls' physical activity participation (Biddle and Mutrie, 2008). The next chapter will present a theoretical overview of physical activity and youth sport, which will be followed by a description of school-based programmes that have attempted to increase physical activity in adolescent girls in chapter 4.



### Chapter 3 Theoretical approaches for understanding physical activity behaviour change

In order to understand adolescent girls' physical activity, physical education and sport behaviour, theories and models have been adopted from general, social, educational and health psychology, and applied to the context of physical activity. Much of the work in the field has focussed on motivations for physical activity behaviour, which is strongly associated with competence and control based approaches. Designed as an overview chapter, the main theories/approaches applied in sport and exercise research will be discussed here and are displayed in the following heuristic figure. Later chapters will elaborate on the theories which are particularly pertinent to my research.



**Figure 3.1 Theoretical approaches to understanding girls' physical activity behaviour.** (Note- there is also overlap between categories). Adapted from Biddle *et al.*(2007) classification system in Biddle *et al.*(2008) 'motivational characteristics' in *Youth Physical Activity and Sedentary Behaviour*.

### **3.1 Belief- Attitude Theories**

#### **3.1.1 Health Belief Model (HBM)**

*The Health Belief Model (HBM)* is a psychological model that attempts to explain and predict health behaviours. This model addresses an individual's perceptions of threat posed by a health problem (susceptibility, severity), the benefits of avoiding the threat, and factors influencing the decision to act (barriers, cues to action, and self-efficacy). This relationship is shown in figure 3.2 below. The HBM was first developed by social psychologist, Rosenstock (1966), in response to the failure of a free tuberculosis (TB) health screening program. Since then, the HBM has been adapted to explore a variety of long- and short-term health behaviours, and is based on the idea that a person will take a health-related action (e.g. participate in physical activity) if that person:

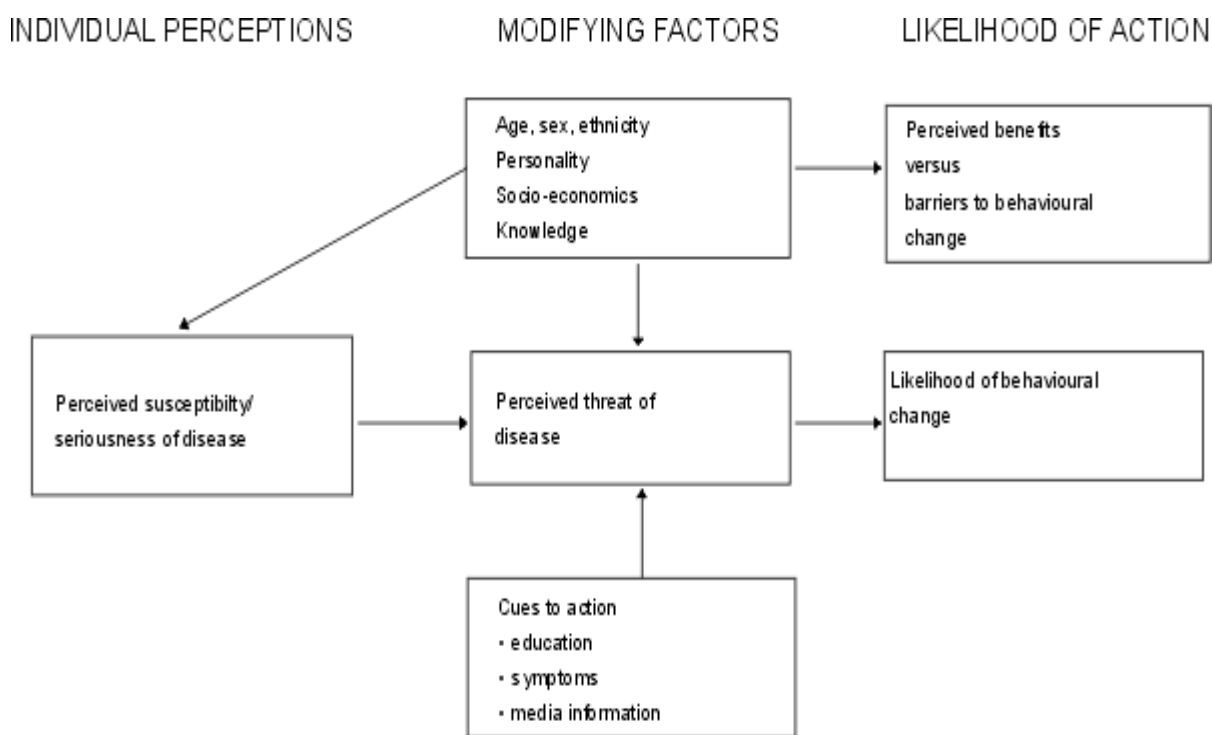
1. Feels that a negative health condition can be avoided,
2. Has a positive expectation that by taking a recommended action, he/she will avoid a negative health condition
3. Believes that he/she can successfully take a recommended health action

In subsequent years, researchers expanded upon this theory, eventually concluding that six main constructs influence people's decisions about whether to take action to prevent, screen for, and control illness. Rosenstock and colleagues (Rosenstock, Strecher and Becker, 1988) argued that people are ready to act if they:

- Believe they are susceptible to the condition (*perceived susceptibility*)
- Believe the condition has serious consequences (*perceived severity*)
- Believe taking action would reduce their susceptibility to the condition or its severity (*perceived benefits*)
- Believe the benefits outweigh the consequences (*perceived barriers*)
- Are exposed to factors that prompt action (e.g., a physical activity intervention) (*cue to action*)
- Are confident in their ability to successfully perform an action (*self-efficacy*)

Self-efficacy was added by Rosenstock and others in 1988 to help the HBM better fit the challenges of changing habitual unhealthy behaviours. Since health motivation is its central focus, the HBM is pertinent for addressing problem behaviours that evoke health concerns (e.g., sedentary behaviour and obesity). Although this is one of the oldest models to provide explanation *why* some people engage in healthy behaviours and others do not, it is not as useful when applied to an adolescent population, as motivations for PA are unlikely to be based on health concerns (Center for Disease Control and Prevention, 1999). Although there has been some success in using the HBM to predict exercise behaviour, the results have been inconsistent because the model was originally developed to focus on disease, not exercise (Berger *et al.*2002).



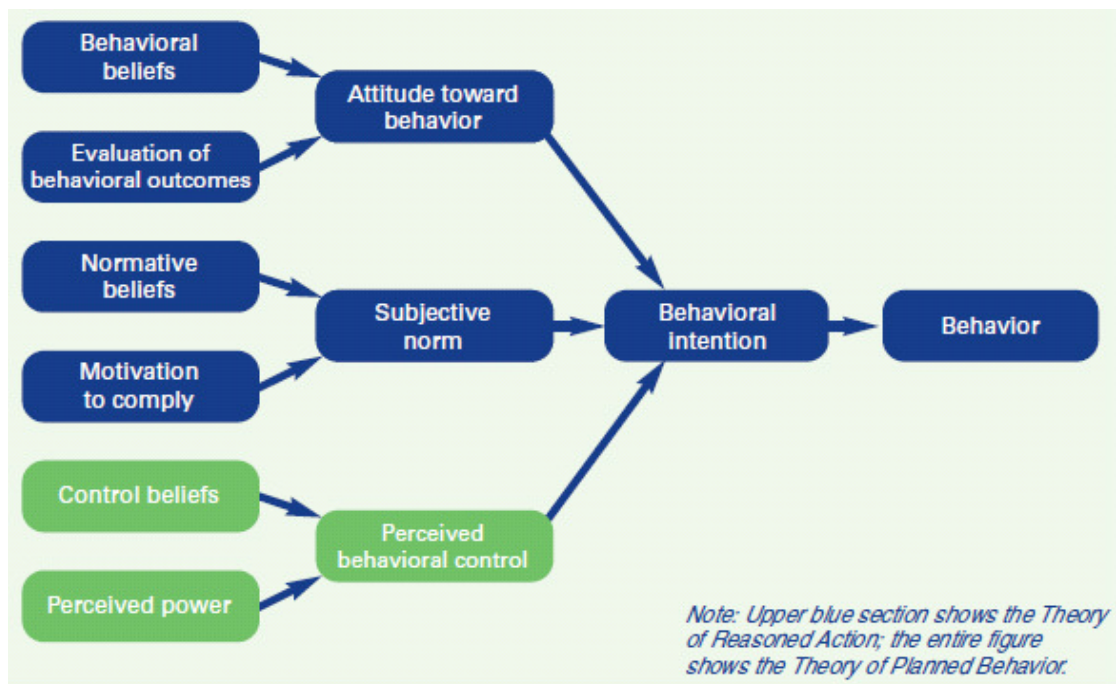


**Figure 3.2. Rosenstock's Health Belief Model** (Rosenstock, 1974)

### 3.1.2 The Theory of Planned Behaviour (TPB)

*The Theory of Reasoned Action (TRA)* (Ajzen and Fishbein, 1980) and the subsequent *Theory of Planned Behaviour (TPB)* (Ajzen, 1985) attempt to explain the relationship between behaviour, beliefs, attitudes, and intentions (see figure 3.3 below). Both the TPB and the TRA assume *behavioural intention* is the most important determinant of behaviour. According to these models, behavioural intention is influenced by a person's *attitude* toward performing certain behaviours, and by beliefs about whether individuals who are important to the person approve or disapprove of the behaviour (*subjective norm*). However, the TPB and TRA assume all other factors (e.g. culture, the environment) operate through the models' constructs, and do not independently explain the likelihood that a person will behave a certain way. The TPB differs from the TRA in that it includes one additional construct, *perceived behavioural control*; this construct has to do with people's beliefs that they can

control a particular behaviour, and accounts for situations in which people's behaviour, or behavioural intention, is influenced by factors beyond their control. Azjen (1985) argued that people might try harder to perform behaviour if they feel they have a high degree of control over it. TPB has been useful in predicting exercise behaviour. For example, Mummery and Wankel (1999) found that swimmers who had a positive attitude towards training, believed that others such as coaches wanted them to train hard (subjective norm) and held positive perceptions of their ability (perceived behavioural control), had stronger intentions to train and adhered to the training significantly more than those who did not have the same attitudes and perceptions. Generally research which has adopted a TPB approach has focused on adult populations (Rhodes *et al.* 2006, 2007). However, one study which has focussed on an adolescent population is that by De Bruijn (2006). They modelled individual and perceived environmental factors in addition to the TBP among 12- 18 years olds. Results showed that past physical activity had the strongest relationship with current self-reported physical activity, while perceived environmental aesthetics and distance to activity opportunities were indirectly related to adolescents' intentions to be physically active.



**Figure 3.3 The Theories of Planned Behaviour and Reasoned Action** from *Theory at a Glance (2005)*

## 3.2 Competence-based theories

### 3.2.1 Competence Motivation Theory

A recognised theory of competence is *Harter's competence motivation theory* (1978) in which competence-motivation is described as a general desire to engage in achievement tasks, succeed in them, and perceive one's own successes (Harter, 1985). Harter's Competence Motivation Theory maintains that children's competence motives develop gradually through 'prolonged interaction with their surroundings' and through the evaluative reinforcement of others. The social environment and the actions of those involved in them will affect feelings of competence. This feedback from the social environment also impacts the likelihood of a behaviour being repeated. Harter also proposed that competence should be considered as multi-dimensional with distinct domains such as scholastic, social and athletic competence. She suggests

that individuals are motivated to demonstrate competence and avoid incompetence in achievement domains, which is essential for the development of their self-worth.

Harter's theory has been applied extensively in the sport and exercise field, in relation to physical ability, with many studies showing that individuals with high perceptions of their physical ability will be more likely to take part in physical activity (Harter, 1985; Biddle *et al.* 2005; Fox and Biddle, 1988). Research has consistently revealed this cyclical pattern of demonstrating competence in physical activity and PE leading to increased enjoyment, which then is likely to result in continued participation (Fox and Biddle, 1988). Many of the studies which have shown evidence of a relationship between perceived competence and participation in PE and physical activity (Carroll and Loumidis, 2001) have also shown gender disparities, with boys exhibiting higher levels of perceived competence than girls (Inchley *et al.* 2011; Telama, 1998). Further, qualitative research has also shown girls with low perceived physical competence have low engagement in physical activity (Garrett, 2004). Thus, this theory is pertinent to my research which explores adolescent girls and PA behaviour in the PE environment.

### **3.2.2 Social Cognitive Theory (SCT)**

*Social Cognitive Theory* (Bandura, 1986) is one of the most frequently used and robust health behaviour theories (U.S. department of health and human services, 2005). It explores the reciprocal interactions of people and their environments; in which personal factors, environmental factors, and human behaviour exert influence upon each other. According to SCT, three main factors affect the likelihood that a person will change their health behaviour: (1) self-efficacy, (2) goals, and (3) outcome expectancies. Bandura describes self-efficacy as our belief in our ability to succeed in specific situations. According

to this theory, people with high self-efficacy - that is, those who believe they can perform well - are more likely to view difficult tasks as something to be mastered rather than something to be avoided. People with high self-efficacy in a task are more likely to make more of an effort, and persist longer, than those with low self-efficacy. Bandura (1986) addresses four main areas for developing self-efficacy;

#### 1. Mastery Experiences

According to Bandura (1986), the most effective way of developing a strong sense of efficacy is through mastery experiences, as performing a task successfully strengthens our sense of self-efficacy. However, failing to adequately deal with a task or challenge can undermine and weaken self-efficacy.

#### 2. Social Modelling

Witnessing other people successfully completing a task is another important source of self-efficacy. If an individual sees people, who are perceived as similar, succeed by sustained effort, it raises beliefs that they too possess the capabilities to master such activities.

#### 3. Social Persuasion

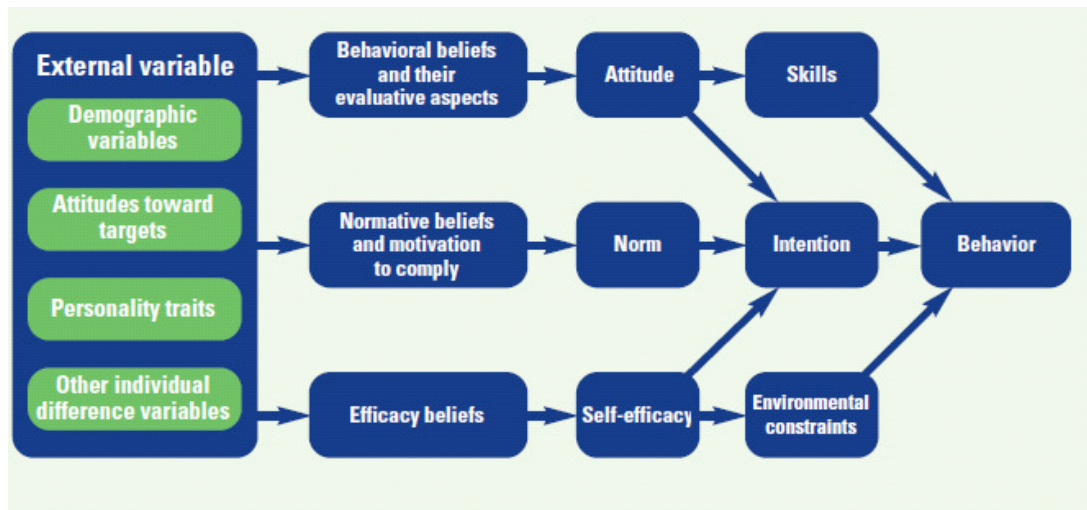
Bandura also asserted that people could be persuaded to believe that they have the skills and capabilities to succeed, suggesting that verbal encouragement from others helps people overcome self doubt and instead focus on putting in effort for the task at hand.

#### 4. Psychological Responses

Responses and emotional reactions to situations also play an important role in self-efficacy, with Bandura suggesting moods,

emotional states, physical reactions, and stress levels can all impact on how a person feels about their personal abilities in a particular situation. A person who becomes nervous before performing a sports skill or exercise in front of others, may develop a weak sense of self-efficacy in these situations. However, Bandura also notes it is not the sheer intensity of emotional and physical reactions that is important but rather how they are perceived and interpreted and so by learning how to minimize stress and elevate mood when facing difficult or challenging tasks, people can improve their sense of self-efficacy.

Finally, as a person adopts new behaviours, the behaviour is not simply a product of the environment and the person, and the environment is not just a product of the person and behaviour. Bandura names this interaction between behaviour, personal factors and environment *reciprocal determinism*. This relationship is illustrated in figure 3.4. Self-efficacy theory has some of the most consistent findings when related to exercise behaviour, with research generally showing an increase in self-efficacy as exercise participation increases and those high in self-efficacy more likely to participate in PA behaviours (Maddison and Prapavessis 2004). Self-efficacy is also an important construct for understanding adolescent girls PA behaviour. For example, Motl (2002) reported self-efficacy to be the primary correlate of moderate and vigorous physical activity in over 1000 adolescent girls and accounted for their intentions to be physically active. More recent evidence (Dishman, 2004) exists which shows that increased self-efficacy through a physical activity intervention can directly result in increased physical activity among adolescent girls. Self-efficacy is therefore important for understanding girls engagement and experiences in the PE context.



**Figure 3.4 Social Cognitive approach to physical activity behaviour** from *Theory at a Glance (2005)*.

### 3.3 Control based theories

#### 3.3.1 Self Determination theory

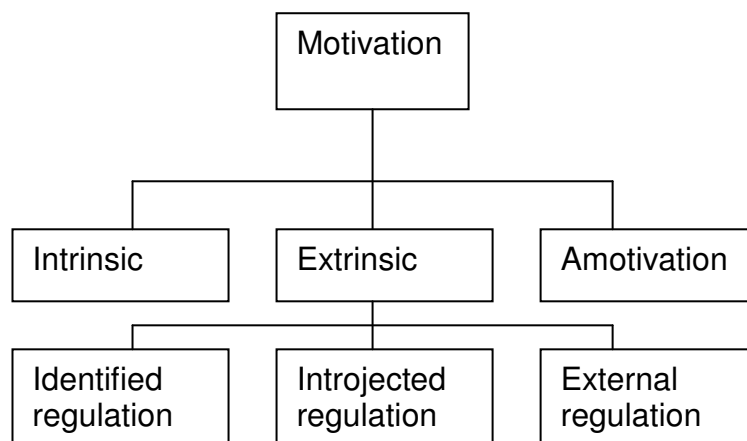
*Self-Determination Theory (SDT)* (Deci and Ryan 1985) is a control-based approach to understand ‘why we do what we do’. It explores how certain behaviours can be undertaken for self-determined reasons. SDT proposes that human behaviour is motivated by three primary and universal psychological needs:

- 1) Autonomy (the need to endorse and be the origin of one’s behaviour)
- 2) Competence (the need to interact effectively with the environment)
- 3) Relatedness (the effort made to relate to others, as well as feeling accepted by others and experiencing satisfaction with the social world).

The satisfaction of the basic psychological needs is related to motivation, well-being and various aspects of human functioning (Deci and Ryan, 2000). Different types of motivation fall along a

continuum of self determination, with the type of motivation influencing activity choice, attitudes towards an activity, effort and persistence, and affective responses (Deci and Ryan, 2002). The highest form of motivation is intrinsic motivation, in which behaviour is motivated by the pleasure and enjoyment generated by the activity itself.

This is followed by extrinsic motivation, with behaviour influenced based on the degree of relative autonomy, which ranges from high to low, namely identified regulation, introjected regulation and external regulation (See figure below).



**Figure 3.5 Motivational regulations from self determination theory** (from Biddle, Treasure and Wang, (2008) in *Youth Physical Activity and Sedentary Behaviour*).

Identified regulation, as it suggests, relates to an individuals' belief that an activity is consistent with their self identity. Introjected refers to a regulation that was previously considered solely external, in which the behaviour is usually performed to avoid feelings of guilt or to improve confidence. External regulation takes places if an individual participates in an activity to receive reward or avoid punishment. Finally, amotivation is a lack of motivation in which the individual sees



no purpose in engaging in the activity and so there is no contingency between actions and outcomes.

According to SDT then, individuals that are intrinsically motivated would demonstrate a strong interest in the activity, choose to continue the activity and exhibit a high degree of effort. This has been shown with self determined motivation correlating positively with desirable responses in PE classes and physical activity, showing positive affect (Ntoumanis, 2005), effort (Ntoumanis, 2001) and intention to be physically active in leisure time (Standage *et al.* 2003). Recent research has also explored aspects of the environment that may act as barriers or may facilitate the satisfaction of autonomy, competence and relatedness (Reinbooth *et al.* 2004). Most of the youth physical activity research has focused on comparing autonomy supportive environments versus controlling environments; however this may overlook social factors that contribute to basic needs of competence and relatedness. Standage and colleagues (2005) have termed this 'need supporting context' and have examined the influence of competence support and relatedness support aspects of the PE class.

Understanding how motivation is regulated is extremely important, particularly in relation to girls' participation in PE. For example, fear of negative evaluations (FNE) is said to undermine intrinsic motivation and can result in students exhibiting avoidance behaviours in PE. Girls in particular are more likely to exhibit avoidance behaviours in PE because they fear that their performance will be negatively evaluated, either by their peers or the teacher (Ridgers *et al.* 2007). Consequently, by understanding the contexts and behaviours that either undermine or support intrinsic forms of motivation, teachers have the capacity to adapt both their curriculum and pedagogy to take account of the psychological needs that affect girls' motivation in PE.

This will enable them to support girls in the development of more self-determined behaviours, which in turn, can have a positive impact on the levels of engagement and their learning.

Although the satisfaction of all three needs is related to the development of intrinsic motivation, perception of autonomy is a necessary condition for the development of intrinsic motivation and it is expected to play a key role in the development of pupil wellbeing (Ryan and Deci, 2006). Within the school setting, the degree to which teachers support girls' autonomy, as opposed to controlling their behaviour, is a strong predictor of engagement and learning (Ryan and Deci, 2006). In order to create an autonomy-supportive environment, the teacher 'minimizes the salience of external incentives, avoids controlling language, and acknowledges the learner's frame of reference' (Vansteenkiste *et al.* 2004, p. 247). Autonomy supporting conditions are also created when learners are provided with opportunities for meaningful choice, such as a choice of activity in PE classes. This does not simply mean providing learners with lots of choice, this means increasing their experience of choicefulness or volition (Ryan and Deci, 2006). By contrast, a controlling environment, where the learner is pressurised through the use of punishments, incentives and deadlines has been found to hinder learning (Vansteenkiste *et al.* 2004). This theory is important for understanding how different PE environments which foster or neglect these basic needs can affect girls' engagement and experiences. Thus, this theory will be drawn on throughout this thesis.

### **3.4 Stage based theories;**

#### **3.4.1 Trans-theoretical model of behaviour change**

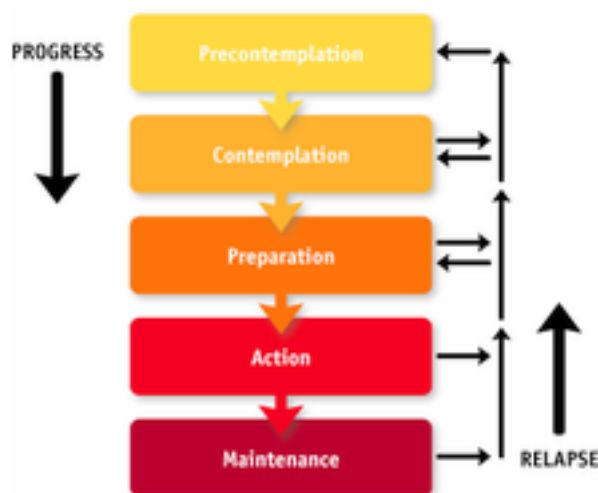
Developed by Prochaska and DiClemente (1983) *the Trans-theoretical (Stages of Change) model* evolved out of studies

comparing the experiences of smokers who gave up the habit on their own, with those of smokers receiving professional treatment. The model's basic premise is that behaviour change is a process, not an event. As a person attempts to change behaviour, he or she moves through five stages;

- 1) Pre-contemplation- Has no intention of taking action within the next six months
- 2) Contemplation- Intends to take action in the next six months
- 3) Preparation- Intends to take action within the next thirty days and has taken some behavioural steps in this direction
- 4) Action- Has changed behaviour for less than six months
- 5) Maintenance- Has changed behaviour for more than six months

Definitions of the stages vary slightly, depending on the behaviour. The model recognises that people at different points along this continuum have different informational needs, and benefit from interventions designed for their stage. The model is circular, and so people do not systematically progress from one stage to the next, ultimately 'graduating' from the behaviour change process. Instead, they may enter the change process at any stage, relapse to an earlier stage, and begin the process once more. They may cycle through this process repeatedly, with the process varying in time (see figure 3.6 below). The Stages of Change Model has been applied to a variety of individual behaviours, as well as to organizational change. It has also been used widely in exercise psychology, with research showing people go through a cause-benefit analysis or pros and cons decisional balance when making decisions about exercise. Prochaska *et al.* (1994) found that in the pre-contemplation and contemplation stages, the cons are usually greater than the pros; this then changes in the preparation stage so that by action and maintenance stages the pros outweigh the cons. This suggests that if participants are

knowledgeable about the benefits of exercise (so are more intrinsically motivated) they are more likely to move from contemplation to preparation. Evidence of the Transtheoretical Model in the context of adolescent's physical activity is limited. The reasons for this are likely due to the complexities in such a sample. Hausenblas *et al.*, (2002) suggests the level of physical activity in adolescence is higher than during adulthood, thus there may be few adolescents in the precontemplation and contemplation stages, resulting in a low statistical power. However this remains to be confirmed. De Bourdeaudhuij *et al.* (2005) suggests that since a core feature in the Transtheoretical Model is its time perspective, it is not known whether this time perspective also applies in children and adolescents. They also stipulate that adolescents may not be able to adequately evaluate their own level of physical activity, and so may not be able to categorise themselves into the correct stage. Due to the limited amount of evidence with adolescents, this theory has limited applicability to my PhD research.



**Figure 3.6. Transtheoretical model of behaviour change.**

Prochaska and DiClemente (1983)

## 3.5 Hybrid models

### 3.5.1 Health Action Process Approach

*The Health Action Process Approach (HAPA)* (Schwarzer, 1992, 2001) is a model that integrates linear and stage assumptions, and so is a hybrid model. It suggests that the adoption, initiation, and maintenance of health behaviours must be explicitly conceived as a process that consists of at least a motivation phase and a volition phase. The idea is that individuals experience a shift in mindset when moving from the motivation to the volition phase. In the motivation phase, the individual forms an intention to either adopt behaviour or change risk behaviours in favour of other behaviours. Self-efficacy and outcome expectancies are seen as the major predictors of intentions. A minimum level of threat or concern must exist before people start contemplating the benefits of possible actions and level of competence to participate in them. The direct path from threat to intention may become negligible if expectancies are already well established.

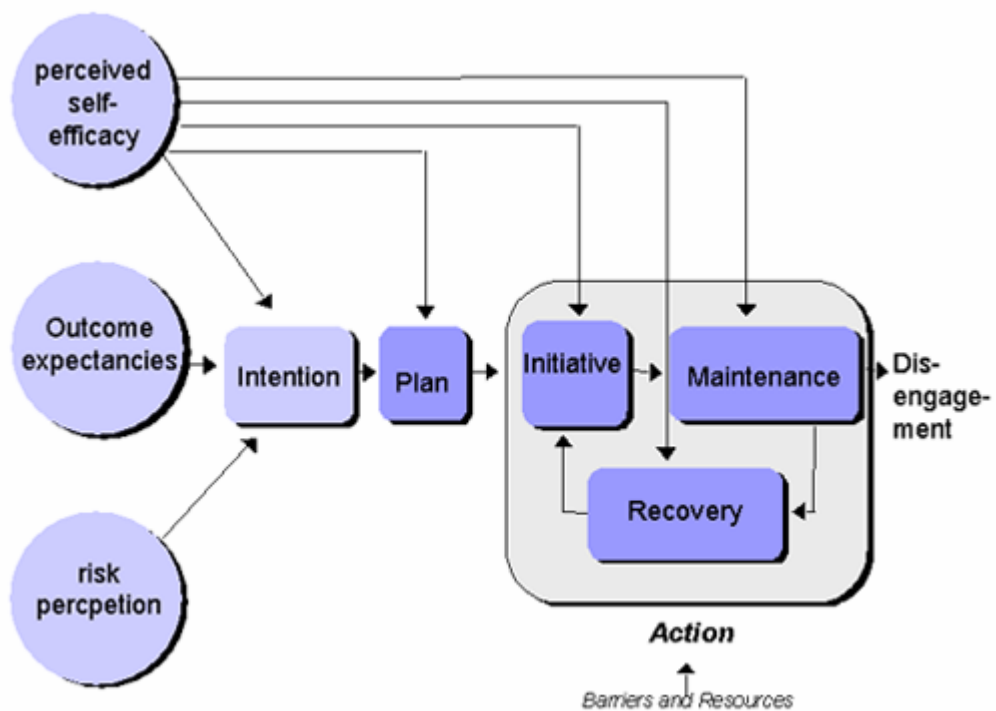
The motivation phase describes 'what people choose to do', while in the subsequent action or volition phase the focus is on 'how hard they try and how long they persist.'

Therefore, according to the HAPA, the *motivation* stage is made up of the following components:

- self-efficacy (e.g. 'I am confident that I can participate in PE class');
- outcome expectancies (e.g. 'participating in physical activity regularly will improve my fitness'), and a subset of social outcome expectancies (e.g. 'other people want me to join an after school sports club and if I start I will gain their approval');
- Threat appraisal, which is composed of beliefs about the severity of an illness and perceptions of individual vulnerability

(e.g. feeling vulnerable performing in front of peers/teachers in the PE environment).

The *volition/action* stage consists of three levels: cognitive, behavioural, and situational. The focus is on cognitions that instigate and control the action, (i.e. 'if I don't do any physical activity I will imagine how unhealthy I will be') and action control (e.g. 'I can make myself do PE regularly by reminding myself that I want to be fit and healthy'). The situational factor consists of social support (e.g. friends who encourage participation in PA/PE) and the absence of situational barriers (e.g. financial support to join an exercise club). Since this is a relatively new model (as shown in the figure below), there is a scarce amount of evidence of the models applicability, particularly in relation to adolescent girls PA behaviour. Thus, this model will not be drawn on in this thesis.




**Figure 3.7. Health Action Process Approach (HAPA; Schwarzer, 1992).**

This chapter has shown the main theories adopted in understanding physical activity behaviour in young people. Since chapter 2 highlighted one of the main barriers to girls engagement in PA is low perceptions of competence and self-efficacy for particular sports/activities, these are clearly important factors for understanding girls PA behaviour. In addition, it is clear that the PE environment is very important for promoting feeling of emotional wellbeing, and fulfilling basic needs. Thus the theories that are particularly applicable for adolescent girls' engagement in the PE environment are the competence based theories (Competence Motivation Theory and Social Cognitive Theory) and control based theories (Self Determination Theory).

### **3.6 A Social ecological approach**

Social-ecological models focus not only on the individual-level characteristics that may influence behaviour but also to focus on social and environmental factors that could support or hinder individual behaviour. Therefore, ecological models propose that multiple levels of influences determine individual behaviour (Sallis and Owen, 1999). Some researchers (e.g. Spence and Lee, 2003) have broadly divided levels of influence and intervention into intra-individual influences (the person) and extra-individual (environment). Thus, if there is change in intra-individual influences towards physical activity (such as beliefs, attitudes) and change at extra-individual level (social cultural context, environmental facilities), there is increased possibility that physical activity will occur. Others, such as McLeroy *et al.*(1988), have split levels of influence for health-related behaviours and conditions into three main levels. These levels include: (1) *intrapersonal* or *individual* factors; Individual characteristics that influence behaviour, such as knowledge, attitudes, beliefs, and personality traits (2) *interpersonal* factors;

Interpersonal processes and primary groups, including family, friends, and peers that provide social identity, support, and role definition (3) *community level factors*; include rules, regulations, policies, and informal structures, (social networks, schools, local authority/government), which may constrain or promote recommended behaviours. Figure 3.8 below illustrates the levels of influence and associated theories.

<i>Change Strategies</i>	<i>Examples of Strategies</i>	<i>Ecological Level</i>	<i>Useful Theories</i>
	<ul style="list-style-type: none"> <li>• Educational sessions</li> <li>• Interactive kiosks</li> <li>• Print brochures</li> <li>• Social marketing campaigns</li> </ul>	Individual	Stages of Change Precaution Adoption Process Health Belief Model Theory of Planned Behavior
	<ul style="list-style-type: none"> <li>• Mentoring programs</li> <li>• Lay health advising</li> </ul>	Interpersonal	Social Cognitive Theory
	<ul style="list-style-type: none"> <li>• Media advocacy campaigns</li> <li>• Advocating changes to company policy</li> </ul>	Community	Communication Theory Diffusion of Innovations Community Organizing

**Figure 3.8. Multi-levels of influence within a socio-ecological approach to behaviour change.** Taken from *Theory at a Glance* (2005)

Socio-ecological models acknowledge the role of intrapersonal variables but place their emphasis instead on the pervasive influences of ‘behaviour settings’ – clusters of socio- and physical-environmental factors that cue or reinforce behaviours. An implicit premise in the ecological approach is that determinants of physical



activity behaviour are likely to be context specific (Dishman and Sallis, 1994). It has been demonstrated that the relationships between specific psycho-social and environmental factors and physical activity among youths vary according to the setting and type of physical activity (Ommundsen *et al.* 2006). The socio-ecological model of health behaviour is, to a great degree, based on Operant Psychology (behaviour modification) and Social Cognitive Theory (Bandura, 1986). Operant psychology (Skinner, 1953) presents an important building block of the social ecological model, whereas social ecology emphasizes the behaviour of individuals in various 'behaviour settings' (i.e., in certain places and at certain times). In operant psychology, behaviours are strengthened through the process of reinforcement, and so behaviour that is followed by a pleasant consequence (positive reinforcement) or the escape from an aversive situation (negative reinforcement) is likely to be reinforced (i.e., more likely to occur again in the future). Prompts, modelling and other antecedents to the behaviour may also make it more likely to occur. Behaviour that is followed by an aversive consequence (embarrassment/punishment) or one that is impeded by various social or environmental barriers (threat of punishment) will be less likely to occur again in the future. Social Cognitive Theory (Bandura, 1986) provides a second element of social ecological theory's foundation. Social Cognitive Theory describes relationships between self-regulatory behaviour and the supportive functions of the physical and social environments for adopting and maintaining health-promoting behaviours (Saunders, 1997). Research has identified Social Cognitive Theory-related physical activity mediators such as self-efficacy, perceived barriers, outcome expectancies, enjoyment, social norms, time spent outdoors, involvement in community-based agencies that promote physical activity, access to equipment and facilities, parental encouragement, and parental activity as factors associated with youth activity behaviour (McLeroy,

1988). Many of these factors are of great relevance to the adolescent population. Since social ecological models embrace important aspects of many of the theories discussed (particularly belief attitude, competence and control based theories) this overarching theoretical framework will be used for my research. This will be discussed further in chapter 5 and will be related to the research questions.



## **Chapter 4 Promoting girls' participation; school-based physical activity interventions.**

In order to address low activity rates in adolescent girls, interventions or projects have been designed in many different countries to try and engage girls in physical activity. Since adolescent girls spend a large part of their day at school, school-based interventions are seen to be a good way to engage them in regular physical activity. Further, many school-based PE programmes have been shown to be effective in increasing time spent in physical activity and improving fitness levels (Cale and Harris, 2006). McKenzie (2001) view PE as the most suitable vehicle for the promotion of active, healthy lifestyles among young people and, according to Stone *et al.*(1998), school-based physical activity interventions have an inherent advantage over interventions in other settings because programmes can become institutionalised into the regular school curriculum, staff developments and other infrastructures. School physical activity programs have also received support as they may provide benefit to all children (Harrell *et al.*1998; World Health Organization, 2004), particularly those with limited or no access to physical activity areas (McKenzie *et al.* 1996). Further, school-based interventions may avoid stigmatisation (Harrell *et al.*1998) and target students (or a population of students) through the curriculum, thereby increasing the reach of the interventions.

There is a growing body of work investigating the effectiveness of interventions in schools. Successful interventions have demonstrated increased physical activity and fitness and achieved a range of positive health outcomes (McKenzie *et al.*1996; Cale and Harris, 2006; Kahn, 2002). In 2008, the National Institute of Clinical Excellence (NICE) carried out a review of interventions among adolescent girls. This was an international review aiming to assess the effectiveness of interventions in increasing physical activity levels

in girls aged 11-18 years. In doing this review, 250 titles and abstracts (until the end of 2006) were assessed against the following criteria:

- 1) Is the paper an intervention study?
- 2) Is the age group studied aged 11-18 years?
- 3) Is the study population female? (Or if boys and girls, are there separate results for girls?).
- 4) Is an outcome reported on physical activity behaviour or core physical skills?

In total 153 titles were assessed by NICE (2008) to be potentially relevant and the full papers were retrieved. Studies were then excluded if:

- They had a main focus on treating obesity
  - They were from less economically developed countries or they were studies about ethnic groups that do not have large populations in England
  - The intervention involved primarily school physical education lessons
  - The study involved a change to the built or natural environment (and thus had been covered in NICE guidance on the environment and physical activity) or was clearly more appropriate for one of the other NICE reviews carried out in the same series (e.g., active travel).
- Twelve studies were accepted for full data extraction.

Dobbins *et al.* (2009) also reviewed the effectiveness of school-based interventions in promoting physical activity and fitness in children and adolescents. Interventions were identified and screened resulting in 26 studies which were considered to have strong or moderate methodological quality and so were included in the review. Inclusion criteria were;

- 1) Relevant to public health practice and implemented, facilitated, or promoted by staff in local public health units.
- 2) Implemented in a school setting and aimed at increasing physical activity
- 3) Reporting on outcomes for children and adolescents (aged 6 to 18 years).
- 4) Used a prospective design with a control group.

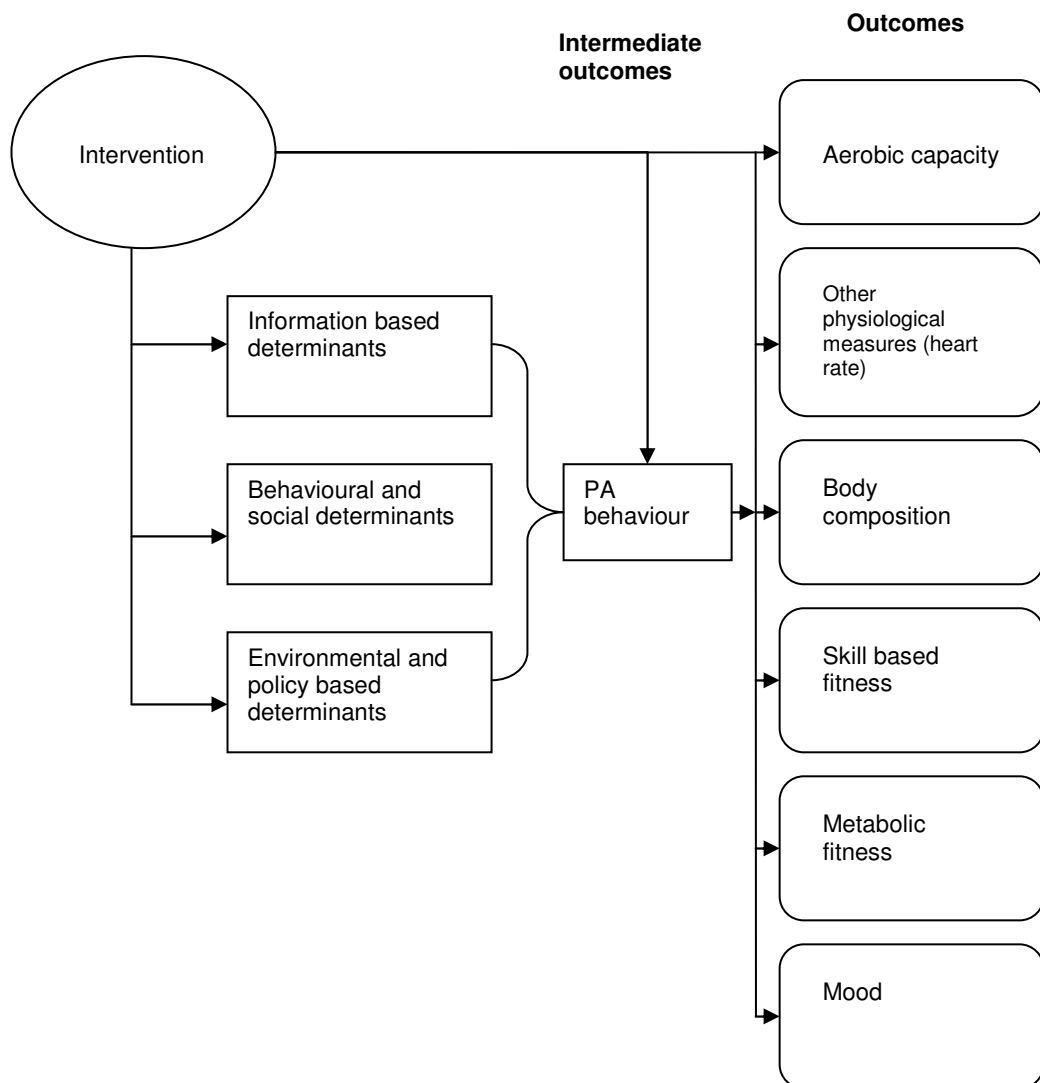
More recently, Slingerland and Borghouts (2011) reviewed the direct and indirect influence of PE based interventions on young people's physical activity levels. They separated these into primary school interventions (age 8 to 11) and secondary school interventions (age 11 to 18).

#### **4.1 Review of Quantitative research on intervention studies**

For the purpose of this chapter, studies from the three key reviews were assessed and included in Table 1 (appendix A) if they met the criteria outlined below. Six studies are featured from the Dobbins (2009) review (in red text), eleven from the NICE (2008) review (in blue text) and one study from Slingerland and Borghouts (2011) review (in green text). Studies which appeared in more than one review are noted in the table. Since the NICE (2008) review did not include interventions after 2006, or PE based interventions, a systematic search was carried out (summer 2010) to identify additional interventions which may be of relevance to my thesis. Web of Knowledge was used to search for interventions carried out after 2006 (up to summer 2010) and all PE based physical activity interventions. Search terms included physical education\* physical activity \* girls\* school\*, giving 1609 studies. The search was then further refined by the terms project\* intervention\* programme\* and filtered from 2006. This left 26 studies to be reviewed for relevance. Studies were included if:

- 1) It was an intervention study
- 2) The age group 11-18 years
- 3) The intervention is school-based
- 4) The results are reported separately for girls /or the focus of the intervention is girls
- 5) The outcome reported includes physical activity behaviour
- 6) After school interventions were included if conducted in the school setting.
- 7) There was not a focus on preventing obesity
- 8) The study was not from less economically developed countries and did not target ethnic groups that do not have large populations in the UK.

Six studies from this supplementary search are included in Table 1, (appendix A) in black text, (The remaining 20 studies from the search either did not fit the criteria or were papers from existing intervention data sets [see appendix B]). The table displays intervention studies which have focussed on increasing physical activity in adolescent girls (aged 11 to 18) during school time. All are quantitative evaluation studies, including randomised controlled trials (RCT n=8), cluster randomised controlled trials (CRCT n=5), controlled non-randomised trials (CNRT n=6), a randomised non-controlled trial (RNCT n=1) and quasi-experimental design (n=2). The first part of the table includes studies which effectively increased physical activity levels followed by those that did not. The text following discusses all the interventions included in the table, until the section on qualitative research evaluating interventions is presented. The figure below highlights the range of intervention studies included in this chapter.



**Figure 4.1 Range of school-based interventions included to increase PA levels in 11-18 year olds.**

The studies were all conducted in school settings, and not specific to PE classes, but were physical activity based. Studies were conducted in the USA (n=13), the UK (n=2), other European (non-UK) countries (n=5), and Australia (n=2). Most of the work done has been conducted with upper primary aged children (Stone *et al.* 1998) with few in older adolescents. Eight interventions targeted physical



activity behaviour change among girls only, with seven of these studies showing positive effects. Of the 14 studies targeting boys and girls together in the same intervention, nine did not show increases in physical activity among girls. According to NICE (2008) targeting girls only, rather than boys and girls together, may be an effective strategy for increasing physical activity. Cale and Harris (2006) suggest that a focused approach which tackles specific groups may be more successful for increasing physical activity and report a “*noticeable lack of targeted interventions*” (p. 406).

The interventions varied in scale and duration, from just 44 participants (Eliakin, 1996) to 5225 participants (Webber, 2008). Furthermore, duration of interventions ranged from just 2 weeks (Marks, 2006) to 4 years (Simon *et al.* 2004). Other studies with short-term intervention periods ((Eliakim, (1996) 5 weeks; Winnet, (1999) 3 weeks; Metzker, (1999) 8 weeks)) were all successful in increasing PA levels. One reason for this may be that motivation in the students is high in the first few weeks of the project, but may then plateau or diminish over the longer term. Shephard and Trudeau (2000) suggest that rather than measuring short term gains in fitness, the focus should be on programmes which develop a habit of regular PA that persists through adulthood. Only two of the studies collected follow-up data (Simon *et al.* 2004; Pate *et al.* 2005) although the four year follow up data from Simon (2004) study could not be found and so it is uncertain if the intervention had sustained success. Overall, Pate *et al* (2005) is the only study, from the criteria outlined, which showed sustained increases (3 years) in PA in adolescent girls from a school-based intervention. However, it is important to mention that one PE-based intervention study (carried out between 1970 and 1977), has been followed up after a 20 year period, and claims the long-term benefits of increased PE on PA levels. The original paper on the ‘Trois-Rivieres study’, is not

included in the above table as it could not be located. The follow up paper by Trudeau (1998) investigates the long-term effects of additional PE on PA of those who were included in the experimental group (receiving 5 hours of PE per week, taught by specialist PE teachers) compared to those in the control group (received a standard 40 min of PE per week, supervised by their classroom teacher). Twenty years later, the experimental group was compared with a newly recruited control group and PA was established by a single item from a questionnaire. Women who had received daily PE during elementary school reported more involvement in physical activities later in life. In the male experimental group no long-term difference was observed. The authors note in their follow up paper that it is difficult to explain the apparent effect in women since they reported no differences in intention to exercise, attitudes toward exercise, perception of social support and opportunities for exercise. The results should therefore be interpreted with caution, with some suggesting the results may be a chance finding (Slingerland and Borghouts, 2011).

#### **4.1.1 Implementation of interventions**

From the interventions included in the table above, generally, there was limited detail given about the specific protocols employed, and also delivery of the interventions. Also it is largely unknown if there was any consultation with the students about which activities they would like to do in the projects. The majority of the interventions used random assignment of schools to intervention and control groups, which seems most appropriate as this avoids within school 'contamination' of the interventions to the controls (although there is the possibility of cross-contamination between schools). Control groups are important, as are baseline measures, otherwise there is no way of knowing if the intervention itself actually increased PA, or whether some other factor(s) may have contributed to observed

changes. This was an issue in Project Active Teens (Dale, 1998), as no baseline data was collected, due to 'seasonal differences' in data collection periods. Perhaps if baseline data had been collected it would have been possible to demonstrate an increase in MVPA over time (rather than simply in comparison to the control group).

#### **4.1.2 Measurement of PA**

A proportion of the studies used fitness testing as an outcome for increased PA (Plonkenoff, 1999; Webber, 2008; Elikim, 1996; Singh, 2007, Haerens, 2006). Although useful as an indication of fitness, issues have been raised about using such tests with children and adolescents as they fail to take other influencing factors (e.g. motivation, environmental conditions, practice) into account (Rowland, 1995). Also, psychological and social repercussions could result if students do not 'perform' well in front of peers. Rowland (1995) states that fitness testing can be demeaning, embarrassing and uncomfortable for children who are less fit/active, re-enforcing that exercise is unpleasant and competitive. According to Malina *et al.* (2004) the current focus should be on health-related fitness rather than performance-related fitness, and so fitness testing could be counter-productive to the promotion of active lifestyles in young people (Docherty and Bell, 1990). Therefore interventions which focus on physical activity monitoring rather than fitness testing should be viewed as more appropriate for this population.

#### **4.1.3 Objective measures**

Accelerometers and pedometers were also employed in a number of the studies. Such objective measures are thought to provide fairly accurate estimates of volume of activity (Riddoch, 2007).

Accelerometers are considered more advanced motion sensors compared to pedometers as they register acceleration within one movement, rather than just the number of movements. However,

accelerometer data are expressed as 'movement counts' which vary between the brands of monitor. This can make setting the threshold difficult (Reilly *et al.* 2008; Rowlands 2007). Pedometers also have issues, with storing only the total amount of steps (not the time series of step frequency), so they cannot detect intensity, duration or frequency (Corder *et al.* 2008) or identify the specific activity being adopted. However, Rowlands *et al.* (1997) believe pedometers are suited to such large scale studies and work well in the assessment of physical activity in young people and children as, compared to accelerometers, they are relatively inexpensive. They are also reusable, objective and non-reactive.

#### **4.1.4 Subjective measures**

Subjective methods include questionnaires, interviews, activity diaries and direct observation. Such measures were used in many of the studies to measure physical activity. These methods are valuable for assessing the activity setting and the mode of activity behaviours and determinants (Corder *et al.* 2008). However, like the other methods there are limitations in this approach. The reliability of self-report PA has been questioned due to the difficulty of young people accurately recalling and quantifying activity (Welk *et al.* 2000). Activity diaries, for example, as used in Robbins (2006) and Murphy *et al.* (2006), can be useful. However, they require young people to report specific activities in a predetermined period of time. Therefore, there is a reliance on participants to fill these in frequently (Bratteby, 1997). A few of the studies employed modified versions of well-known questionnaires, such as the Physical Activity Previous Day Recall (Weston, 1997) and the 3 Day Recall (3-DPAR) (validated by Pate *et al.* 2003). The previous day and 3 day recall questionnaires require the child to recall their previous day/ past three days of PA. One advantage of this short time frame, particularly the previous day version, is that it reduces the complexity of the cognitive processing

involved in recall for the child (Barnowski, 1998). Other studies used modified versions of other questionnaires, or designed their own and so differed on a number of factors including; the types of activities assessed, whether intensity and/or duration of activities were assessed and the time period of recall for physical activity. In some cases, both objective and subject methods were employed. However, this does not necessarily strengthen the results, as shown in the Schofield *et al.* (2005) intervention. They included a pedometer step count (PED) intervention group and a time-based (MIN) intervention group, along with a control group (CON). The PED and MIN groups were told to increase steps or minutes of PA respectively. The intervention involved a session conducted before or after school or during lunchtime for 30 min duration weekly for 6 weeks (followed by a six week maintenance phase). Results showed that only the PED group significantly increased total activity as measured by a 4 day step count, when compared with the control ( $p = 0.03$ ), and the girls in the PED group had a greater increase mid intervention ( $p = 0.04$ ). However, what is interesting is neither self-reported activity ( $p=0.94$ ) nor BMI ( $p=0.32$ ) showed any significant change, even though the pedometer group indicated significant increases in physical activity. This therefore questions the pedometer accuracy and/or the reliability and validity of self-reported PA. As 13 of the studies used only self-reported PA measures, this may have resulted in less accurate representations of the effectiveness of the interventions.

#### **4.1.5 Counselling and support components to interventions**

In the Girls on the Move program, Robbins (2006) examined the efficacy of a two component intervention: computerized, individually tailored PA plus nurse counselling. Girls completed a computerised health assessment / questionnaire, with the Intervention group receiving tailored feedback and nurse counselling at baseline, 3

weeks and 9 weeks. The control group just received age-specific PA recommendations. Information was posted to parents at baseline and 6 weeks to offer tips on how to encourage their daughter to be more active, and follow-up phone calls at weeks 1, 6 and 11 assessed progress and provided advice on meeting goals. There were no reported differences between intervention and control groups on any PA measure, and no statistics were provided for these measures. However, the log diary kept by the girls showed that both intervention and control groups increased their physical activity.

Metzker (1999) provided physical activity counselling in a school setting. Sessions were face-to-face individually or in small groups and were based on the processes of change from the Transtheoretical Model, as well as determinants of, and barriers to, physical activity. Each session lasted 5-10 minutes. Metzker did find positive changes in physical activity; however the study was given 'low research quality' rating by the NICE review. Although the reasons were not stated, it is likely due to the use of a measure of physical activity of unknown reliability and validity. In addition, Paetcher's (1988) one year intervention included a parental support element, and compared school curriculum only and school curriculum with parent participation. However, the only outcome revealing evidence of a significant effect within this student cohort was cardiovascular knowledge. Although it appears that counselling and support interventions may not be effective in increasing PA levels, it should be noted that there were concerns with the level of clarity and information provided in the included studies. For instance, the researchers did not make it clear exactly what the counselling and support provided consisted of, how appropriate it was for the participants and if the people delivering the counselling were fully trained to do this. Thus further evidence is required before firm conclusions can be drawn.

#### **4.1.6 Unstructured PA opportunities**

Making changes to the structure of the school day to include PA seemed to be successful in Verstraete *et al's* (2007) study, but not in Haerens *et al's* (2006) work. Verstraete (2007) used printed educational materials, game equipment and play cards during lunch break and intervals, and found significant increases in time spent doing moderate to vigorous physical activity in the intervention group at lunch time (moderate: from 38% to 50%, vigorous: from 10% to 11%), while time engaged in PA in the control group decreased (moderate: from 44% to 39%, vigorous: from 11% to 5%). Similar results were shown at interval time. Although effective, this was a small study, with just one intervention group and one control group, so results should be interpreted with caution. In Haerens (2006) work, schools were also encouraged to create more opportunities for students to be physically active during school breaks, with extra sports materials provided for break / lunchtime and after school. The aim was to increase PA to at least 60 minutes per day with the help of computer-tailored intervention. However, there was no effect for the intervention over 1 or 2 years. Another small scale project which appeared to increase girls PA was carried out in partnership between the Women's Sports Foundation, Creative Partnerships South London, the Helen Storey Foundation, and Sheffield Hallam University. The project showed that inserting physical activity sessions throughout the school day and using break time for supervised physical activity sessions, increased girls enjoyment and involvement levels (Women's Sport and Fitness Foundation, 2008). Physical activity frequency and intensity increased following the intervention as shown by diaries and accelerometer data. This study was not included in Table 1 as there were three different interventions employed across three schools, with a small sample in each and so it is not possible to report on overall effectiveness of each intervention. In one school, activity sessions were

oversubscribed, indicating the interest in physical activity generated by the project. Girls reported they were more focused and found it easier to concentrate in classes with both teachers and pupils reporting that medium energy levels classes were the best (classes which were not too lively, but prevented lethargy). Therefore, it appears small scale projects (42 teenage girls and 15 teachers overall) that offer unstructured PA opportunities throughout the school day can increase PA levels for small samples. However, more work needs to be done to find out how this can be achieved effectively in larger samples.

#### **4.1.7 Changes to the school environment**

Interventions which focussed on change at the environmental level rather than just the individual appeared to be more effective in increasing PA levels. Simon's (2004) study was based on an ecological model designed to influence intrapersonal, social and environmental determinants of PA. By adapting times and places of PA, the recognised barriers to girls PA were reduced (open participation, emphasis on fun, meeting with others and absence of competitive sports). Frequency and duration of leisure orientated physical activity significantly increased from 59% to 83% among intervention girls compared to controls (48% to 50%; OR=3.38  $p<0.01$ ). Follow-up results were collected post intervention indicating PA was associated with improvements in self-efficacy and intentions to be active. There was also a significant reduction of high sedentary (screen-based) behaviour among intervention girls from 24% to 17%; (OR=0.54;  $p<0.0001$ ). A multi-level approach was also effective in the Lifestyle Education for Activity Program (LEAP) PE intervention (Pate *et al.* 2005), which was designed to change both the 'instructional practices', and the school environment, to increase support for physical activity among girls. LEAP PE offered a range of activities for girls such as: aerobics, dance, walking, self-defence,



martial arts, and weight training. The results indicated that 45% of girls in the intervention schools and 36% of girls in the control schools reported vigorous physical activity during an average of one or more 30-minute time blocks per day over a 3-day period. However, there were no adjusted baseline values reported and so it is not possible to tell if there was an increase in PA levels over the intervention period.

The follow up assessment three years on, LEAP 2 (Pate *et al.* 2007), found girls attending *some* intervention schools were more physically active than girls attending other schools. However, it should be noted that such an effect was not consistent across all intervention schools. The Middle School Physical Activity and Nutrition (M-Span) project (Sallis, 2003) also involved making changes to the school environment, including increased supervision, equipment and organised activities. The results showed that the intervention was effective for increasing boys' physical activity in school, but not girls. Clearly ecological interventions have potential. However the barriers related to girls' physical activity need to be understood further in order for interventions to be successful.

#### **4.2 Qualitative Research assessing school- based interventions**

Recent UK-based qualitative work has attempted to understand *how* changing the PE environment or developing an alternative curriculum may increase girls' physical activity levels, perceptions and enjoyment of school- based PA (Ennis, 1999; Hastie, 1998; Kinchin and O'Sullivan, 1999; Oliver and Latik, 2001). Brooks and Magnusson (2006) explored the lived experiences of 31 British adolescent girls and boys, aged 14-15, who previously defined themselves as being actively resistant to participation or having an 'intense dislike' of school PE. Following a school intervention to change the way teachers delivered PE, all of these individuals

became actively involved in a range of physical activities provided by the school. In this small scale study, explicit attempts were made to change the form of provision, the types of activities and extent of choice and the culture (e.g. staff approaches to competitiveness) of the PE class. The students were also offered the chance to voice their opinion (students were able to redesign PE uniform and suggest new activities). In addition, improvements were made to the physical environment, including updating some equipment, decoration of the sports hall and improving the changing rooms. Finally, the students were given *choice* about which part of the PE uniform they wore to lessons and whether they preferred indoor or outdoor activity. Crucially, the authors report that the shift in teaching focus, from striving to attain excellence to achieving broad participation, appeared to have motivated the adolescents to want to participate.

Focus groups were carried out with 25 of the adolescent girls involved in the intervention to provide insights into their perceptions and experiences of PE before and after the implementation of the modified PE programme. Importantly, the girls changed from describing their bodies as 'inhibiting' them in PE, to perceiving their bodies as 'performing and active'. Self-confidence seemed to grow and participation rates increased. The girls also reported feeling a sense of control over what they wore for school PE, and this choice of clothing made them physically more comfortable whilst participating. Brooks and Magnuson's (2006) study provides useful insights into the possibilities that a successful small scale UK intervention can bring. The shift in the school culture and physical changes to the environment were central to girls having a choice and being given a voice. This study also illustrates that PE teachers may be focussing on providing 'excellence in sport' rather than maximising participation, and therefore playing organized sport is not

necessarily the solution to increasing physical activity levels in all adolescents. According to Biddle *et al.* (2005), *“there are many forms of physical activity and this need to be explored to maximise participation. For those who wish to play organised sport, they must be provided with opportunities and suitably encouraged. For others, we must provide either a sporting environment that is more appealing than at present or seek other opportunities for physical activity, such as active transport”* (p.429).

This idea of adapting the curriculum to increase girls’ engagement is also shown in qualitative work by Griggs (2008). Twenty-five 13 year old girls who had been identified by staff as being ‘less engaged’ with PE were taught an alternative range of activities, including cheerleading, aerobics, skipping, tag rugby and ultimate Frisbee in place of their usual and more traditional PE curriculum. Data were collected from the girls in the form of anonymously returned self-completion questionnaires, within which pupils were asked a range of closed and open questions in order to compare their contrasting curricula. Although the questionnaire data is not robust enough to evaluate if the intervention effectively increased physical activity in girls (as it is such a small sample), two key themes were drawn out from the open questions; namely curriculum content and *choice*, with 84% of the 25 pupils reporting that they enjoyed their PE lessons more during the alternative activities unit of work. Within this study, a raised level of motivation was apparent throughout the pupil responses (evident in the statements provided), with the ability to have choice reported as being central to this.

Enright and O’Sullivan (2010) also showed the importance of negotiating the curriculum and giving teenage girls a voice, as central to PE participation. Data were gathered from a three year Participatory Action Research Project which included 41 15-19 year

old female 'co-researchers and activists' working together to understand and address the girls self-identified barriers to PE. Through the use of individual and group interviews, and participatory tools (photographs and posters), the researchers showed that when girls were offered the opportunity to help create their own curriculum, this increased their ownership of what became 'their curriculum' and so resulted in full participation. The authors assert that as the girls had leadership and responsibility for this change in curriculum, they became committed to its success. This study is important as it clearly shows that including and consulting with the girls about the PE curriculum, increased participation. The importance of consultation will be discussed further below and is revisited in the following chapters.

Strengths of adopting an ecological approach and moving away from solely curriculum changes to increase PA have been recognized widely (Biddle, 1991; Cale, 1997). It is important to recognise that there are aspects of the school that may inhibit or promote physical activity and lifelong participation. Furthermore, according to Cale and Harris (2006), understanding gained through a formal curriculum can be either reinforced and supported or completely undermined by other influences, such as peers, family, and the 'hidden' curriculum. Therefore, Cale and Harris (2006) recommend that *"to increase the likelihood of PA interventions being successful and leading to sustainable behaviour change, an ecological framework is used to address the multiple levels of influence of physical activity and to explore the potential of every aspect of the school to promote PA"* (p. 412).

### **4.3 Current UK initiatives**

There are a range of current initiatives in the UK which have attempted to make PE more accommodating and attractive to girls

include; the Youth Sport Trust programme '*Girls Active*', designed to empower teenage girls (13-16 years olds) 'to enjoy more sporting activity on their own terms, making positive choices and being given a voice' (Youth Sport Trust statement, 2006). It is also about enabling young people to make a positive contribution to their schools as girls are challenged to come up with ideas on what they would change in their own schools in order to make sporting activity something they would want to participate in. The project is ongoing so no evaluation has been published. However, questionnaires completed by girls appear to indicate that girls participating in the programme feel they have much more choice at school (based on preliminary data from The Youth Sport Trust). Girls reported enjoying PE when no-one was mucking around and they liked the activity and reported having more fun when it was new, interesting and not repetitive.

In Scotland, work has also been done through the Y-dance 'Dance-in-Schools Initiative' (DISI). This consisted of a five-week programme of dance workshops, delivered to primary and secondary school pupils across all 32 local authorities in Scotland between 2005 and 2008. The aims of the programme were to increase participation in physical activity among school-aged children, promote positive health and well-being, improve motor skills and development and promote sustainability of dance in school by equipping teachers with skills and resources. The evaluation consisted of a longitudinal pupil survey and two case studies. Amongst primary-aged girls, there were immediate positive benefits reported from the workshops, such as increased enjoyment, confidence about participating, attitudes, self-efficacy and competence towards dance. In addition, an increase in moderate physical activity was also shown (by survey). However, this was a short term effect, with levels returning to baseline at 6-month follow up. The secondary school girls' survey data appeared to indicate the project was less successful in reaching this age group,

with girls reporting that they did not enjoy the workshops as much as they had expected and had less positive attitudes towards dance afterwards. However, differences in programme delivery may have influenced the results. Focus group discussions suggested more positive experiences among some girls who described the workshops as 'energetic', 'great', and 'enjoyable'. The researchers note that the findings should be interpreted with caution, as they represent the views of a limited number of pupils and so are not generalisable (Muldoon and Inchley, 2008). A follow up project 'Free to Dance' is currently being implemented in three Local Authorities in Scotland.

Overall, the evidence shows that school-based physical activity interventions can lead to moderate increases in physical activity. However the sustainability and fidelity of interventions is largely unknown as often researchers do not re-visit the school to assess the delivery or longer term sustainability of interventions. One problem with this is that enduring social and environmental factors can cause a return to previous low active behaviour after the intervention period (Gauvin, Levesque & Richard, 2001), and so future intervention work should address this as an implementation issue. Successful interventions appear to include self-monitoring techniques (Marks, 2006), teacher-led extra-curricular physical activity (Simon, 2004; Eilikin, 1996; Webber, 2008; Murphy, 2006), and multi-level programming targeting psychological, social and environmental correlates (Pate, 2005; Webber, 2008; Simon, 2004), along with curriculum content and choice (Griggs, 2008; Brooks and Magnusson, 2006; Enright and O'Sullivan, 2010). Indeed, from the interventions reviewed, those which appear to have been most effective in increasing physical activity behaviour and also improved attitudes towards PA and PE seem to all contain elements of consultation, offering a choice of activity or just including girls in the school changes. A key message, therefore, is that consultation and

giving girls a voice appears to be elemental for engaging girls in PE. As discussed above, interventions which target girls only also appear to be slightly more effective than mixed gender interventions. However, there is clearly still a lot of work to be done to engage and sustain engagement in physical activity for this population. Finally, it is worth noting that the majority of studies included are American, which supports Whitehead and Biddle's (2008) statement that there is 'a general bias in this field towards American research, which prevents conclusions being drawn from UK research.' Thus there is a need for further research into this area within the UK, particularly in relation to intervention studies.

#### **4.4 Fit for Girls**

Fit for Girls (FfG) is 3-year programme funded by the Scottish Government and jointly led by **sportscotland** and the Youth Sport Trust. The programme was implemented in Scottish secondary schools during the period September 2008 – March 2011. The programme targeted girls aged 11-16 years, aiming to increase participation levels in Physical Education as well as physical activity out with the school curriculum. Workshops are delivered to the PE staff and Active School co-ordinators across Scotland, which facilitate and support schools to make changes to increase girls' participation. Schools are encouraged to examine not only the curriculum, but also the environmental factors that may play a role in girls' engagement in the subject, such as equipment and changing facilities. Specifically, the intervention aims to include the girls in the design of their own school's programme and so the aims and objectives of each school will vary slightly depending on the school's needs. The workshops are delivered by five Fit for Girls trainers, all full-time PE teachers. As the research presented in this thesis was carried out in schools in Scotland that were case study schools in the

Fit for Girls programme, this section will explain the programme in full to provide contextual information.

Fit for Girls is based on the Nike/Youth Sport Trust 'Girls in Sport' Programme (Youth Sport Trust, 2008) which was designed to equip secondary school teachers in England with the appropriate skills and ideas to provide forms of physical education and sport opportunities that would foster long-term change in girls' involvement in sport. It focused on developing girl-friendly forms of PE with the aim of increasing girls' physical activity levels and producing more positive attitudes towards participation. 'Girls in sport' was specifically aimed at girls and young women who were least likely to be physically active, and who did not currently participate in extracurricular activities or curricular PE. The initiative offered a five-part approach for schools – a training workshop for PE staff, a user manual for secondary schools, assistance in developing a tailor made action plan, research support through the Institute of Youth Sport, and a national award scheme. Following the success of Girls in Sport, the programme was adapted to a Scottish context and Fit for Girls was piloted between 2005 and 2007, with 27 Scottish secondary schools taking part. The pilot phase was known as the Girls in Sport and Physical Activity initiative. This included development of a training programme for PE staff and Active Schools Coordinators designed to facilitate new ways of engaging girls and young women in physical activity. The pilot indicated, on average there was a 9% increase in girls' participation, but in six of the schools the increase was higher and girls' participation exceeded or levelled with boys' participation. The positive evaluation, which improved on previous interventions, resulted in funding being granted from the Scottish Government to roll out the programme across all 380 Scottish secondary schools (and re-naming the programme Fit for Girls). The partnership of **sportscotland** and Youth Sport Trust are accountable for the



management and embedding of the programme and will report back to a Scottish Government steering group comprised of representatives from health, sport and education.

The Child and Adolescent Health Research Unit, (CAHRU), previously based at Edinburgh University and now at the University of St Andrews, are responsible for the evaluation of the Fit for Girls programme. CAHRU has been commissioned by **sportscotland** to evaluate the programme over three years and this includes a focus on *process* (implementation), *impact* (specific activities and programme outputs at organizational level) and *outcome* (broader health-related outcomes including change at the individual level). The evaluation uses a range of quantitative and qualitative methods to provide a comprehensive picture of the impact of the programme and the process of implementation (the methods used for the evaluation will be discussed in chapter 7). My PhD research was carried out in CAHRU and so my findings contribute to the overall evaluation. As my work focuses specifically on girls who are low active from four case study schools, these schools are featured case study schools in the evaluation report. This thesis will investigate how these four schools responded to the Fit for Girls programme, and will explore the social ecological factors that influence participation levels and perceptions of physical activity and PE in school. The following chapter will discuss the approach that will be taken to do this work.

## **Chapter 5 A Social Ecological Approach to understanding girls' engagement and experiences in the PE environment.**

As shown in the last chapter, programmes that utilised girls only, social- ecological approaches to behaviour change appeared to hold promise as an effective way to increase physical activity levels. As discussed in chapter 3, social ecological theory is now the most commonly adopted theoretical framework for research into health-related behaviour change (Humpel *et al.* 2002). Among the first to apply an ecological model to physical activity research were Sallis and Owen (1999), followed by Welks (1999) *Youth Physical Activity Promotion model (YPAP)* (Welk and Eklund, 2005). This 'heuristic' model aims to guide physical activity promotion programmes and bring together theory and practice. Welks' model is a promising approach for understanding young peoples' physical activity (Rowe *et al.* 2007). It builds on existing research on developmental, psychological and behavioural characteristics specific to youth, and integrates the constructs of different theories. The model divides the influential correlates of physical activity into three domains: (1) the individual-level *predisposing factors*, comprising the cognitive and affective considerations, represented by the two components "is it worth it?" and "am I able?"; (2) the *enabling factors* that include personal attributes (e.g., skills and fitness) and environmental or access variables; and (3) the *reinforcing factors* reflecting social influences. The enabling and reinforcing factors can directly influence physical activity levels because of their facilitating and stimulating effects. According to Welks (1999), there is a strong relationship between the components "is it worth it?" and "am I able?", because young people value what they are good at doing, and perceive that as worth doing, and likewise aim to become good at and pursue things they value.

This model provides a useful working model to help understand young peoples' behaviour change in physical activity contexts, as it incorporates the influences of intra- and extra-individual factors on physical activity participation. More importantly, it distinguishes between perceptions of competence and self-efficacy (am I able?) and enjoyment beliefs and attitudes (is it worth it?) at the individual cognitive level. According to Welk (1999), young people's interest in physical activity is an element of the construct "Is it worth it?" as interest is what drives an individual to adopt certain behaviours as a response to influences in the immediate environment. Secondly, an individual's interest is the psychological disposition of preferences for an activity or action that is based on the knowledge and the values that have been developed during an individual's interaction with this activity or action. For example, an adolescent girl would first have to have an individual interest in participating in physical activity (e.g. PE class), then base her willingness to participate in a specific activity (e.g. gymnastics) on her knowledge, previous experience and general regard/attitude towards that activity. Welks (1999) also proposes that 'situational interest' is the direct appealing effect of characteristics of an activity on a person. Both individual and situational interests are likely to have a combined impact on young people's decisions about what to do. Therefore, in order for girls to engage in physical activity in the PE class, there has to be a) an individual interest in the activity being worth it, and b) a situational interest relating to how appealing characteristics of the PE environment are. Since this model is relatively new, it has not yet been applied to much of the youth physical activity research (Rowe *et al.* 2007; Dollman and Lewis 2009; Chung and Chow, 2010). However, it presents a promising and relevant approach which encompasses relevant theories for understanding adolescent girls motivations for behaviour and behaviour change.

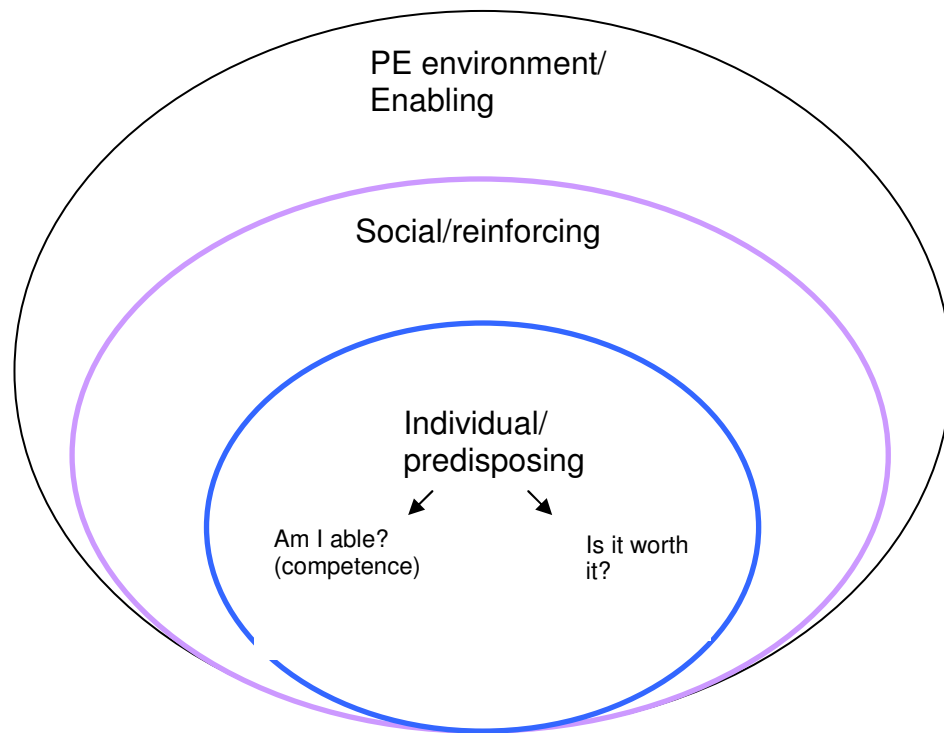
Theories such as Competence Motivation Theory (Harter, 1978) and Self-Efficacy Theory (Bandura, 1986) have shown how important competence and self-efficacy (am I able) are for understanding motivation for physical activity. In addition, the Theory of Planned Behaviour (Ajzen, 1985) and Theory of Reasoned Action (Ajzen and Fishbein, 1980), clearly show that enjoyment, beliefs and attitudes (is it worth it) are key constructs for understanding behaviour (predisposing factors). Although Social Cognitive Theory (Bandura, 1986) and other more cognitively based models include the environment within reciprocal determinism, many applications of Social Cognitive Theory are limited to individuals' cognitions and perceptions of environmental influences. One of the strengths of Welks' (1999) model is that it accounts for the influence of extra-individual factors (enablers). In this PhD research, the PE environment (including equipment, changing rooms, choice of activities, single sex classes) is likely to have an impact on girls' engagement and experiences. Since there may be physical changes made to the PE environment (such as new equipment, new activities on offer for girls) as part of the Fit for Girls (FfG) programme, it is important to address directly the social (reinforcing) and physical contexts and changes in these environments in order to understand the processes of behaviour change. The YPAP model (Welks, 1999) will therefore be applied as an overarching framework to guide the research questions and analytical strategy, focussing on girls' experiences and engagement within the PE environment, during a physical activity programme.

For the individual-level *predisposing factors* of the model, the 'am I able' component will be used to guide exploration of girls' perceptions of competence in the PE environment among a selected disengaged group. Thus, concentrating specifically on their own physical perceptions, and how far their perceptions of competence in

the PE environment affect their engagement and experiences within the subject. Although perceived competence has been readily studied in the sport and exercise field, much of the work in this area is quantitative. This type of research aims to find statistical relationships between perceptions of competence and other factors, such as activity levels. Therefore, my study aims to build on previous knowledge and research, with the understanding that disengaged girls are likely to exhibit low levels of perceived competence in PE. I intend to explore qualitatively *how* these perceptions of competence have bearing on the girls' experiences in the PE environment. In relation to the 'Is it worth it?' component, disengaged girls' attitudes, beliefs and enjoyment towards PE as a subject and the PE environment will be explored. As the girls in this study all attend schools taking part in the Fit for Girls programme, attitudes, beliefs, enjoyment and engagement will be monitored throughout a two-year period to assess if and how the programme affects these particular girls and the processes of any changes in engagement and/or behaviours.

In relation to the second component of Welks (1999) model, *enabling factors*, environmental variables will be investigated to understand how any changes to the physical school environment or PE curriculum, as a result of the programme, may affect girls' engagement and experiences. This may include, for example, new PA clubs on offer, new activities in PE, equipment, facilities, structures in PE class, depending on each case study schools' aims (this information is gathered from the PE teachers in each school). The third component of the model, the *reinforcing factors*, reflects social influences and so the influences of peers and PE teachers on girls' engagement and experiences within the PE environment will be explored. The levels of influence are shown in figure 5.1 below. As was shown in chapter 2, there has been relatively little work exploring

the influence of peers and peer relationships in the PE environment and so my work will contribute to the evidence base in this area.



**Figure 5.1 Welks (1999) social ecological approach to understanding the factors involved in youth physical activity.**

### **5.1 Research questions**

Coleman *et al.* (2008) highlighted the fact that qualitative research exploring the determinants of young girls' physical activity is still rather limited in the UK. A recent comprehensive review of twenty four UK-based studies, carried out by the British Heart Foundation (2004), showed that only five qualitative studies had explored young women's reasons for participation and non-participation in sport. As shown in the previous chapters, there is still relatively little qualitative work that has been carried out on girls' experiences and engagement in the PE environment. Consequently, there has been a call for more qualitative research (Wright *et al.* 2003) in order to understand: 1) why adolescent girls are not engaging in PE, 2) the experiences girls

have while participating in PE lessons, 3) the significance of PE to girls, and 4) how and why levels of activity change with age.

With this in mind and having reviewed the literature around adolescent girls and PE, there are areas of work that need further investigation to understand more about disengagement, but also *if* and *how* their experiences and engagement can be affected and influenced by a physical activity programme in their school.

According to Bailey *et al.* (2006) "*there is a need to determine not only the product of participation, but also the process of change*" (p. 17). It is clear that the process of change in girls' engagement needs to be explored, in order to better understand girls' experiences in the PE environment. My research therefore aims to address the following questions;

1. *What are 'disengaged' girls' experiences in the school PE environment?*

1.1 How do individual / predisposing factors (perceptions of competence and PE identity) affect girls' experiences and engagement in the PE environment?

1.2 How do peers and PE teachers (reinforcing factors) influence girls' experiences and engagement in the PE environment?

1.3 How does the PE environment (enabling factors) affect girls' experiences and engagement?

2. *Does a school physical activity programme affect 'disengaged' girls' engagement and experiences in the school PE environment?*

2.1 How, and in what ways, are girls' participation and attitudes affected by a school-based physical activity programme?

2.2 How, and in what ways, can a school-based physical activity programme 'enable' girls' engagement and experiences?

2.3 Do relationships between PE teachers and girls change as a result of taking part in a physical activity programme? If so, in what way(s) and how does this impact on girls' engagement?





## Chapter 6 Research approaches

The aim of this chapter is to broadly discuss different research paradigms and how they are applied to my research. Following this, there will be a short chapter on the methods used in the evaluation of the Fit for Girls programme. Then in chapter 8, the reader will be provided with a full description of the methods used in this PhD research.

### 6.1 Methods utilised in physical activity/physical education research

A significant amount of the research undertaken on young people's engagement in sport and physical activity has been carried out using large-scale surveys, thus employing a quantitative methodology (e.g., the Scottish Health Survey, Scottish Executive, (2005)). Psychosocial and environmental factors associated with physical activity in young people have been documented in a number of quantitative investigations (e.g. Sallis *et al.*, 1992; Taylor and Sallis, 1997; Dishman, 1998; Kohl and Hobbs, 1998; Wold and Hendry, 1998; Biddle, 2005). Green *et al.* (1990) suggest there is an over-reliance on positivist methods of measurement involving questionnaire/survey data. Many of the studies which have been carried out have been largely cross-sectional and have relied on population-based research (Booth *et al.* 1997). This is similarly true of PE research, with much of the work positioning pupils as 'objects', using quantitative measures to carry out research *on* participants (Erikson and Shultz, 1992). Although quantitative evidence can be useful for identifying factors associated with activity levels of particular groups of young people, it is unlikely to reveal how these variables influence physical activity behaviour or to provide the underlying reasons for engaging, or not engaging, in physical activity. According to some researchers (e.g. Holm *et al.* 2001), an alternative approach is required which is

sensitive to the contextual, social, economic and cultural factors that influence participation in physical activity and physical education. Qualitative methods can provide in-depth insights into individuals' experiences and perceptions about physical activity (Thomas and Nelson, 2005). By exploring and presenting the social world, qualitative accounts provide the concepts, behaviours, perceptions and accounts of the people who live within it (Spencer, 2010). Despite previous criticisms of qualitative research, with some suggesting it is 'soft' and 'unscientific' (Thomas and Nelson, 2005) qualitative data is now regarded as valid and valuable, and is applied across a range of disciplines (Richie and Lewis, 2003). However, it is acknowledged that both methods are subject to quality control and validation issues.

*"...the ways in which measures are constructed in psychological tests, questionnaires, cost-benefit indicators, and routine management information systems are no less open to the intrusion of the evaluator's biases than making observations in the field or asking questions in interviews. Numbers do not protect against bias, they merely disguise it. All statistical data are based on someone's definition of what to measure and how to measure it"* (Patton, 1990, p.480).

Qualitative research is becoming increasingly utilised in the sport and exercise research field (Denzin and Lincoln, 1994) with many researchers and social scientists selecting this methodological approach (Faulkner and Sparkes, 1999; Partington and Orlick, 1991; Lipsey *et al.* 2006; Hills, 2007; Flintoff and Scraton, 2001; Wright *et al.* 2003; Brooks and Magnusson, 2006; Brooks and Magnusson, 2007; Coleman *et al.* 2008). In addition, there has also been a recent shift towards understanding the 'students as subjects' in PE research, and appreciation of the student voice as a legitimate area of enquiry within PE (Enright and O'Sullivan, 2010; Lee and McDonald, 2010; Ennis, 1999).

There is much debate in the social research world about whether quantitative and qualitative research methods should, or even can, be combined (Richie and Lewis, 2003). Some writers contend that the approaches are too different in their philosophical and methodological origins to be mixed together. However, others maintain that quantitative and qualitative approaches are not contradictory and can be applied within the same piece of research, depending on the research aims and design (Kirk and Miller, 1986; Silverman, 2000, 2001). While agreeing that these approaches can be used complementarily, my research adopted a qualitative in-depth approach to study the experiences and engagement of adolescent girls in PE classes. This allows for exploration of how and why disengagement occurs which could not be adequately understood by experimental and statistical-based evidence (Cresswell, 1994; Guba and Lincoln, 1994; Silverman, 2000). I have therefore pragmatically chosen the methods most appropriate to address my research questions, rather than basing my methods on a philosophical assumption alone. Since qualitative research typically aims to understand the meaning of individual experience within social context, the inductive nature of qualitative research allows for theory to emerge from the lived experiences of research participants rather than the pre-determined hypothesis testing of quantitative approaches (Allender *et al.* 2006). Indeed, this is one of the strengths of in-depth qualitative work, as often large scale studies are unable to capture the difference between school systems, infrastructure, environment, and social norms. Thus they cannot provide detail about how and why different school environments may affect individuals differently.

## **6.2 Processes of change**

In presenting my data, I have focused on the processes of change across all the selected disengaged girls. According to Fullan, (2001,

p. 52) "*change is a process, not an event*" and so by revisiting the schools at various intervals, I was able to follow this process of change in the girls, if it occurred and the extent to which it occurred. In the interviews with the girls, I structured my questions to elicit accounts of their perceptions of change in their own words. I would often ask the girls to compare their experiences in earlier years which allowed me to code changes based on their interpretation of the changes they had undergone, rather than my interpretation of their experiences. This was a reassuring process for me in coding the data, and the quotes with the comparisons provide the reader with the girls' and not the researcher's accounts of change. This also assures that the girls own awareness of changes in attitudes and behaviours are recorded. Subtle changes in relation to attitude and behaviour were later uncovered after all the transcripts were analyzed and re-read. This is a familiar process according to Saldana (2003)

*"sometimes the processes and products of change are so subtle we are unaware of them at first glance, therefore, we should be flexible and allow a definition of change to emerge as a study proceeds and its data are analyzed"* (p. 10).

I was also careful to take into account the wider context of girls' lives. As Fullan (2001) notes, since time is contextual, and our social actions and circumstances within it are contextual, change is also contextual. Taking this into account allowed the processes and products of change to emerge through the data collection. As Murray (1999 p. 3) notes "*meaningful change is slow: there are always stellar moments, but real change takes time and patience*".

### **6.3 Creating narratives**

In addition to the main results chapters, I have also provided the reader with short narrative accounts of three girls' journeys of change

(Appendix H). This allowed me to explore the in-depth processes of change that occurred in these girls, in two different PE environments. Although there are multiple definitions of what a narrative is, essentially a narrative is used to 'tell a story' in a variety of ways and is perceived as a common and natural way of conveying one's personal experiences (Bruner, 1990). It is also a strategy that recognises the extent to which the stories we tell provide insights about our lived experiences. Through analytic processes that help us detect the main narrative themes within the accounts people give about their lives, we discover how they understand and make sense of their lives (Sandelowski, 1994). Therefore, it is understood that by employing a narrative approach, we are interested in learning something about other individuals' narratives and how those narratives influence psychological and social realities (Crossley, 2000). According to Murray (2003), narratives not only bring order and meaning to everyday life but reflexively, they also provide structure to our 'sense of selfhood'. Through telling stories about ourselves and to others we create a narrative identity. Smith and Sparkes, (2009) also advocate that although the narratives people tell are personalised and unique, they are also constructed within a social context; they are a cultural creation. Who the story or experience is being recalled to, may vary how the story is told. Thus, the relationship between the narrator, the audience and the broad social and cultural context will shape how their story is told and what it consists of (Murray, 1999). As Overcash (2003) states, "*the beauty of narrative methods is in the diversity and malleability of the methodology in capturing the human experience*" (p. 183). The task is to 'represent' the participant in two ways: firstly in the 'artistic' meaning of the word, as in to make a realistic likeness, and secondly by acting as an 'agent' to the subject, ensuring the participants voice is heard (MacLure and Stronach, 1993).

Three girls' stories are presented in Appendix H, each of which is based on a key theme from the main results chapters and therefore, the girls were not selected until the data across all girls had been analysed and the main themes identified. This was to show in more depth the key environmental supports that are present (or missing) for each girl in her journey, which affects her engagement in the subject. Eva (School D) was chosen as her story shows the importance of having peers in the PE class for increasing engagement and positive experiences in PE. Sharon (School A) was selected to show that effective consultation and a choice of activity were significant for her engagement in PE. Although the stories of change are important, it was also felt that a story which showed no change in engagement should be highlighted, thus, Cathy (School D) was selected. Her story shows that individual barriers coupled with insufficient encouragement/consultation, can result in negative PE experiences and continued disengagement. Selecting two girls from the same school (Cathy and Eva) was intentional, to show that individuals can have very different experiences within the same environment.

## Chapter 7 Fit for Girls evaluation

As a proportion of this qualitative research will also contribute to the evaluation of the 'Fit for Girls' programme, it is important to address the contribution that quantitative and qualitative data have in evaluation research. Traditionally, evaluations have focused on the use of quantitative methods only (Silverman, Ricci and Gunter, 1990). However, incorporating qualitative methods into evaluations can be a powerful way to investigate questions which cannot be addressed by quantitative methods alone. The dataset for the Fit for Girls programme consisted of both quantitative and qualitative research, thereby providing a comprehensive evaluation of the programme.

### 7.1 Quantitative dataset

The quantitative element of the FfG evaluation consisted of 1) a questionnaire survey of girls, and 2) an online questionnaire survey of PE staff and Active School coordinators. The girls' survey was conducted at baseline (2009) and follow up (2011) of the 3-year programme period, to assess any significant changes in behaviour and attitudes over time. Questionnaires were sent to all secondary schools in Scotland to monitor changes as the Fit for Girls programme was implemented nationally. A total of 17,853 S2 girls completed the baseline questionnaire in 2009, with the mean age of the girls 13.7 years. In 2011, 17,088 girls from the same cohort then completed the follow-up questionnaire when they were in S4, mean age 15.5 years. The girls' questionnaire was developed by CAHRU and **sportscotland**, for the Fit for Girls programme to gather information about physical activity, sport, physical education and extra-curricular school-based activities, as well as girls' health and wellbeing. The questionnaire includes items and scales taken from: the Physical Activity in Scottish Schoolchildren (PASS) study (Inchley



and Currie, 2004), the Health Behaviour in School-aged Children (HBSC) study (Currie *et al.*, 2001) and the Amherst Health Activity Survey (AHA) (Sallis *et al.*, 2000). Adapted scales were also added to measure Exercise Self-Efficacy (Garcia *et al.*, 1998), Physical Self-Perceptions (Fox and Corbin, 1989) and Perceived Benefits of Action (Garcia *et al.*, 1998). A second shorter questionnaire was also designed specifically for the purpose of identifying participants for my PhD research and the qualitative work for the evaluation. This was administered to girls in the four case study schools and will be discussed in more detail in the following chapters.

The PE and Active School online questionnaire was emailed out to all secondary and Additional Support Needs (ASN) schools in Scotland during the second year of the programme (2010) and again in the final year of the programme (2011), to capture any significant changes which may have resulted from the programme. The questionnaire gathered information from PE teachers and Active School Co-ordinators about physical activity provision in schools through PE and extra-curricular activities, perceptions of girls' participation at school, consultation activities with girls, and experiences of the Fit for Girls programme and links with key partners at local level. The responses from the first online questionnaire were received from 297 of the 372 mainstream schools (80% response rate) and 12 of the 27 ASN schools (44% response rate) across Scotland. For the follow-up on online questionnaire, 289 (77%) mainstream schools responded and 5 (18%) of the ASN schools filled in the questionnaire.

## **7.2 Qualitative dataset**

I conducted the qualitative component of the evaluation which consisted of 1) peer focus groups with girls and 2) PE staff focus groups in the case study schools, both at baseline and follow up. The

12 baseline focus group discussions with girls included three in each of the four case study schools. A total of 41 disengaged girls took part. The focus groups with girls were carried out to generate data to be used in both the national evaluation report and this PhD thesis. The aim was to investigate attitudes towards physical activity and the factors underlying disengagement within the PE context and extra-curricular provision. Ten follow-up focus groups, with 32 girls, were also carried out with selected peer groups of girls when they were in S4. Six of the girls from the baseline focus groups were included again at follow-up (those who were not selected for my PhD longitudinal in-depth interviews). This was to keep the main evaluation and PhD data somewhat separate, since I was working in greater depth with the girls in my PhD research. The other girls were selected according to peer groups, and so included a mix of previously disengaged girls and a random selection of girls with different levels of engagement in order to ensure coverage of different experiences and insights into the success of the programme. The follow-up focus groups measured girls' attitudes towards physical activity and the PE/extra-curricular context, along with the impact, outcomes and reach the programme had on a range of girls, across the four case study schools. The in-depth individual interview data were collected mainly for my PhD research, although a small amount of this data is featured in the FfG final evaluation report.

Baseline and follow-up focus groups were also carried out with staff in each PE department in the four case study schools. The PE staff focus groups investigated the perceptions of the Fit for Girls programme, including the training workshop, the materials given and the support provided. Questions also focussed more specifically on PE as a subject, including timetabling, participation in PE, curricular and extra-curricular activities offered within the school. Data from

these focus groups also provided an indication of the success of the programme by exploring processes of implementation, the impact of the programme with regard to specific activities, changes at the organizational level, along with the perceived outcomes of the programme. Carrying out these focus groups also gave me valuable insights and knowledge of each PE department and each school environment, providing a broader context for understanding and interpreting my interactions and discussions with the girls. Working with the PE staff in this way also enhanced my relationship with the schools and helped to facilitate communication in relation to the ongoing PhD fieldwork.

To conclude, the dataset for the monitoring and evaluation of the programme consisted of quantitative questionnaire data, providing evidence of variables associated with physical activity behaviour and changes in variables across *all* girls in all secondary schools in Scotland, over the three-year period. These elements measure the extent of change and document the nature of transitions in relation to the programme. The qualitative work on the other hand, endeavoured to shed light on the processes by which change happened in individuals and at school level, in four case study schools.

## Chapter 8 Research Design

### 8.1 Longitudinal inductive Research

There have been some discussions in the literature as to what constitutes a longitudinal qualitative study. The criteria from the Inventory of Longitudinal Studies in the Social Sciences (Young *et al.* 1991) indicates that studies must span at least one year. Similarly, Stuart (1998) states that prolonged fieldwork “*has customarily been construed as 12- 18 months*” for ethnographers (p. 68). Generally, longitudinal qualitative researchers appear to devote extensive periods of time in the field (Wolcott, 1994; Stewart, 1998). Indeed, Ruspini (1999) defines the common characteristics of longitudinal work accordingly:

- 1) Data are collected for each item or variable for two or more distinct periods
- 2) The subjects or cases analysed are the same or broadly comparable
- 3) The analysis involves some comparison of data between or among periods.

Saldana’s (2003) suggestions are wise, stipulating that a qualitative longitudinal study should not be a set amount of time, as time and change are contextual. Instead, he suggests that longitudinal work should at least consider; 1) the importance of how time interacts and interplays with the collection and analysis of qualitative data, 2) the multiple and possible types of change and 3) the influences and effects on human actions and participant worldviews (p. 5).

As the data collection for this study was over a two-year period, the analysis of the findings was an ongoing process. Therefore, an emergent design was adopted, meaning that ‘data collection and data analysis are simultaneous and ongoing, “*allowing for important*

*understandings to be developed along the way and then pursued in additional collection efforts”* (Maykut and Morehouse, 1994: p.174). This meant that after reading through and analysing the data, I was able to return to the girls and ask additional questions and re-address/refine the original research questions, if appropriate, at the next interview phase. Thus, the previous interviews formed an integral part of subsequent data collection. An open-ended, exploratory approach was also adopted which, as suggested by Trochim (2006), begins with specific observations and measures, to detect patterns and regularities. This leads onto formulating tentative hypotheses that can be explored, resulting in general conclusions or theories. Although I was not carrying out an ‘ethnographic study’ I adopted elements from the ethnographic approach. This is due to the fact that I made regular visits to the four case study schools over a period of two years, focusing primarily on the girls’ experiences in school PE whilst observing broader aspects of the school environment and culture.

For this study, I have taken on the role referred to as ‘Observer as participant’ (Gold, 1958), where I am mainly an interviewer. Although there was some observation, very little of it involved any participation. According to Gold (1958), classification of ethnographer roles range from: Complete participant (someone who is completely immersed in the research setting to the point they are a fully functioning member of the social setting and their true identity is not known to the other members), participant as observer (the same as complete participant, however their identity is known to the group), Observer as participant (mainly an interviewer) and Complete observer (someone who does not interact with the participants on any level).

Each of Gold’s (1958) ‘ethnographic roles’ have advantages and disadvantages. The observer as participant role has been critiqued

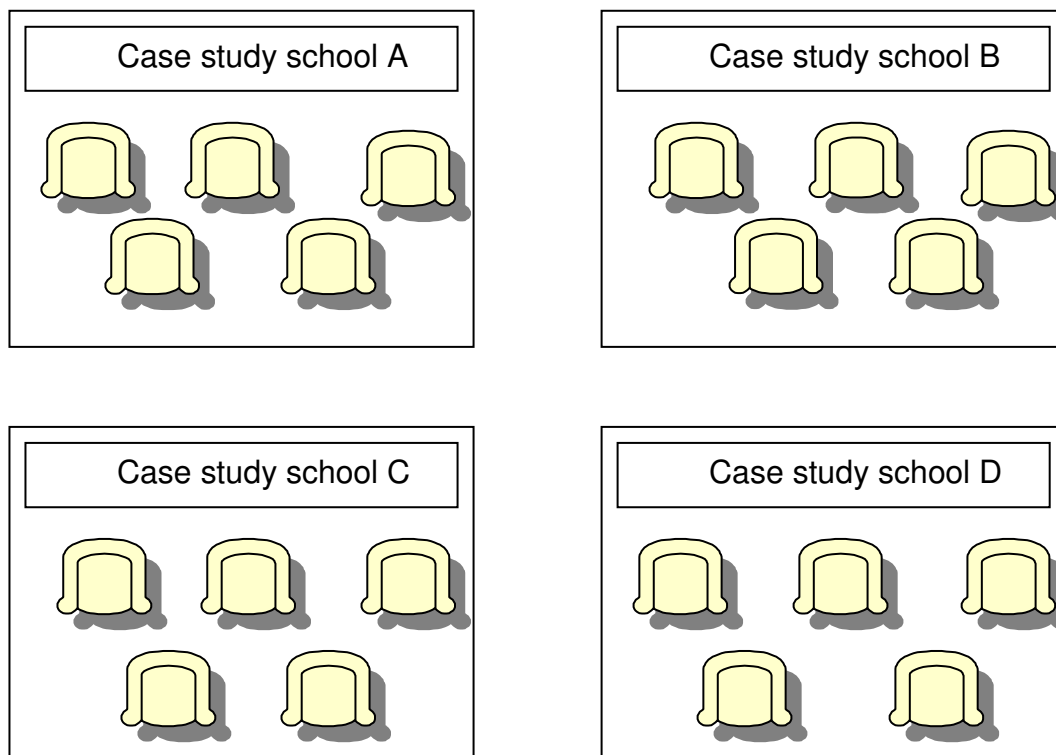
for carrying the risk of failing to understand the social setting and people in it sufficiently, and therefore making incorrect inferences. Bearing this in mind, I collected as much information about each school as possible when carrying out my research. This was done with overt observations of PE staff during each case study school's 'Fit for Girls training session', in addition to many visits to the schools to collect data over the two-year period. The PE staff focus groups and interviews with the girls also gave insights into each school's priorities, ethos and policies. I also endeavoured to gain information relating to the broader cultural, historical and societal contexts within which the schools are located, as these play an important role in girls' engagement and experiences in the PE environment. As mentioned, a reflective diary was also kept, noting thoughts and impressions.

## **8.2 Case study approach**

As girls' experiences and engagement in the PE environment are likely to be dynamic and variable, a case study approach was utilized to allow a more holistic and vibrant view of the phenomenon being investigated. At the heart of case study research is a commitment to understanding meaning from the position of the individuals involved and to seek ways to illuminate or provide insights into their beliefs, assumptions, values and actions (Pring, 2000). A case study can therefore be thought of as a useful strategy to develop a picture of 'what it is like' for individual(s) and to build an understanding of their real-life, lived experiences and actions (Cohen *et al.* 2000).

My research adopted the collective approach, defined by Stake (1994, p. 237) as 'a group of cases that are studied in order to inquire into the phenomenon, population or general condition' by which four schools are involved to explore disengaged girls' experiences in the PE environment. It also employs a *multiple case embedded design*

which is said to consist of multiple cases with multiple units of analysis (Yin, 2009). Each school is a case in itself in terms of local authority, geographic setting, activity level, socio-economic profile, levels of participation, school context and school ethos. Each selected disengaged girl was also a single case within their school, therefore each case study school also had 5 girls initially (units of analysis). This design is illustrated in Figure 8.1 below.



**Figure 8.1- Case Study units.**

One of the main strengths of a multiple case embedded design is the researcher's in-depth view of participant experience within each context. Choosing this design provides richness and detail into not only each school, but also into each girl's complex and lived experience in the PE environment. As discussed previously, narratives are presented for three girls, providing 'thick descriptions' (Lincoln & Guba, 1979) of their journeys. This approach offers the

reader in-depth longitudinal accounts of the processes of change that may occur when a physical activity programme is introduced into the lives of adolescent girls.

### **8.3 School Context**

As the focus of this thesis was to explore girls' PE experiences and engagement, the school contexts in which these experiences took place are central to my research. As Creswell (2007) and Pring (2000) note, understanding of any phenomenon or human activity can only be realised in context. Employing a case study approach allows a focus not just on the 'particular', but also in 'cognisance of the unique and dynamic' contexts in which the case is embedded (Cohen *et al.* 2000).

One issue that has been raised in relation to carrying out case study research is defining clear boundaries of the context (Stake, 2005). Stark and Torrance (2005) discuss the issue of 'defining boundaries' in case study research as more than simply a pragmatic matter, but also a significant epistemological issue with the researcher having a 'conceptual responsibility' (Stake, 2005). At first glance, the boundaries in my research appeared obvious (the school). However, once the data collection commenced defining these boundaries became more difficult. I began to recognise the wider influence of not only the PA programme but also the multiple influences that affect girls' PA behaviour. For example, as this programme took place in the girls' PE environment, each school's implementation, endorsement and indeed effectiveness of the Fit for Girls programme clearly shaped and informed girls' experiences. However, I also recognised that each individual girl would be influenced by numerous diverse contextual factors, and so the complex experiences and journeys of change that occur in the individual girls cannot be tied to any one programme or factor. I acknowledge that an in-depth study



of these multiple influencing contexts is not possible within the scope of my research. This is a key challenge of this type of research and so I recognise that these parameters or boundaries must be considered as open, shifting and evolving, somewhat vague or blurred and perhaps contrived, in line with complexity theory (Radford, 2007). According to Schostak and Schostak:

*“Synchronic and diachronic can be elaborated.....mapping the multidimensional spaces of their intentional networks, their beliefs, their interests, their values, their practices, the events that take place, the dramas and the spaces and places that compromise the scenes of action, the built environment, the stealth architecture and so on that compromise their everyday sense of realities and through which they articulate their sense of identity and community and formulate their personal projects.”* (Schostak & Schostak, 2008 p.239)

By acknowledging that the boundaries of my research were somewhat arbitrary, I was able to identify, examine and explore the interactions of significant factors, within the school environment. However, I did not ignore the out of school influences which affect behaviour change. Further, I was able to investigate the underlying reasons for the changes in girls' attitudes, beliefs, experiences and behaviour (Gillham, 2000; Merriam, 1998; Stake, 2005).

#### **8.4 Ethics**

Ethical approval for the study was attained from Moray House School of Education Research Ethics Committee. Various measures were used to protect and inform participants. Information sheets about the research and opt-out forms were given to the principal teacher of PE, to be handed out to all S2 girls in registration at baseline. These were passive consent forms, therefore were only to be returned to the school if the girls or their parents did not want to take part. This was primarily to avoid teachers having to chase up forms from all the girls. I was sensitive to any discomfort the participants experienced during the focus groups and interviews, so the participating girls were

also informed prior to and during the research that they may opt out at any time.

Confidentiality was ensured by the use of barcodes, which were printed on all Fit for Girls and PhD questionnaires (appendix D) which were used in the case study schools. This allowed individual data for girls, in the four schools, to be matched on both questionnaires. This also ensured the correct participants were selected for the qualitative research and for follow-up survey data. Participants have been given pseudonyms when writing up this thesis to protect their identity. Schools were also allocated a case letter to retain confidentiality. Participants were assured of this procedure, and the research aims were made clear to the case study schools at the outset.

Finally, all transcripts and audio files have been stored on a password protected departmental computer system, and therefore were only accessible to myself and those assisting with the transcribing. These files will be destroyed once the PhD is successfully completed and related papers are written up.

## **8.5 Recruitment**

Sampling was considered in three stages, firstly by selection of the local authority (LA), secondly the selection of schools, and thirdly the selection of the girls within each school. Girls from four schools in four different Scottish Local Authorities were recruited to the study. Since sampling is linked to the generalisability and validity of a piece of research (Borg and Gall, 1989), an appropriate selection is vital to get the best possible understandings of the phenomena being studied (Borg and Gall, 1989).

Some researchers have suggested approaches such as 'maximum variation' (Lincoln and Guba, 1985) as a useful strategy for selection. Others such as Burns (2000) argue that sampling needs to be based

on defining the criteria for a unit to be chosen as a case. In selecting local authorities, schools and girls, criteria were used to ensure fair representation. These are described below. 'Reputational sampling', which is proposed by Burns (2000) as a method whereby a sample is chosen on the recommendation of experts or acknowledgement by the media, was also employed when selecting schools. This was mainly due to the knowledge and experience such experts had (Active School Managers and **sportscotland** Local Authority Partnership Managers) in working with the schools and so guidance on certain 'co-operative' schools was sought. Although working with co-operative schools can be an advantage for research in some ways (as the schools may be more compliant with the research visits) there are also disadvantages of working with such 'proactive' and high performing schools. Such schools may, for example, have limited or no issues with PE participation. Thus the data will not accurately reflect the range of issues faced across Scottish schools. Therefore, I was careful to use selection criteria in the first instance (see next section), then guidance was sought later in the selection process to ensure I did not end up with four high performing schools. Moreover, although my selected schools were co-operative with the research, they were not by any means the 'stars' of the programme in increasing girls' participation. This is evidenced in the **sportscotland** Fit for Girls case study booklet, which showcases eight of the best and most innovative work across Scottish schools related to the programme, in which none of the four case study schools feature.

### **8.5.1 Local authorities**

Local authorities were selected based on physical activity level, accessibility and geographic spread. Four different local authorities were selected to provide a fair representation for the evaluation. These were selected on level of activity, with two 'low-active'

authorities chosen alongside two 'middle active' authorities' classified by **sportscotland's** area variation report (Coalter and Dowers 2006). This was to try and ensure that an adequate sample of disengaged girls would be achieved for the in-depth qualitative research (i.e. the group of girls most likely to provide theoretical insights). This provided one local authority from the west, one north, one east and one from central Scotland, based on the following criteria:

### ***1. Geographic representation***

This not only ensured there was a representational spread of schools across the country, but also provided insight into the differences/challenges that geographically diverse locations may face. Moreover, as LA's have different structures, policies and strategies in relation to PA and PE, this could impact on the way the programme was implemented and delivered.

### ***2. Activity level***

Based on **sportscotland's** area variation report (Coalter and Dowers, 2006), two 'low active' and two 'middle active' LA's were selected. Low active areas were those where fewer than 40% of adults participated in sport at least once a week. Middle active areas were those where fewer than 60% of adults participated in sport at least once a week. Therefore, both fall short of the target of 60% of adults to take part in sport at least once a week as set out in sport21 Scotland's national strategy for sport (**sportscotland**, 2003). It is acknowledged that these divisions are somewhat arbitrary but they provide an indication of overall participation at local authority level.

### ***3. No prior experience of the programme***

In order to get baseline data from the schools, four local authorities were selected that had not received the Fit for Girls workshop

training at time of selection. Generally, most schools within each authority were trained around the same time.

#### ***4. Accessibility***

It was important that I was able to access local authorities without excessive travelling. For this reason, islands and some parts of the highlands were excluded from selection.

#### **8.5.2 Case study schools**

Case study schools were chosen under specific criteria. One school was chosen from each local authority, therefore providing two 'low-active schools' and two 'middle-active schools'. Schools were then selected from the short-listed LAs that met the following four criteria:

##### ***1. School size***

It was felt that all schools chosen should be around the same size as one constant variable for comparison, therefore schools were to be chosen if there were around 100 S2 girls. However, this sample size was not possible in all four schools with the additional criteria being met. This resulted in the two low active schools with around 100 S2 girls and the two middle active schools with around 60 S2 girls (according to the school register at the time of selection). Therefore the school size was kept (roughly) constant with the 'activity level'.

##### ***2. Accessibility***

In addition to LA accessibility, it was also important that I was able to get to the schools by public transport and without excessive travelling.

##### ***3. Consent***

The school's willingness to participate in the research.

### **8.5.3 Disengaged girls**

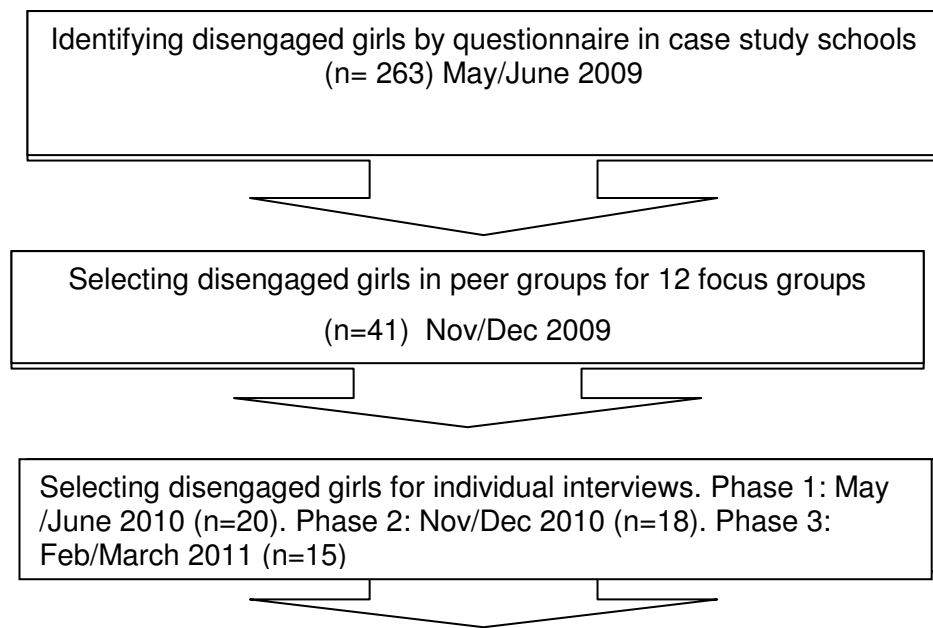
Twenty girls were initially recruited, five from each of the case study schools. Sixteen girls was the proposed sample, however over-recruiting allowed for girls dropping out. In order to identify 'disengaged girls' for the qualitative work<sup>5</sup>, a short questionnaire was designed to ask girls about their participation levels, reasons for not participating in PE and feelings towards the subject. Girls were identified as being 'disengaged' if they participated in PE 'some of the time' or 'none of the time' (rather than 'all of the time' or 'most of the time') according to their baseline responses. This was in addition to reporting negative perceptions of the subject when asked: 'how do you feel when you take part in PE?'. Negative responses included: bored, stupid, angry, embarrassed, worried, sad, agitated or nervous. At the end of the questionnaire, all girls in the case study schools were asked to indicate if they would be willing to participate in a focus group and, if so, which friends they would like to be grouped with.

### **8.6 Stages of data collection.**

Each phase of data collection was roughly 5 to 6 months from the last, apart from the final interview phase which was about 3 months after the previous. This was due to the girls' standard grade exams and so data collection was completed before exams commenced. Figure 8.2 shows the time frame and number of girls in each stage of data collection.

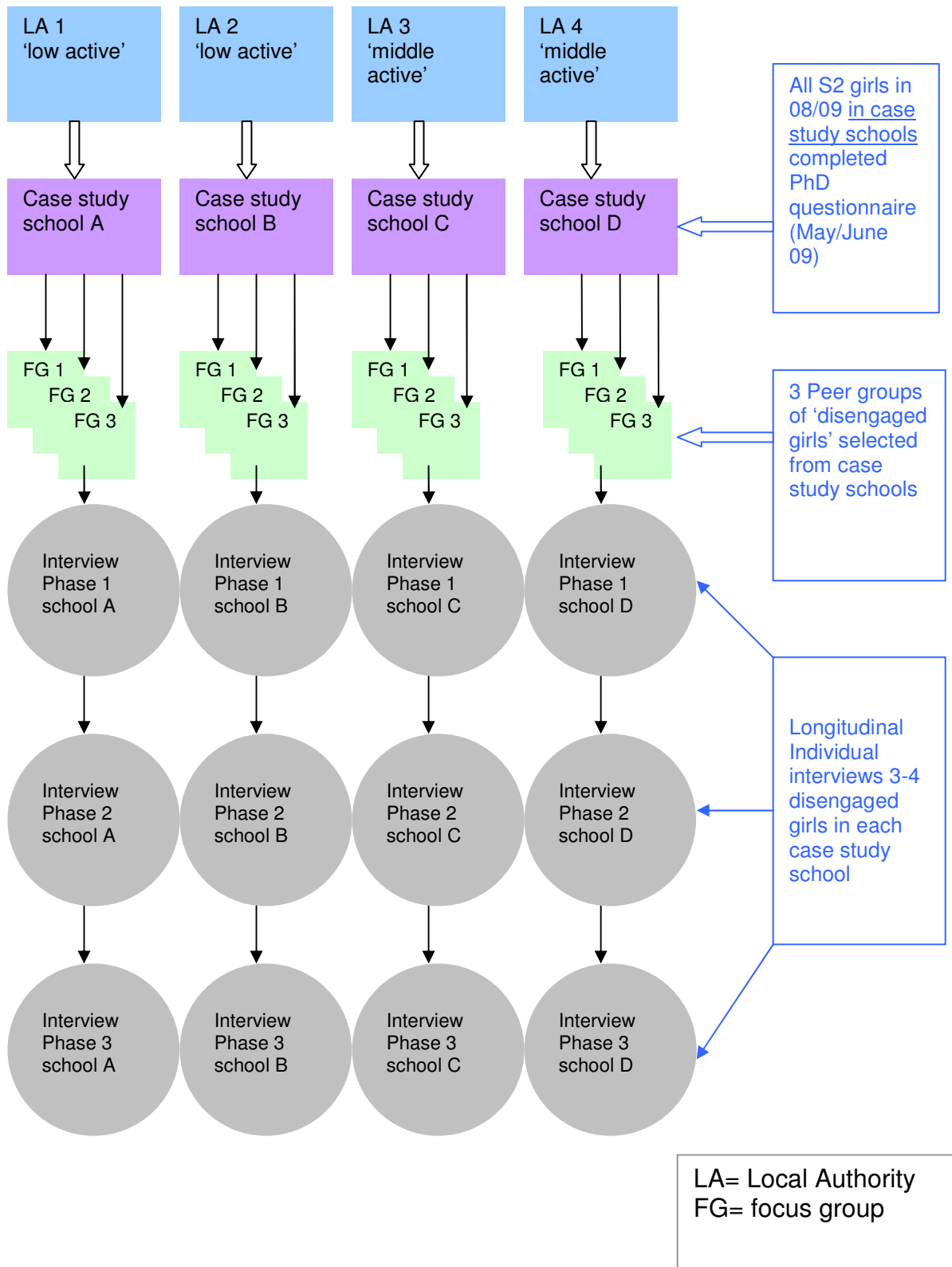
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<sup>5</sup> It was not disclosed to the girls that selected girls are 'disengaged'. This was to avoid the girls feeling stigmatized or over identified.



**Figure 8.2 stages and timing of data collection**

The following figure (8.3) shows the recruitment process and data collection stages of the research.



**Figure 8.3 Recruitment and data collection model**



### 8.6.1 Stage 1- Selecting 'disengaged' girls

Selecting participants is something which needs careful consideration when working with hard to reach groups. One of the shortcomings of many studies with young people in schools is that often the teachers select the pupils for the research. This often results in including only the 'well represented' pupils. Authors such as Flintoff and Scratton (2001) used teacher selection to identify girls disengaged with PE, and acknowledge that this was one of the limitations of their work: "*we interviewed young women who were more positively orientated to schooling and PE than are representative of the whole school population, and our data need to be viewed accordingly.*" (p.18). This shows how important it is that we have in-depth qualitative accounts of young women who are considered 'hard to reach' and are not selected by teachers so that a more representative population of disengaged girls are given a voice about their experiences in PE. In order to address this issue, the questionnaire was used to identify the disengaged girls for the research. Therefore, all girls from the case study schools, who were in S2 in 2008/2009, completed the PhD questionnaire at baseline in May/June 2009 and this was completed again at follow up in Feb/March 2011. Completing both the main FfG questionnaire and the additional PhD questionnaire took around 45 minutes. In selecting girls for the qualitative work, it was imperative that names were written on the PhD questionnaire. However as the main FfG questionnaire was to remain anonymous, a strategy was in place to enable names to be retrieved and matched to participant ID numbers. This involved printing matching ID numbers for each participant onto both questionnaires which were then put into one envelope. Each girl then received one envelope and was instructed to write their name only on the PhD questionnaire. Girls were then asked to put both questionnaires into the same envelope after completion. I was present when each of the case study schools

administered the questionnaires, allowing this procedure to be monitored and to answer any questions. Since the aim of the PhD questionnaire was to identify particular subjects for the qualitative part of the study, it was important that I was present to explain what the focus groups involved and to ask girls for their consent to take part in these focus groups. Consent for interviews was sought from the selected girls following the focus groups.

The qualitative data were subsequently collected to explore PE experiences among selected disengaged girls. It is acknowledged that 'disengaged girls' may not wish to take part in focus groups that discuss PE experiences, so there were a number of girls in each class that did not consent to the focus groups. However, as the girls were aware the focus groups and interviews were all carried out in PE time, this may have encouraged some disengaged girls to participate. Although the FfG programme aimed to get girls more active, logistically, this was the best solution as girls were in exam years and so it would have been difficult to remove them from certificated classes. Overall, the selected girls only missed 2 periods of PE for questionnaire administration, 1 period for focus groups and 3 periods for interviews, over the two-year data collection period. It is unlikely this affected girls' activity levels significantly.

#### 8.6.2 Stage 2- Baseline focus groups

Focus group data were collected from 9-15 girls in each school. The rationale for carrying out baseline focus groups was to investigate the girls' opinions and perceptions about the PE environment in their school, whilst providing them with a secure atmosphere to participate with the research and researcher. This allowed rapport to be built with the girls for the following in-depth individual interviews. The focus groups were carried out 5 to 6 months following the questionnaire. They captured open 'group representation' of PE as a

subject in each school, before exploring the PE environment and reasons for disengagement with some of the girls individually. Focus groups were carried out in a classroom supplied by the PE department. The topics for discussion were mostly derived from gaps in knowledge about girls' physical education experiences, which were identified from reviewing the literature. The focus groups were exploratory and so although questions and subject areas were identified, these were not adhered to in a strict order.

Girls were selected primarily by those who agreed to participate, then short-listed into girls who were 'disengaged' (see the above section on disengaged girls for the criteria used). Girls were then selected when friends were identified and these friends also consented. This meant that most of the time the girls were in a group with friends who were also 'disengaged', however, a couple of the friendship groups consisted of a few 'sporty' girls and a few 'disengaged' girls. As these girls had chosen to be in a group together they seemed to be comfortable opening up about their different experiences in PE. Naturally, there were group dynamics between girls and the presence of the young female researcher may have influenced some of the girls' discussions/opinions (this will be discussed more in the reflexivity section).

Activity sheets (appendix E) were used at the beginning of each focus group. Each sheet contained two boxes containing emotions (these included emotions such as; happy, sad, bored, excited, and nervous).<sup>6</sup> Girls were asked to circle the words in the first box that they thought described how 'other girls might feel' when they participate in PE. The girls were then asked to circle the emotions in the second box that described 'how they feel when they take part in

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<sup>6</sup> These emotions were selected based on the words girls used to convey their experiences of school dance, in the Y-Dance questionnaire (Muldoon and Inchley, 2008), as these were girls of similar ages and population.

PE'. The activity sheets were designed primarily as a trigger to promote discussion around PE. Since the first task allowed girls to express opinions about how other girls may feel, this reduced the embarrassment of expressing their own feelings immediately in front of the group. Girls were forth-coming with discussions relating to how they think 'other girls may feel' which built up rapport and comfort within the group. Girls were then asked to compare the feelings they had circled in both boxes, which promoted discussion around their own feelings. These activity sheets have also been used as data in themselves (see chapters 13, 14 and 15).

Focus groups can be used to access group norms and give facilitators the chance to observe how individuals within groups react to the views of others and defend their own views. However, there have been criticisms that focus groups are not trustworthy and are inaccurate representations of experiences and beliefs held. Whitehead and Biddle (2008) found that focus groups used in their study with adolescent girls were "clearly threatening for a minority of the girls, with some of the quieter girls struggling to cope with group dynamics and make themselves heard" (p. 257). It was also suggested in this study that the group dynamics may have led the girls to voice a peer group decision, to avoid ridicule or embarrassment. McNeill (1990) notes that first encounters with participants can only provide useful guidelines as to what should be followed up in the main enquiry. Bailey (1994) suggests that flexibility of such initial data collection where the researcher is open and sensitive to new ideas, new suggestions and new directions is more pertinent and of a greater advantage to a study. Therefore, the rationale for using focus groups mainly as a baseline measure was to meet the girls and build rapport in a supportive environment before moving onto individual interviews, which were felt to be more appropriate for the design of this in-depth study. The focus group

data are presented in chapter 11 of this thesis and also contributed to the baseline qualitative findings for the Fit for Girls interim report 2 (Inchley, Mitchell and Currie, 2011) and Final Evaluation Report (in preparation).

### 8.6.3 Stage 3- Individual interviews

As the focus groups provided a baseline account of experiences and engagement, interviews were designed to give girls an opportunity to expand and discuss further points from the group discussions. Also, as some of the girls were in a focus group with 'sporty girls', the individual interviews allowed disengaged girls the privacy to talk about PE experiences which may have been constrained in front of friends. Therefore, following the focus groups, individual interviews were carried out with selected and consenting disengaged girls to explore personal engagement and experiences in the PE environment. The questions in the interviews were not considered to be sensitive, and it is unlikely that the girls felt uncomfortable discussing such issues in the individual interviews. The in-depth interviews were longitudinal in nature, held at three points over a one year period. This offered the opportunity to become familiar with the participants, allowing exploration and understanding of the girls' social setting and experiences in PE. Important changes in girls' engagement and experiences in the PE environment could then be tracked. Interviews were informal and conversational in nature and lasted approximately 20-25 minutes, allowing two girls to be interviewed in one PE period.

#### 8.6.3.1 Individual Interviews- first phase

The first set of interviews were conducted with 20 disengaged girls (5 from each school) when they were in S3. The purpose of this initial set of interviews was to find out about girls' experiences of secondary PE, how this compared to primary PE and importantly, to identify the

factors/barriers in PE that had contributed to disengagement in these girls. Interviews were semi-structured and encompassed the following areas: nature of PE participation, out-of-school sport and physical activity participation, activities they liked/disliked in school PE, experiences and opinions of primary school PE, comparisons of primary PE, first year PE, second year PE and third year PE along with influences on PE participation. Therefore, the objective of the first set of interviews was to draw out the main barriers and reasons for disengagement, which could be explored further in the second and third interviews.

#### 8.6.3.2 Individual interviews- second phase

From the twenty girls interviewed in Phase one, 18 of these girls were selected for further interviews in an attempt to ensure varying individual experiences were reflected in the in-depth analysis. These girls were chosen as it was felt they were expressive and reflective and more eager to self-disclose. The two girls who were not included at this stage were not engaging well with the interview process, often giving one-word answers even with extensive probing, therefore the over-recruitment allowed for such selection of participants. Girls were not told how many interviews they would be participating in. This was to avoid girls feeling excluded if they were not interviewed again. The selected girls were informed of the interviews by teachers a few days prior to each interview.

Examination and coding of the focus groups and first interviews identified three main areas/themes which were explored further in the second and third interviews. Themes were based on the psychological factors, social factors and environmental factors that played a role in girls' engagement and experiences in the PE environment. This included perceived competence for different activities performed in PE, girls' identities in the PE class, the role of

peers and teachers in PE classes, and the impact of the wider environment and school ethos on PE experiences. Therefore, the aims of the second and third interviews were to a) explore these main themes in more depth and how these factors may affect engagement and experiences over the data collection period and b) to identify if any changes in girls' behaviour and attitudes towards PE had occurred in response to the Fit for Girls programme.

It is important to note that girls were not necessarily aware of the Fit for Girls programme or that it was being implemented in their school. Consequently, I avoided mentioning the programme with the girls until the third interview phase. Often teachers would use the term as a way to identify me to the girls, saying such things as 'Fiona from Fit for Girls is coming in again tomorrow to speak to you'. This sometimes resulted in girls asking me what Fit for Girls was. In such instances, I explained it was a programme I was involved in, without mentioning the schools direct involvement (to avoid influencing the results). Importantly, girls' awareness of the programme did not imply greater changes in the girls. Different strategies were employed by each school to engage girls, based on their FfG action plan. The girls often did not realise why certain 'amendments' were taking place and so this was perceived as things 'going on' in the PE department rather than it being any association with the programme. Essentially, the interviews also allowed me to observe if any of these proposed actions had reached or had an impact on any of the selected girls.

#### 8.6.3.3 Individual interviews- third phase

Due to issues with two of the girls' attendance and one girl leaving school, the third set of interviews were carried out with 15 girls at the end of the 'Fit for Girls' programme implementation (3 from School A, 3 from School B, 4 from School C and 5 from School D). As in the second interviews, the aims were to a) explore the three main

themes in more depth and how these factors may affect engagement and experiences over the data collection period and b) to identify if any changes on girls behaviour and attitudes towards PE had occurred in response to the FfG programme. These data were collected one year from the first set of interviews, and two years from when the girls first participated in the study, when they completed the FfG and PhD questionnaire. Therefore, some changes were expected in the girls' engagement and experiences (irrespective of the impact of the FfG programme).

In recognising there are limitations to each data collection method, one of my reasons for the combined use of questionnaire data, focus groups and individual interviews, was to add strength to the research. In carrying out the in-depth longitudinal interviews, I got to know the girls personally and the schools they attended. Crucially, this study not only gave disengaged girls a voice in their experiences and engagement in PE, it also provided the girls with a unique opportunity for reflection, critical self-analysis, discussion and debate in an informal comfortable environment.

### **8.7 The 'trustworthiness' of qualitative research**

Due to the interpretive and subjective nature of qualitative research, it is understood that those involved in the research may have some influence over the data collected. As Yardley (2000) argues, the researcher and participant's reactions, observations, thoughts and opinions are unavoidably embedded in the collection and analysis of the data. Therefore, in order to ensure 'trustworthiness' of the data from this qualitative study, I followed Lincoln and Guba's (1985) guidelines on data collection and analysis.

According to Lincoln and Guba (1985), trustworthiness involves establishing:



*Credibility* - confidence in the 'truth' of the findings

*Transferability* - showing that the findings have applicability in other contexts

*Dependability* - showing that the findings are consistent and could be repeated

*Confirmability* - a degree of neutrality or the extent to which the findings of a study are shaped by the respondents and not researcher bias, motivation, or interest.

Lincoln and Guba (1985) stipulate that establishing *credibility* is a two-fold task: firstly, to carry out the research in a manner which ensures the findings will be deemed credible and secondly, to demonstrate the findings match the constructed realities of the participants themselves. One of the advantages of collecting qualitative data in stages was that findings could be validated by the girls in subsequent interviews. For example, if there was something I wished to clarify or make sure I had interpreted correctly, I followed this up with the girls at the next interview.

To increase *transferability*, Lincoln and Guba (1985) suggest including a 'thick description' of the context of the study, thereby allowing readers to reach their own conclusions as to whether the transfer of findings to other settings is feasible. For this piece of work, I was careful to provide a detailed description of each case study school, the girls selected for the research and the PE environment.

In order to make sure *dependability* was addressed, I kept a personal diary recording thoughts, ideas and reactions to the interviews. The use of a reflective diary further helped organise recurrent themes as they were interpreted from the text. As described above, the multiple methods used for the programme and evaluation helped ensure research dependability. Finally, an informal process was used to

check the *confirmability* of the study. This is discussed in the following section.

### **8.8 Researcher bias**

An issue that has been raised in qualitative research is researcher bias or misinterpretation of the data, as suggested by David Bridges (2002, p.74) in the forms of: “*special pleading, selective memory, careless error, self-centredness, myopia and prejudice*”. By acknowledging these limitations, I was aware where and why my influence was strongest and this is discussed (see ‘my influence’ section in results chapter 12). Therefore, in terms of the validity of the research, it was not my intention to generalise the issues raised by girls and teachers and provide solutions and new statements of ‘what works’ for delivering girls’ PE. Moreover, by presenting the data in such a way that girls voices are heard about their experiences and engagement helps us to understand ‘what it is like’ (Cotton and Griffiths, 2007) for disengaged girls in the PE environment. It is hoped that this thesis and further publications may create opportunities for discussion that may illuminate, challenge and disrupt theories and understandings of why girls may be disengaged in the PE environment and how disengagement may have been, across different contexts, overcome, addressed or at least acknowledged.

### **8.9 Reflexivity**

Darren Longdrige (2007) describes reflexivity as a term used for the processes in which researchers are conscious of and reflective about the ways in which their questions, methods and own subject position might impact on the psychological knowledge produced in a research study. He also states that reflexivity is especially important as a researcher seeks to study ‘vulnerable’ people and communities,

especially if they are not someone who has experienced the issue themselves.

According to Willig (2001) there are two types of reflexivity: personal reflexivity and epistemological reflexivity. Personal reflexivity involves reflecting upon the ways in which our own values, experiences, interests, beliefs, political commitments, wider aims in life and social identities have shaped the research. It also involves thinking about how the research may have affected and possibly changed us, as people and as researchers. Epistemological reflexivity requires us to engage with questions such as:

- How has the research question defined and limited what can be found?
- How have the design of the study and the method of analysis constructed the data and the findings?
- How could the research questions have been investigated differently?
- To what extent would this have given rise to a different understanding of the phenomenon under investigation?

Thus, epistemological reflexivity encourages us to reflect upon the assumptions (about the world, about knowledge) that we have made in the course of the research, and it helps us to think about the implications of such assumptions for the research and its findings. As O'Hanlon advises,

*'All practice takes place against a conceptual framework which structures and guides its activities, either tacitly or consciously in the real world'... (and therefore)...researchers need to engage in personal reflection to understand themselves in relation to their world and to deliberate about or reconstruct their values in relation to everyday situations, which constantly demand their judgments and their action' (O'Hanlon, 1994, p.282),*

Therefore, as a researcher, I was aware that who I was and envisaged being, has inevitably exerted some influence throughout any research process I have participated in (Gore, 1993; Witherall and Noddings, 1991). I understand that my beliefs and values are based on my own experiences and so I acknowledge that these may have influenced my behaviour. Therefore, reflecting on such experiences allows me to understand some of the barriers adolescent girls face. By recognizing my influence, I understand that this may have impacted on my data. I am also aware that my position as a young, white, middle class female may have influenced the girls to respond in a particular way. I was also aware that my appearance may influence the girls in some way and so considered what I wore when I was talking with the girls, as Green *et al.* (1993) advise that presentation of the self may dramatically affect the dynamics of the interaction.

As these girls were PE-averse, I did not want them to tell me things they thought I might like to hear; rather I wanted to explore their detailed lived experiences. I was therefore careful not to represent myself as someone who was 'sporty' or 'onside' with the teachers. My appearance ensured I was visibly distinct from their PE teachers who were dressed in tracksuits and trainers. I also made it clear to the girls that I was not a teacher and did not know their teachers, but I simply wanted to speak to the girls for my own university work. I also asked the girls to call me by name, rather than 'Miss' and I had a relaxed manner with them so they felt comfortable. It was, however, important that I remained an authority figure, particularly when I administered the questionnaire to the year group. Often the teachers would leave me in charge of all the girls and so I had to take on a teacher's role to some extent, ensuring the girls worked through the questionnaire on their own and were not disruptive to others.



## Chapter 9 Qualitative data analysis

Merriam (1998) describes data analysis as a highly intuitive process, and asserts that “*a researcher cannot always explain where an insight came from or how relationships among data were detected*” (p.156). Sipe and Ghiso (2004) suggest that “*all coding is a judgement call since we bring our subjectivities, our personalities, our predispositions, and our quirks*” to the process (p. 482-3). Others suggest similar principles. Miles and Huberman (1994) propose analysis is a continuous and iterative process with a threefold structure: data reduction, data display and conclusion drawing and verification, which are “*interwoven before, during and after data collection in parallel form*” (Miles and Huberman, 1994, p. 2). This is essentially the same principle as Glaser and Strauss’ (1967) ‘constant comparison method’ which can be applied across different qualitative data sets or among the same data sets at different levels.

The approach that was taken to apply this constant comparison method was a combination of inductive reasoning, which uses the data to generate ideas (hypothesis generating), and deductive reasoning, which begins with the idea and uses the data to confirm or negate the idea (hypothesis testing) (Holloway, 1997). Initially, the literature guided which areas required further exploration. The interview and focus group questions were also loosely defined at the first stage of data collection, however these were not fixed concepts and changed with time as categories and themes emerged from the data. The research questions were seen as a basic framework for the focus groups and interview guides. When analysing the data which is presented in Chapters 11 and 12, a prior research driven approach, or deductive method, to code the data was used. Therefore, after reviewing the literature, this provided insight into the development of the thematic codes. This approach is similar to Miller and Crabtree’s

(1992) 'editing style of analysis' and what Strauss and Corbin (1990) call 'axial coding' in clustering or reconfiguring categories identified and developed by others. As Welks' model (1999) classified the three main factors or influences for physical activity behaviour, including the individual, the social and the environment, these were the predefined codes I used when analysing the data in the identified chapters.

Interviews and focus groups were recorded and transcribed verbatim into N-vivo, a computer package which assists with qualitative analysis. The data were then sorted by thematic and content analysis, otherwise known as 'open coding' (Thomas and Nelson, 2005).

Three questions were used to guide the analysis of data:

*Q1: What is the data telling me? (Explicitly engaging with theoretical, subjective, ontological, epistemological, and field understandings and theoretical points of interest).*

*Q2: What is it I want to know? (According to research objectives, questions, and theoretical points of interest).*

*Q3: What is the dialectical relationship between what the data are telling me and what I want to know? (Refining the focus and linking back to research questions) (Srivastava and Hopwood, 2009).*

The analysis approach taken was a combination of the 'realist' approach and 'narrative' approach outlined by Silverman (2000). The realist approach treats respondents' answers as perceived 'facts', in their descriptions of external reality or internal experience. The narrative approach, however, treats interview data as "*accessing various stories or narratives through which people describe their*

*world*" (Silverman, 2000, p. 122). Therefore it attempts to understand the context and environment providing a 'narrated reality'. This approach allows for the relationship between the social and environmental PE context and girls' experiences and engagement to be portrayed.

With this in mind, the thematic framework used for the analysis of data consisted of:

1. Data management - identifying themes and sub-themes for comparison across the data set and incorporating them into a thematic framework or set of codes. Applying these themes to the text, sorting and sifting themes and summarising under themes.
2. Generation of findings - for explanatory accounts, such as those given in this study. Searching for patterns of association and identifying explicit and implicit reasons for disengagement, and changes in experiences and engagement.

The first stage of coding was carried out on the baseline focus groups. As with the realist approach, each group was focused on individually, with words and sentences highlighted and categorised as 'tree nodes' in N-Vivo. This allowed all the focus group data to be coded to existing or new nodes at this baseline level. The transcripts were then read through again and notes were made, before returning to the data with a narrative approach. Categories were then refined when required. This was a continuous process of re-reading transcripts and re-coding which allowed themes to emerge and categories to move from abstract terms to more refined themes. This process is likened by Abbott (2004) to the 'decorating of a room': "*you try it, step back, move a few things, step back again, try a serious reorganization and so on*" (p. 215).



According to Saldana (2003) coding is only the initial step towards an even more rigorous and evocative analysis and interpretation for a piece of work. Moreover, coding is not just labelling, it is linking: *“it leads you from the data to the idea, and from the idea to all the data pertaining to that idea”* (Richard and Morse, 2007, p. 137), Charmaz similarly identifies the importance of the coding process by stipulating *“coding generates the bones of your analysis.....Integration will assemble those bones into a working skeleton”* (Charmaz, 2006, p. 45). This process was then carried out for the interviews, each of which was transcribed and read over until they were familiar and understood before carrying out the subsequent phase of interviews. It was not always possible to fully code each interview before the next stage of data collection, due to time constraints of the longitudinal design.

The second stage consisted of generating findings from the data. This involved refining the main themes drawn out from the first stage of data analysis, constructing three main theoretical themes as reasons for disengagement in the PE environment. The process of change, as a result of the FfG programme was also explored across the three themes, to assess if and how girls' experiences and engagement were affected by the programme. This second stage also involved looking for patterns of association and looking across individual cases to the wider school context.

As the girls are individual cases within each case study school, analysis was also carried out with girls within the same case study school. This process explored insights at a school case study level meaning similarities and differences in data across each school could be compared. This was carried out with girls from one school at a time, with one case assisting in the understanding of another. Such an approach allowed me to see the issues within the school that had

wider implications for the other cases. Miles and Huberman (1994) describe this process as difficult, stating that “*simply summarizing superficially across some themes or main variable by itself tells us little*” (p. 205-206). They suggest looking “*carefully at the complex configuration of processes within each case, understand the local dynamics, before we can begin to see patterning of variables that transcend particular cases*” (Miles and Huberman, 1994, p. 205-206). Therefore an understanding of school context, ethos and environment was vital.

According to Morse (1994):

*“data analysis is a process that requires astute questioning, a relentless search for answers, active observation and accurate recall. It is a process of piecing together data, of making the invisible obvious, of recognising the significant from the insignificant, of linking seemingly unrelated facts logically, of fitting categories one with another, and of attributing consequences to antecedents. It is a process of conjecture and verification, of correction and modification, of suggestion and defence. It is a creative process of organizing data so that the analytic scheme will appear obvious.”*

Chapters 11 and 12 present the three overarching themes from all 15 girls, from the three phases of interview data. These stemmed from Welks’ (1999) YPAP social ecological model (see chapter 7) which stipulates that influential correlates of youth physical activity can be divided into three domains: 1) individual-level *predisposing factors*, comprising the cognitive and affective considerations, 2) social or reinforcing influences and 3) environmental or *enabling factors* that include personal attributes (e.g., skills and fitness) and environmental or access variables. The order and wording of these have been adapted slightly so girls’ experiences and engagement are specific to the PE environment. However, occasionally out-of-school physical activities are referred to. These will be broken down into more specific themes as each is addressed. The next chapter introduces

each case study school to provide context before discussing the results.

## **Chapter 10 Case study schools**

### **10.1 Case Study School A**

School A is located in an accessible rural area in the East of Scotland. According to **sportscotland's** Area Variation Report (2006), this Local Authority is classified as a 'middle active' area. It is a non-denominational, community use school which opened in 1987. It has a school roll of 729 and had 54 girls in S2 at the start of the Fit for Girls programme. The Fit for Girls action plan for School A is shown in table 10.1 below. Schools were advised to have at least 3 targets, which included curricular and extra-curricular actions. These were set by PE department to increase girls' participation in PE, PA and sport.

#### **10.1.1 PE department composition**

1 full time male Principal Teacher of PE

2 full time male PE teachers

1 full time female PE teacher (Ex RAF officer)

1 male Active Schools Co-ordinator

#### **10.1.2 My observations/opinions of the school**

The PE department consisted mainly of men, all of whom were fairly young (the PE base felt a bit like a 'boys club'). There was one female member of staff, however, she was older than the men and seemed to keep to herself. I think she felt a bit out of sorts with the young men, making comments like 'they never tell me what's going on'. The PE staff appeared to have a good relationship with the girls, with the girls telling me that the male teachers have 'a laugh with them'. The older female member of staff, who is also an ex RAF officer, was deemed by the girls as 'more strict', which will be seen as relevant in Sharon's story in Appendix H. The girls seemed to prefer being taught by the young males.

**Table 10.1 Fit for Girls action plan- School A**

Q /	Target	Actions	Timescale	cost	Success Measure
	<p>Target 1:                      Increase participation of S3/S4 girls in core PE by 25% (present levels and any improvements noted by registers) – Baseline participation in 08/09 was 70%.                      Targets:                      10/11 – 85%                      11/12 – 95%</p>	<p>Create a link with hair and beauty departments at local colleges. Educate pupils in ways to maintain hair and make-up while leading an active lifestyle.</p> <p>Use the link with the hair and beauty departments to establish a reward system to promote 100% participation.</p> <p>Build option choices in to the core curriculum. Ensure that there is always a 'girl friendly' activity – these activities will be selected using information collated from an S1/2 course evaluation.</p>	<p>Session 2009-12</p>	<p>£200 (travel &amp; beauty products )</p>	<p>Achieving set target -                      26% more girls in S3/4 taking part in core PE.</p>
Curriculum PE	<p>Target 2:                      Introduce netball to the S1/2 curriculum (requested by current S3 pupils)</p>	<p>Up skill 1 member of staff to improve quality of teaching.</p> <p>In-house in-service to be provided to all other staff.</p> <p>Purchase additional equipment.</p>	<p>August 2010</p>	<p>£200 Approx</p>	<p>60% of girls to take part in an end of block tournament.</p> <p>Zero non-participation letters sent home during the netball block.</p>

<p>Target 3: Increase of 10% in the 2010 Standard Grade uptake by girls. In 08/09 the number of girls doing SG was 14/60 (23%).</p>	<p>Establish a girl's only SGPE class on timetable. Ideally try to have the option of girls choosing to go into mixed or single class so girls are more confident to try new things. This is a suggestion from the girls.</p> <p>Change the SG curriculum to include girl friendly activities. Swimming may be excluded from the curriculum depending on the thoughts of the current S2 girls.</p>	<p>Aug 2010</p>	<p>£200 new equipment</p>	<p>10% more girls enrolled on SG courses and taking part regularly. tracked by registers.</p>
<p>Target 1: Increase the number of girls participating in extra-curricular activities by 50% by 2012 (41 girls attended regularly during 2008-09).</p>	<p>Establish gymnastics and dance clubs (requested by current SG students).</p> <p>Train senior pupils to deliver/assist in the delivery of dance clubs to younger pupils.</p> <p>Purchase new equipment including ipod/stereo.</p> <p>Purchase mirrors/straighteners etc (requested by pupils) for use after lunchtime clubs.</p>	<p>Session 10/11</p>	<p>£1000 new equipment Additional funding from local Council</p>	<p>A minimum of 61 girls participating in extra-curricular clubs every week. 2 new girls only clubs established.</p>
<p>Target 2: Increase the number of school staff/volunteers delivering girls clubs.</p>	<p>Carry out whole staff audit to see what expertise can be offered. Because PE department is small find out if any staff would be willing to start up or take on extra curricular clubs on a voluntary basis to try and offer range of activities.</p> <p>Also encourage seniors to get ILA accounts and attend coaching courses so they can also be involved.</p> <p>Identify courses for enthusiastic staff to attend to gain confidence/skills.</p> <p>Local clubs of popular extra-curricular activities to be contacted and invited in to support.</p>	<p>Session 10/11</p>	<p>£200</p>	<p>2 staff outside the P.E Department assisting/delivering girls clubs.</p>
<p>Target 3:</p>		<p>August 2011</p>	<p>£0</p>	<p>10% of girls involved in</p>

Extra-curricular sport and PA

	<p>Develop links to local clubs in at least 1 extra-curricular activity.</p>	<p>Link through 'Community Use' to identify clubs already training in school in the evening.  Link programme to be established whereby pupils can stay on from school until evening community clubs begin.</p>			<p>extra-curricular activities to be enrolled in a community club</p>
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## **10.2 Case Study School B**

School B is located in a large urban area in the West of Scotland. The school is situated in a local authority classified as a 'low active' area. The school itself has a relatively high proportion of black and ethnic minority pupils ( $\geq 20\%$ ) and, since 1999, has housed Scotland's first School of Sport, dedicated to sporting excellence. The school is non-denominational and co-educational with 883 pupils, 82 of whom attend the School of Sport. There were 82 girls in S2 at the start of the Fit for Girls programme. The action plan for School B is shown in table 10.2.

### **10.2.1 PE department composition**

- 1 female faculty head
- 1 full time female PE teacher
- 1 part time female sports co-ordinator /part time PE teacher
- 3 full time male PE teachers
- 1 female active schools co-ordinator

### **10.2.2 My observations/opinions of the school**

In School B, there was not a Principal Teacher of PE, but a 'faculty head'. This female faculty head was in charge of PE in addition to business and administration subjects. She had a background in business which resulted in tensions from the PE staff, as the department was being managed by someone who *'doesn't really know much about PE'* (fieldnotes). The teachers revealed that they did not feel there was enough communication between PE and the faculty head and so were not very happy with the setup. The sports co-ordinator was very proactive in setting up after school clubs and was always very friendly and keen to inform me of all the clubs that were running. I got the impression she wanted me to document all the work she was doing, to somehow acknowledge her efforts. She also appeared slightly worried when she realised which girls I had



selected for the research, as obviously these were girls who were not involved in any of her after school activities. She then proceeded to offer me some of her 'engaged' girls from her after school clubs. This illustrates the worries teachers have when using pupils who are not 'well represented' for research purposes.

**Table 10.2 Fit for Girls action plan- School B**

QI	Target	Actions	Timescale	Cost	Success measure
Curriculum PE	<p>Target 1: Set up a school sports council and have a sub group for girls. This group will consist of pupils from each year group and will be pupil focussed and pupil led.</p>	<ul style="list-style-type: none"> <li>• Set up a School Sports Council run by senior pupils and overseen by Faculty Head of HWB. Meetings to run once a month.</li> <li>• Set up a girls-only sub-group of the school sports council and ensure it includes representation by less-active/under-represented girls. Meetings to be held once a month.</li> <li>• Incorporate girls' suggestions for activities and respect pupil choice in terms of lesson style, lesson format, choice of music for dance lessons and so on. As a result of the information found out commit to delivering a minimum of 4 new activities as suggested by the girls.</li> </ul>	Feb 2011		<p>Regular meeting of girl's subgroup once a month.</p> <p>4 new activities delivered in the curriculum based on the</p> <p>Feedback at dept meetings to staff</p>

	<p>Target 2: 5% of girls aged 16-18 adopt a leadership role by 2013 (from a 2010 baseline of 0%)</p>	<ul style="list-style-type: none"> <li>• Introduce Sports Leader Award</li> <li>• Encourage older girls to act as suitable role models for young girls. Allow opportunities for different ages to interact and, wherever possible, relinquish responsibility to older girls in the form of leadership and officiating roles.</li> <li>• Organise leadership and officiating award courses for the girls, aim for 5% senior girls to become sports leaders.</li> </ul>	<p>August 2010</p>		<p>Target achieved in numbers of girls awarded Sports Leader girls in the leadership activities. These will be discussed in meetings.</p> <p>Girls actively involved in delivering PE activities, officiating</p> <p>5% senior girls awarded Sports Leaders</p>
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	<p>Target 3: Introduce Dance into the PE curriculum and also fitness through technology which can be taken into life outside school leading to a fitter and healthier lifestyle (S3-S6)</p>	<ul style="list-style-type: none"> <li>• Discuss with department the best way forward</li> <li>• Implement it into the social dancing block for the first trial in December 2010</li> <li>• Training with dance teacher to work out 2 routines which can be taught to pupils</li> <li>• Evaluate the impact of the new lessons</li> <li>• Discuss how sports Leaders can be used in the future</li> </ul>	<p>January 2011</p>	<p>£400 with school per capita also supporting purchases of wii fit, television, ipod and docking station, fitness DVD's requested by the girls</p>	<p>100% of S3-S6 pupils will be given a choice of activities if girls requests and dance and fitness</p>
<p><i>Extra-curricular sport and PA</i></p>	<p>Target 1: 40% of girls aged 11-13 take part in at least one hour extra-curricular sport each week by 2013 (from an estimated 2010 baseline of 20%)</p>	<ul style="list-style-type: none"> <li>• Pupils surveyed about the clubs they wish to see starting</li> <li>• Information into the school bulletin about the club starting</li> <li>• Initial meetings will take place</li> <li>• Club advertised every week</li> <li>• Parents informed that club is starting</li> <li>• Regular feature in the Parent newsletter</li> <li>• On school website with pictures of the club and any games attended</li> <li>• Promoted at assembly</li> <li>• Pupil Council involved</li> <li>• Sports Council when running involved</li> </ul>	<p>April 2013</p>		<p>40% of S1 and S2 girls attending an after school club.</p>

<p>Target 2: Establish a girls football team Establish a girls and mothers fitness class Establish another girl's club – depending on the requests from the Sports Council</p>	<ul style="list-style-type: none"> <li>• X will put information into the school bulletin about the club starting</li> <li>• Initial meetings will take place</li> <li>• Club advertised every week</li> <li>• Parents informed that club is starting</li> <li>• Regular feature in the Parent newsletter</li> <li>• On school website with pictures of the club and any games attended</li> <li>• Promoted at assembly</li> <li>• Pupil Council involved</li> <li>• Sports Council when running involved</li> </ul>	<p>August 2010 - 2013</p>	<p>£300 for football strips and transport to matches</p>	<p>Girl's football club will have developed enough for the girls football team league.  We would be aiming for 15 girls attending by 2013</p>
<p>Target 3: Introduce Duke of Edinburgh Award with a focus on girls participating to develop confidence and team building skills with a focus on sporting activities chosen by the pupils with an input from the girls group.</p>	<ul style="list-style-type: none"> <li>• Liaise with local sports facilities e.g. ski centre, riding school, climbing centre etc.</li> <li>• Enter into options booklet</li> <li>• Advertise course</li> <li>• Regular feature in the Parent newsletter</li> <li>• On school website with pictures of the club and any games attended</li> <li>• Promote at assembly</li> <li>• Pupil Council involved</li> <li>• Sports Council when running involved</li> </ul>	<p>August 2010 – 2013</p>		<p>We will have at least 40 % of the pupils completing the D female from a basis of zero.</p>

### **10.3 Case Study School C**

School C is located in a large urban area in Central Scotland. The Local Authority is classified as a 'low active' area. The school is a Roman Catholic, co-educational secondary school currently participating in 'Schools of Ambition'. It has a school roll of 1100 and had 106 girls in S2 at the start of the Fit for Girls programme. The FfG action plan is provided in Table 10.3.

#### **10.3.1 PE department composition**

- 1 full time male principal teacher of PE
- 2 full time female PE teachers
- 2 full time male PE teachers
- 1 female active school co-ordinator

#### **10.3.2 My observations/opinions of the school**

This school had a good, proactive PE department that have been involved in many initiatives to get young people more active (such as Sky living for sport, Youth Sport Trust Africa exchange project). However, there seems to be more focus on the sporty pupils, and less time and effort for the disengaged. The staff were all friendly, however they often forgot when I was coming in and forgot which girls I was 'borrowing' for the period. They sometimes made comments when I said the girls names, such as 'I don't know who that is', or, 'oh you'll have a hard time with her, she never brings her kit', corroborating their focus on the sporty girls. Once I had informed them, they often forgot to send the girls to me and so generally interviews started late.

**Table 10.3 Fit for Girls action plan- School C**

Q/ Target	Actions	Timescale	Cost	Success measure
<p>Target 1: Develop a Health and Wellbeing Insert into Physical Education on Self Image and the Role of Exercise &amp; Healthy Lifestyle to address the 80% of girls who had no idea of recommended amount of daily physical activity for their age &amp; who believe being healthy is important.</p> <p>Improving girls' perceptions of their own competence is central to improving participation rates. Biddle <i>et al.</i> (1995)</p>	<p>Develop a course on 'Self Image &amp; Self Esteem' to inform girls on the Key role that exercise and physical activity plays in the development of their confidence, self image and self esteem.</p> <p>Establish the key role that individuals have in the development of the above thru awareness raising and decision making.</p> <p>Provide follow up opportunities to immediately recruit girls into activity thru curricular and extra-curricular opportunities.</p>	<p>August 2010 Ongoing</p>	<p>£200 For relevant resources, DVD's, ICT, material for presentation</p>	<p>Course delivered to all S1 girls from 2010</p> <p>Pupil Evaluation of course.</p> <p>Review &amp; Evaluation of participation rates in extra-curricular opportunities.</p> <p>Review of Department Course uptake, female participants and role models, Sports Leaders</p>
<p>Curriculum PE</p>				

<p>Extra-curricular sport and PA</p>	<p>Target 1:          Establish a forum for Active Girls to act as role models, recruit female participants and take a leadership role in providing opportunities through clubs within the school and within our Primary Schools.</p>	<p>Establish the 'Fit Girls Council' (role models) from S4-S6 role models &amp; Sports Leaders.          Ensure high profile promotion of this group on plasma screens around the school and by creation of 'Fit Girls – Fit Leaders' posters          'Fit Girls.....' canvas S1 &amp; S2 girls as their target group for involvement in activities of their choice at lunchtime &amp; after school.          'Fit Girls – Fit Leaders' are given access to budget to address their needs and form part of consultative group in decided appropriate spending.          S4-S6 girls are given key leadership/ role model responsibilities within school &amp; Associated Primary Schools.</p>	<p>Jan. 2010          Ongoing</p>	<p>£400</p>	<p>76% of girls stated school never asked what Phys. Activity they would like to do. 79% of girls stated they would like to be more physically active.          Initial target: minimise these % thru consultation &amp; providing participation opportunities – S3/4 every girl consulted re-choice of activity.          Monitor uptake of clubs and activity opportunities offered.          Regular meetings of Fit Girls group          Club established and the opportunity for competitive</p>
<p>Target 2:          Establish a Netball Team as a first step in developing</p>	<p>Establish an in school Netball Club to provide a team sport opportunity for girls.</p>	<p>Jan. 2010          Ongoing</p>	<p>£100          For</p>		



<p>extra-curricular opportunities For girls.</p> <p>To provide opportunity for the sizable 38% of girls who would like to do more team games.</p>	<p>Provide the opportunity to play competitively against other schools in the authority.</p>		<p>new bibs &amp; netballs</p>	<p>matches against other NL schools offered – Initially with a working group of 15 and developing from there.</p>
<p>Target 3: Use role models from our 'Active Girls' to promote Netball in the Primary Schools thru our Active Schools Prig.</p>	<p>Active School Co-ordinator to organise monthly netball festival for our Primary Schools. 3 of our 'Fit Girls' group will take responsibility for the umpiring and organisation of games.</p>	<p>Jan. 2010 Ongoing</p>		<p>Festivals taking part. Uptake and participation numbers, with all Ass. Primary schools involved = a min. of 4 teams (30+)</p>

## **10.4 Case Study School D**

School D is located in a remote small town in the South East of Scotland. The Local Authority is classified as a 'middle active' area. It is a non-denominational, co-educational school with a school roll of 690. There were 76 girls in S2 at the start of the Fit for Girls programme.

### **10.4.1 PE department composition**

1 full time male principal teacher of PE

1 full time male PE teacher

2 part time female PE teachers/ part time guidance teachers

2 female newly qualified teachers (NQT)

1 male active schools co-ordinator (The ASC changed during the course of the programme)

### **10.4.2 My observations/opinions of the school**

School D was in an affluent part of Scotland which was apparent in all of the girls I spoke with (across the other schools, there was a mix of girls from different backgrounds; however in School D the girls were all well spoken, polite and well behaved). This was also true of the PE staff, who were always very accommodating of the research.

**Table 10.4 Fit for Girls action plan- School D**

QI	Target	Actions	Timescale	Cost	Success Measure
Curriculum PFI	Target 1: Improved communication between primary and secondary PE specialists	<p>Establish bi-annual meetings to share information across sector</p> <p>Sharing of good practice</p> <p>Establish visits and exchanges - 2 visits throughout the academic year. 1 to primary and 1 to secondary. Meet twice during the year to discuss PE programmes and improve links.</p>	<p>Meetings established by September 2009 and visits by June 2010</p>	<p>None</p>	<p>Better informed about programmes of work and practices across sector with all schools being represented at meetings. 2 visits and exchanges</p>
	<p>Target 2: Staff to undertake a variety of CPD courses to improve their expertise in non-traditional activities - Aim to deliver a minimum number of 3 new non traditional activities within the curriculum based on consultation from the girls. Minimum of 4 staff to attend training.</p>	<p>Consult girls to find out what activities they would like to do</p> <p>- Consult through questionnaires and open discussions in core PE time. S2 &amp; S3 Year groups to be targeted.</p> <p>Access CPD opportunities (internal and external) senior pupils to receive training to help support the delivery of extra curricular activities i.e. links with sports leaders.</p>	<p>Consultation with girls by 12th Feb 2010</p> <p>Senior Pupils Training - Ongoing from August 2009</p> <p>Staff CPD needs established by and addressed from 1/04/2010</p>	<p>£1000 approx - FfG Funding and Internal Funding</p>	<p>Minimum 4 Staff to gain more qualifications and increase expertise across a much wider range of activities. Minimum of 3 new activities to be delivered.</p>

<p>Target 3: 95% of S2/3 girls take part in core PE from a baseline of 92%. 90% of S4 girls take part in core PE from a baseline of 86%</p>	<p>Consult girls to find out what activities they would like to do  - Consult through questionnaires and open discussions in core PE time. S2, S3 &amp; S4 Year groups to be targeted.  Plus individual discussions with targeted (low / non participation) girls.</p> <hr/> <p>Increase choices available to girls - Minimum of 2 new choices of activities to be delivered.</p>	<p>Consultation with girls by 12th Feb 2010  Aim to include some taster sessions during 3rd term</p>	<p>£1000 approx FfG Funding and Internal Funding</p>	<p>identification of activities the girls want. Broader range of activities on offer for girls to achieve set target 90/95 % of girls take part in Core PE each week. Minimum of 2 new activities</p>
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## Discussion of Results

My theoretical framework is based on Welks' (1999) Youth Physical Activity Promotion model (YPAP), which divides the influential correlates of physical activity into three domains: the individual-level *predisposing factors*, comprising the cognitive and affective considerations, represented by the two components "is it worth it?" and "am I able?"; secondly, the *enabling factors* that include personal attributes (e.g., skills and fitness) and environmental or access variables; and finally, the *reinforcing factors* reflecting social influences.

The first results chapter, Chapter 11 explores the reasons for girls' disengagement in PE, drawing mainly on the baseline focus groups and Interview phase 1 to show the individual (predisposing) and social (reinforcing) factors that affect experiences in the PE environment (these factors are re-ordered from Welks (1999) model). The particular influences/themes are seen in Table 10.5 below.

The enabling factors are then discussed in Chapter 12, which explores how adapting the PE environment can affect girls' experiences and engagement in PE. Part 1 shows the changes made by the schools to engage girls in PE. Following this, prevalent changes in the girls' attitudes and behaviours are shown. This chapter focuses mainly on the data from Interviews 2 and 3, at which point the Fit for Girls programme was underway. These chapters include data from all fifteen selected 'disengaged' girls (all the girls names used in this thesis have been changed to protect anonymity).

**Table 10.5 Thematic framework for presentation of results**

Chapter	Factors affecting experience and engagement in the PE environment	Particular Influence
11 Disengaged girls in the PE environment	Part 1- Individual/predisposing	Am I able? (perceived competence)
		Is it worth it? (perceived value)
		Image and identity
	Part 2- Social/re-enforcers	The importance of friends
		Other girls
		Domination of the boys
		The PE teacher
12 Experiences and engagement in the PE environment	Part 1- enablers; Changes made to the PE environment to engage girls	The power of choice
		Activity preferences
		Girls as role models
		My influence
	Part 2- Changes in girls' engagement in PE	Changes in attitudes towards PE
		Changes in participation in the PE environment
		Relationships with teachers
		Girls' awareness of programme and school changes
		Out of school activities and future intention to be active

## **Chapter 11 Disengaged girls in the PE environment- individual and social factors.**

This chapter explores the reasons for girls' disengagement in the PE environment. These are broken down into individual and social factors, drawing on the data from the baseline focus groups and Interview 1.

### **11.1 Part 1- Individual/predisposing factors contributing to girls' disengagement in the PE environment**

#### **11.1.1 Am I able?**

An overview of the literature indicates that perceived competence is a major factor in participation and engagement in PE and forms the 'am I able' component of Welks' (1999) Youth Physical Activity Promotion Model (YPAP). The importance of this construct was evident in the baseline data, with all the girls perceiving low levels of competence in PE. Cathy was one example who continually spoke about her 'inability' to do cross country and athletics in the PE class.

*"At PE, I never really liked doing it 'cause there was always people in the class who are way better than me. I don't like doing it 'cause there are soo many people in my class that are soo much better than me, like in cross country I do soo bad in it. I just can't do cross country. I run and then I tire myself out so I walk. They [PE teachers] told me to try and pace myself but I can't. Then people are finished when I still had three laps to go. Its just soo embarrassing when people are watching you and I'm like I can't do this. And I look really stupid when I run anyway, I'm just soo bad." Cathy- School D*

For Cathy, running was an activity that she felt particularly bad at. Other games-based activities were not viewed as negatively:

*"I don't think it's that bad, maybe it's 'cause I'm better at badminton than I am at running. But I don't feel that embarrassed doing that kind of sports 'cause its not like in running where you can actually see the person running away with you, people can see the gap spreading.*



*But in games you don't really notice, so you don't look so stupid."*  
Cathy- School D

For many of the girls, running and cross country were activities which provoked particularly strong reactions in relation to ability. Often girls had low perceived competence for running and felt they were 'not good enough' to take part. Many expressed feeling embarrassed if they 'came last' and consequently avoided taking part when such activities were timetabled. According to Social Cognitive Theory (Bandura, 1986) failing to adequately deal with a task or challenge can undermine and weaken self-efficacy, which is seen in these girls.

Low perceived competence was also evident in fitness testing activities, with many of the girls fearing they were not 'good enough at the tests' and so were put off participating. One girl, Catherine, described how the bleep test<sup>7</sup>, amongst others, was disliked by all. The girls who were considered 'good at PE' were an exception, as this gave them an opportunity to display their competence.

*"Ahh, they [fitness tests] are horrible, like it's the bleep test and stuff, and they have this one where they see how many times you can run round the track in a certain time and then there's circuits, like sit ups and press ups and all that. Nobody likes doing it, except maybe the girls that are really good at it so they can show off."* Catherine-School C

The disengaged girls generally made distinctions between 'us' (the 'non-sporty') and 'them' (the sporty girls) in the PE class, with girls displaying a similar level of ability to themselves being preferred. When 'sporty girls' were present, disengagement increased, with many of the girls feeling they couldn't 'match up' to their level of skill.

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<sup>7</sup> The bleep test is a multi stage fitness test which involves running continuously between two points that are 20 m apart. These runs are synchronized with pre-recorded bleeps at set intervals, which become quicker over time.

*“There are some girls in my class that don’t do PE, they just kind of stand there. There’s others that when we are doing trampolining they are doing backflips and all that, and so we are just standing looking at them and don’t know what to do or how they do it.” Sarah- School C*

One of the girls suggested that PE would be better if classes were grouped by ability, to reduce the disparity between the skilled and less skilled.

*“That em, you’d have to be with the right group of people. I am kind of ... I don’t love PE or anything but I don’t hate it. I am in between. So maybe if I was with people who had the same sort of attitude and were at the same level. Like, people that still tried but we wouldn’t go over the top and wouldn’t push ourselves to do amazing gymnastics or something like doing a forward roll or something. Just have a neutral attitude and effort.” Becky- School B*

Generally, it appeared that those low in perceived competence were less likely than others to engage in and continue to participate in PE and PA, which supports Harter’s (1978, 1982) Competence Motivation Theory (see chapter 3). For most of the girls, disengagement started following the transition to secondary school PE. Research suggests that boys and girls cope differently with school transitions. Jackson (1997) proposes when girls move to secondary education, there is an increased tendency to socially compare themselves to other girls, rather than boys. In contrast, for boys, there is no significant increase in comparisons with other boys over the secondary transition period. Jackson’s (1997) theory is supported by my research as many girls stated they would not compare themselves to boys in PE as they were ‘*a different gender, so it wouldn’t be fair*’. The girls also claimed they did not worry about their performance in primary PE, and so generally did not make comparisons against others. Many of the girls spoke about PE in primary as being ‘fun’, ‘children’s games’ and ‘not serious’, whereas, many felt that the secondary PE environment was more competitive

and skill-based, therefore making them more aware of how they compared to other girls. When the girls were asked how they felt when they first started high school PE they gave many reasons for disengagement. Not knowing anyone in the 'new class' was the main reason given. These worries were heightened by the competitive games they had to play, feeling conscious of their inadequacies in front of the boys and a teacher they did not know, as Mairi describes:

*"Well, it changed [from primary] because it became more challenging, you were doing it with people you didn't know and stuff. Like you didn't know how to act as you didn't know everyone in your class, so you were more aware of how you were at PE and it became more competitive." Mairi- School B*

Clearly, at the start of the research, most of the disengaged girls did not consider themselves competent in the PE environment. This perceived lack of competence is supported by the results from the baseline findings of the Fit for Girls Interim Report 1 (Inchley, Mitchell & Currie, 2010), showing that 43.7% of Scottish S2 girls report perceived lack of skill as a reason for not doing physical activity. For some of the girls, perceptions of competence changed over time, which is shown in the following results chapters.

### **11.1.2 Is it worth it?**

Many of the girls spoke about PE as not being worth the hassle, with the 'time it takes to get changed' and 'being sweaty for the rest of the day' being offered as common reasons for avoiding it.

*"You go away from PE feeling quite sweaty and stuff, uncomfortable. You don't want to feel all uncomfortable and things. You don't want to go for it, if you do you know you'll be ... After it you'll be thinking 'why did I ... Why did I do that?'" Becky- School B*

*"When I get PE, I have got maths after or I've got science on the top floor so I am trying to rush to get my jeans on and jeans are crap especially if you are all sweaty and stuff and you go upstairs and you*

*are exhausted and you feel crap. You don't feel ready for work ..."*  
Claire- School B

Some girls also spoke about PE as something which wasn't worth 'putting themselves through'. Many girls mentioned embarrassment as a reason, while others talked about the physical exhaustion of running around. For Cathy, the exhaustion and negative emotions she experiences in PE classes were not worth the hassle:

*"The feeling of looking really stupid, the feeling of coming last, like I did in cross country, I was the last to finish. Everyone else stopped running and I still had a lap to go and like, just the feeling of your friends going past you and you're trying to keep up with them but you can't and you're just like oh god. I don't really like the feeling of being exhausted, like you see the adverts where the guy is saying it's enjoyable to run and I just think; no it isn't, I don't get it. I'm like, what's the point in putting yourself through all that and that's just one period." Cathy- School D*

Interestingly, one girl felt that it wasn't worth doing PE if you were slim: *"if you're skinny at least then there's no point."* However, this was the exception, as although the girls did not like the subject, they felt PE contributed to overall physical activity and health. However, for a couple of girls, PE was considered 'worth it' and they mentioned specific benefits such as socialising, team skills and enhanced mood.

*"Because it [PE] makes you like feel mair [more] happy and like you get like fit and ... it helps ... just like ... it just helps ye when you're like feeling like sad and you go to PE you can just like ... go and be happy. Except the... 'cause like other classes that you're in you're just sitting down it would be better if that you were moving about and ... forgetting about everything that's going on." Sharon- School A*

Girls could generally see the bigger picture about health and fitness in their country, with one girl making reference to Scotland as being *"a really obese country so it [PE] helps that. It helps people's health"*. Another made reference to the Scottish Government: *"[we do PE] Just to please the Scottish government. They want us to do about*

*three hours of PE a week. That is it.*” There seemed to be an awareness that there were ‘guidelines’ and recommendations about how much physical activity a young person should aim to achieve, although, as evidenced by the national Fit for Girls survey many of the girls could not correctly state this amount. Interim Report 1 (Inchley, Mitchell and Currie, 2010) showed that around a third of girls (32.3%) said they knew the recommended amount of daily physical activity for someone their age, however, less than one fifth of the total sample (18.9%) correctly stated that the current recommendation is 60 minutes of physical activity per day. This limited understanding and mixed ideas about amounts of activity are also similar to results found by Sleaf and Wormald (2001) and Harris (1993). Their qualitative work also indicated that girls were confused about how much they felt they should do. A few girls in my research did know that you should ‘do an hour a day’, but felt this would not be achieved by many:

*“Well you get your hour of exercise a day which a lot of people don’t get, don’t do that a lot. I know people might do a lot more outside school and stuff but if you don’t then it’s at least an hour so at least you’re doing something. It [PE] helps you to work in a team as well, and you would talk to people you wouldn’t normally talk to. I suppose you’re put in a situation where you just have to deal with it. I think that’s better for you.” Chelsea- School D*

Some girls felt it was not worth putting their efforts into PE classes as they were often not recognized for trying:

*“Like and the teacher will be like “Come on you’ve to do this” and everything ... and ... then the people that have actually been trying don’t get like recognized” Catherine- School C*

Overall, there seemed to be a general awareness that PE was good for your health, and many of the girls felt it was important to be fit and healthy. This supports findings from the Fit for Girls Interim Report 1 (Inchley, Mitchell and Currie, 2010), in which 87.8% of girls agreed

that being healthy and 83.7% agreed that being fit was important to them. However, although the girls were aware of the benefits of PE, feeling uncomfortable and unsupported left many girls disengaged with the subject.

### **11.1.3 Image and identity in the PE environment**

Many of the girls were concerned with their body image and disliked their body being on display in the PE environment. This also related to their physical performance as many did not want to be 'watched' performing certain skills or activities, as they feared they could not do these well. Much of the literature shows similar findings relating to girls being body conscious in PE, sport and physical activity (Orme 1991; Coakley and White, 1992), particularly in relation to tight, ill-fitting PE uniforms (Porter, 2002; Coakley and White, 1992; Orme, 1991). However, inconsistent with much of the previous work, inappropriate PE clothes were not mentioned as a reason for disengagement in PE. These girls were, within reason, allowed to wear what they wished for PE time (provided they had appropriate footwear and it was something that was not restrictive) resulting in more freedom and comfort. Interestingly, the non-uniformed PE kit provided the girls with an opportunity to express their identity. One girl described herself as someone who didn't fit in with the 'popular girls' and preferred to do other things with friends rather than playing sport. For her, dressing differently to these girls in PE meant that she kept an identity in the PE environment that was important to her.

*"Before, when I was in my other class, whenever we did gymnastics or PE basically all of them were cheerleaders and dancers so they could all do the splits and back flips all over the place ... in their tiny shorts and their vest tops and you are standing in your big baggy trousers and long sleeve t-shirt like ...!" Eilidh- School B*

Kirk and Tinning (1994) suggest that the loose baggy clothing worn by girls in their research (as opposed to the body hugging apparel

worn by boys) could be a strategy for girls to make their body less visible and as a form of protection of themselves and their identities. In Eilidh's quote this could be a way to hide her body and identity in front of the 'able girls' who wanted their sporty bodies and identities to be visible in the PE class.

Girls spoke a lot about the 'sporty girls' in the class, who were often the 'popular girls' involved in cheerleading and dancing. The significance of popularity and friendship among girls is well documented in the literature (Hey 1997; Osler and Vincent, 2003) and was also evident in my findings. Generally, the disengaged girls wished they were more competent in the PE environment and they equated being good at sport with being popular. This was an interesting finding as it appears being sporty does not conflict with notions of femininity, but is in fact desirable (this will be discussed further below). There were discussions about certain types of girls sticking together in the PE class, often spoken about in a negative way.

*"I think they are the ones that pick to do stuff, like sporty'ness and stuff always comes down to who you hang about with. Like if you're in with the more popular people you're under more pressure to do better. Like in one class it's like all the people that do sport and dance and all that, and they are all the popular girls. Like they make friends with other sporty people and then get popular, and the girls who are not sporty kind of stick together and don't get better as they don't really get pushed." Becky- School B*

Chelsea also felt the popular girls in her school were usually good at sport:

*"I think it's the same for both guys and girls because if you are popular you are normally good at PE, with the occasional exception. You have to normally be pretty good at PE. It's seen as if you are popular you should really be good at PE" Chelsea- School D.*

Many of the girls felt that certain activities in PE attracted certain 'types' of girls, and these girls would act and dress to fit in with their group. One activity which this was particularly evident in, across all the schools, was dance, with girls giving descriptions of the 'type' of girl that does dance. Catherine was particularly vocal about these girls and felt they spent too much time on their appearance and worrying about how they were perceived by peers:

*"There's a certain type of girls that goes to dancing I think, she'd be like really skinny. She'll care a lot what people think. Just like ... that really. The ones with the fake tan ... Popular and stuff like that. And it doesn't even matter about that anymore. Everyone knows each other in the year. They care way too much about what other people think." Catherine- School C*

These 'types' of girls appeared to dominate the dance option in PE time and the lunch time dance club, acting as a barrier for other girls who did not fit this dancer identity. Catherine did not feel she belonged, as she did not physically express herself in a way that was associated with dancers in the school. Thus, she did not want to take part in school dance although she had been part of a local dance club for years.

*"I would say I was not that creative. I would say I was more on the academic side. So like, I am not the type you would see at dancing, but I do it out of school and have done it for years. I am not just the type of person you'd think 'oh she goes to dancing'. You just wouldn't think I'd be interested in it." Catherine- School C*

Catherine's statement clearly shows us how social expectations and social identities can influence participation. This is a significant finding; if adolescent girls do not believe they 'fit into the image' of someone who is active, this may put them off engaging in physical activity.



Becky also spoke about her preference for after-school dance classes rather than school-based, due to embarrassment about her body. She explained that she felt she was 'too big' to dance with the girls at school but outside of school there were others who she perceived as being more similar to herself:

*"I go to dancing. My sister used to go to it and she did a show and it was really good. There was some bigger girls in the thing [dance class] and I thought 'they are quite close to me' so I thought I'll go to that. It was quite good because it wasn't ... here [school] you feel quite self-conscious. Well, I do. But there, because some of them were quite near you, you don't feel bad. The dancing was good."*  
Becky- School B

Becky's' quote also shows an interesting example of role modelling as it reflects the importance of having someone the girls can relate to, in this case in relation to body size. This will be discussed further in the following chapter.

At the baseline focus groups and interviews, many of the girls were aware of their weight and how their bodies may be perceived by others in the PE class. Some noticed they were gaining weight as they got older and others felt that certain activities would show their bodies off too much. Most of the girls felt they should conform to an 'ideal' slim body shape, which according to Kirk (1993) is a socially constructed body 'ideal' which is 'trim, taut and terrific'. It appears little has changed since Bordo (1989;1993) and Shilling (1993) suggested that the ideal trimmed and toned female body is associated with health and fitness, whereas an 'overweight' body is deemed out of control, deviant and undesirable. More recently, Orbach (2006) has drawn attention to girls intense body dissatisfaction and pre-occupation with their weight despite not being in any sense overweight, and suggested that today we are more 'fat in the mind than fat in the body'. Recent data from Scottish

adolescents in the HBSC study (Currie *et al.* 2011) confirms this. The data show that over 52% of 15 year old girls report their body is 'too fat', whilst the BMI data on the same age group indicates that in reality, only around 8% are overweight. My research also supports this as many of the girls were of slim build, but spoke of trying to achieve such an 'ideal' body through dieting, declaring that they wanted to be thinner. Lorna spoke about the growing numbers of girls trying to lose weight becoming an 'obsession' and linked this to girls growing older:

*"Yeah, I think it [girls losing weight] has grown more this year, like I think it's the group they are in, like 'cause we are in with fifth and sixth year and other classes are paired with girls their own age so that maybe gets worse in the fifth and sixth years, so its maybe as girls get older they get more obsessed with it, I don't know." Lorna-School D*

Many girls also isolated particular parts of their body as problematic:

*"I hate running 'cause when I run I get nervous and I feel like I run stupid and I hate it when my thighs shake" Sharon- School A*

Some girls could also be quite critical of other girls' bodies, even if they were friends. One girl, Melissa (School C) spoke about her friend trying to lose weight, sniggering as she told me about her attempts.

*Melissa- "Well me and my pal a few weeks ago we were cycling round Strathclyde Park [a park in Glasgow] ... and then we walked ...we cycled round it twice we walked round it about four times and then we walked home. So walked there and then walked back."*

*Fiona- "So why...did you walk and cycle around Strathclyde Park?"*

*M- "She [friend] ... she wanted tae lose weight cause she's overweight (sniggers)."*

*F- "Right okay. So did she ask you to go with her?"*

*M- "Aye 'cause she's overweight. Its not working though, she still looks big. Like ... aye she is wide ... I say all this about her tae her face anyway."*

Although supporting her friend by taking part in the activities, Melissa was also mocking her friend for being overweight.

The feeling of 'being watched' by others in the PE class came up frequently across all four schools as a reason for disengagement. It also appeared to be one of the main factors in girls' preferences for certain activities, with girls often reporting a dislike for activities when they felt they were 'on their own' and therefore particularly visible or conspicuous. The activities that were mentioned most often in relation to feeling on display were running, (cross-country in particular) gymnastics, (both of which were also the main activities cited in Coakely and White's (1992) work for girls feeling particularly self-conscious and awkward) and high jump. The girls often felt that they were 'being judged' and their performance could not be hidden by other members of a team or group, as in other sports. This was related to their perceived ability in performing the activity, in addition to how their body moved in front of others.

*"I know I run funny, 'cause outside school some of the people I hang about with, my friends outside school tell me that I run funny but I can't help it. Like see if I'm with my friends I hang about with outside school, I don't mind it 'cause we're all running around, like chasing someone or something. But in school you get put into groups, and one of you has to run to the cones and the others watch. Then someone else runs, so you're really the only ones running. So most people are staring at you, and so you don't want to run. That makes me nervous and puts me off PE." Linda- School D*

Sharon mentioned that she 'still felt like the same person' even though friends told her she had lost weight. This is interesting as it shows how her idea of her identity was fixed around who she was as a person, rather than how she looked. The quote also suggests that

Sharon did not believe she looked different, even though others had told her she had lost weight. As shown earlier in this chapter, girls perceived weight status is often not congruent with their actual weight status. In this case, Sharon seemed to have adopted an 'overweight identity' which she struggled to let go of.

*"because I mean I like ... I started like doing more ... I went to Zumba to lose some weight and then I was in PE as well and everybody said I've lost a lot of weight since ... a' they years ... I didnae agree wi' them because I still feel like I'm the same person ..."* Sharon- School A

Girls openly discussed this desire to lose weight and to be thin or 'skinny', with many fearing and making negative comments about larger body shapes. This is prevalent among other work with adolescent girls (Mitchell, 1997; Sleep and Wormald, 2010). Weight loss was therefore seen to be a motivator and a key benefit for girls' participation in PE and other physical activity, similar to Flintoff and Scratton's findings (2001). However, an interesting discovery was that many of the girls were too self-conscious about being on display that they avoided engaging in the activities in PE, despite the desired physical benefits. This finding is interesting in terms of the cost-benefit analysis which relates to many of the health behaviour models introduced in Chapter 3. Clearly, despite recognising the benefits, the costs of taking part and putting the body on show were perceived to be greater. Indeed, PE is one particular part of the school timetable where 'the body is explicitly used, displayed and talked about' (Paechter 2003), and has been critiqued for promoting destructive relationships, rather than facilitating or challenging them (Kirk and Tinning, 1994). Although there is debate around the nature and purpose of PE (as discussed in Chapter 1) Kirk and Tinning (1994) argue that, while one of the intentions of school PE is to promote health and PA, it could in fact be "reinforcing dysfunctional associations between physical activity, body shape and self-identity"

(p.601). Furthermore, concerns have been raised over the potential contribution physical education can have to disordered eating (Evans, 2007; Halse *et al.* 2007; Rich, 2010). However, the following results chapters show how a supportive and autonomous PE environment can provide girls with the confidence to use their bodies and engage in PE classes.

Another important theme which is shown through the girls' words was the maintenance of their feminine image, particularly in the presence of males. Many of the girls felt that they had to look a certain way in PE classes, which often involved make-up, tidy hair and no traces of sweat. There was also a desire to be perceived as attractive by the boys in the class. Others have noted that appearance and grooming behaviour are not only a major topic of girls' conversation but also a source of popularity (Adler and Adler, 2001). Often girls said they were less likely to 'get stuck in' when the boys were there as this might affect their feminine image. Many of the girls also admitted that they worried more about what the boys thought of them when taking part in PE, than what they were being taught. Consequently, girls are likely to perform in different ways in the presence of boys, many trying to ensure they remain 'attractive' and 'desirable', inhibiting their engagement in the PE environment. Browne (1992) and Scratton (1992) suggest that girls learn a 'female physicality' during adolescence and show non-assertive behaviour which involves hanging back and sitting out during competitive mixed gender PE classes. Similarly, in Chapter 2, Cockburn and Clarke's (2002) study was introduced, illustrating how the qualities encouraged in PE and sport include assertiveness, strength, and physical skills, yet such characteristics oppose the 'socially acceptable' female identity. What is interesting here is that although many of the disengaged girls felt they did not want to get stuck in and show these 'un-feminine' characteristics, many saw these 'sporty and skilled' attributes to be

desirable in other girls. Thus, there appears to be a complex relationship for girls remaining feminine whilst also being good at sport.

Azzarito (2010) argues that, while progress in regard to gender issues has been made, the 'problem' with girls' physicality in school sport and physical education has not been solved, but rather complicated by new *feminine ideals*. These ideals can be circulated through the school and can reinforce physical culture (the meanings, values and social practices concerned with the maintenance, representation and regulation of the body (Wright, 2004)). Her recent paper discusses this female ideal to be the 'future girl; "*a girl who demonstrates multiple and empowering physical features: she is fit but skilful; athletic, yet aesthetic, and hard, competitive, aggressive, but still attractive.*" (p. 267).

Azzarito (2010) proposes that some girls are able to achieve the balance of participating in sports and displaying such 'masculine' characteristics, while remaining feminine and attractive, and so are seen to be "*socially, academically and economically successful*" (p. 267). This appears to be the 'type' of female the girls in this thesis are aspiring to; girls who are good at PE, yet are viewed as popular and feminine. However, Azzarito (2010) suggests that such 'ideal femininities' might be troubling for other girls, clashing with the real experiences of many, especially those who "*lack access to becoming physically active, those whose physicality is constrained by gender or whose images of self/femininity are absent or marginalized from the discourse of the sporting female body*" (p. 269).

The disengaged girls in this thesis clearly struggled to display such an 'ideal'

and so felt constricted to choose either to remain feminine (and inactive) or to 'get stuck in' and display 'un-feminine' assertive characteristics. This can result in what Marcia (1966) terms the *time of choosing or crisis*, described as "times during adolescence when the individual seems to be actively involved in choosing among alternative occupations and beliefs" (p. 340). It is clear that many of the girls could not match up to this 'ideal' and so decided to retain the 'acceptable female image' resulting in lower levels of participation and engagement.

## **11.2 Part 2- Social/re-enforcing factors to engagement and experiences in the PE environment**

### **11.2.1 The importance of friends**

Having friends in the PE class was seen as something which was very important to all the girls at all stages of the data collection. Therefore, this was a dominant theme throughout the research. A number of studies discussed in earlier chapters also found the influence of peers to be a particularly important factor in understanding young people's physical activity motivations (Orme, 1991; Porter, 2002; Biddle *et al.*, 2005; Cox *et al.*, 2006; Mason, 1995; Coakley and White, 1992; Flintoff and Scratton, 2001; Sleaf and Wormald, 2001; Brooks and Magnusson, 2007; Smith, 2006).

In the baseline focus groups and Interview 1, many of the girls disclosed their negative experiences of not having many or any friends in their PE class.

*"Yeah, if you're with your friends it makes you more confident, but if you're in with people you don't get along with it can really put you off. Like everyone is the same sort of level in my class, there are girls that are better, but it's ok. But when they put the two classes together like if we're doing gymnastics, then that's not so good as there are people you don't really know." Mairi- School B*

One girl, Lorna, spoke about her experiences of only having one friend in her PE class in first and second year. She admitted opting out if her friend wasn't taking part.

*"Well if it's all the girls and Laura is doing it then I'll do it but if it's just our class and Laura isn't doing it then I'm not really bothered about doing it" Lorna- School D*

Many of the girls were put off participating in the PE environment if friends were absent. It appears crucial for girls to have friends with them when doing physical activity, and being forced to be active without them is upsetting (Whitehead and Biddle, 2008). Girls that were in classes with friends often spoke about far more positive PE experiences. Clearly friends are a major factor for influencing girls' engagement and experiences in the PE environment.

*"Close pals were there but they know what I am like and just stupid anyway, so I don't mind being stupid in front of them. But, like when you do it in front of people that you don't know, and you get it wrong, you get dead embarrassed and I don't like feeling like that." Sarah-School C*

Many of the girls also thought having friends in the class made it more enjoyable:

*"Probably because like you can have that ...we'll actually try a wee bit more if you're like ... having fun". Nicola –School C"*

Friends could also make girls feel less self-conscious about their physical appearance in PE as they would not 'judge' them, as others might:

*"Well I think I'm quite self-conscious about my body image, it's not just in front of the boys it's the class in general. It depends if I'm with my friends I don't really care, but if I'm with people I don't really know*



*as well then I can feel a bit self-conscious and rubbish.” Claire- School B*

Friends were also described as giving them confidence and making them feel happier whilst doing PE:

*“Your friends gives you little ... confidence boost and just a little bit more happier I guess ... you know your friends and you know they’re not gonna say anything ... and if you’re like kind of not good at it, It’s like ...well I know everyone, I knew them from before” Saima- School B*

Friends could also encourage participation in PE, which is supported by the relatedness component of Self Determination Theory (Deci and Ryan, 2000). This stipulates that the effort made to relate to others, as well as feeling accepted by others and experiencing satisfaction with the social world can motivate participation, attitudes towards an activity, effort and persistence and affective responses (Deci and Ryan, 2002). Chelsea spoke about how her friends encouraged her to join in PE activities:

*“Yeah. I think, ‘cause your friends, like, they give you confidence and they’re telling you that “You’re good at this” and “Oh, come on, just play” and stuff. So it’s good to have people you know, or your friends, ‘cause it makes it more better because sometimes you can be a wee bit competitive with them and they won’t really take it too seriously.” Chelsea- School D*

Many of the girls felt influenced by their ‘sporty’ friends, both in terms of participation and attitudes towards PE. Some of the girls described how a friend’s behaviour could have a positive influence on their own decision to take part:

*“Yeah, I mean I know I would never be as good as them and stuff but yeah I suppose it might make me want to do better and show them you can do it.” Linda- School D.*

*"Yeah I suppose. They [friends] maybe have a positive influence on me, like if I see the ones who are good or trying it might make me try a bit." Saima- School B*

This supports the social modelling component of Bandura's Self-efficacy Theory (1986) which suggests if people perceived as similar can succeed by sustained effort, this will raise beliefs about their own success. The girls perceived their friends as 'similar' to them and so could be motivated to engage if their friends were. Becky had a different view, suggesting that friends can influence the type of sports you choose to do in PE classes, but would not influence participation as such:

*"But at the same time, if all of us wanted to ... say every one of your friends went to football ... you would probably still go to football. You choose your sports because of your friends. You don't choose to do sports because of your friends. You choose what subject. Like if I wasn't being made to do it in school, I would not just do football. If you were all running around in the park or something I would probably stand and watch you. I would be like 'I know them, I am watching'." Becky- School B*

Conversely, for some girls, a close friend could have a negative impact on participation and engagement in PE, encouraging girls to opt out of PE together:

*"I think I, sometimes I've been guilty of that [persuading friends not to do PE], but you don't notice that you're doing it sometimes!" Mairi- School B*

The differing influence of friendship on participation may be related to the nature of the friendship and degree of closeness:

*"Yes 'cause in my class it's just about 10 lassies and it's me and my pal. Well we tell each other everything, we're like best pals so if she's not doing it I won't do it and if I'm not doing it she won't do it." Melissa- School C*

For one girl, a fall out with a friend negatively impacted her participation in an after-school club:

*“Well me and the girls I used to go with [basketball club] just kind of stopped talking as much and I didn’t really know anyone else that was going. I have other stuff on a Wednesday now so it doesn’t really fit in.” Chelsea- School D*

There was a consensus among all the girls that it didn’t matter if some friends liked PE and were considered ‘sporty’, and others didn’t:

*“Cause in my group, my pals love PE and I don’t. I like my core PE class but I’d never pick PE to do it all the time. So no[t] really. It doesn’t really matter what your friends are doing, it is up to you.” Sarah- School C*

Furthermore, it was clear that the girls would not choose their friends based on how sporty they were:

*“You do sports you put in medium effort, you quite like it, you are good at it. You do some sports, some sports you like. I do sports but we are all ... It doesn’t really affect what your friendship is. Carrie does sports, you and Sammy do sports and you and Kate do sports. Some sports. Mollie does ... she is the same as me. She doesn’t bother. But we are all friends so it can’t possibly be because we choose it because of PE.” Becky- School B*

Evidently, the relationship girls have with their friends in the PE environment is complex. Clearly, friends were considered a very important factor for engagement in the PE environment, and could be seen to be both a positive and negative influence on participation. There were examples of girls ‘trying harder’ when encouraged by friends, suggesting that verbal encouragement from others helps people overcome self-doubt and focus on putting in effort for the task at hand, supporting Bandura’s Social Persuasion component of Social Cognitive Theory (1986).

### 11.2.2 'Other' girls

Another important issue which surfaced from the data was around other groups of girls. Often they were seen to be intimidating and could form cliques, particularly 'sporty girls' who could make remarks at the less able. These 'other', often sporty, girls were mentioned regularly in the baseline focus groups and first set of interviews. Many talked about these girls 'taking over' after-school clubs or activities in PE, such as the dance club that was being run by senior girls in School D. Lorna felt that girls were treated differently depending on their friendship with the senior girls, therefore she did not want to join:

*"Yeah, 'cause we used to have a teacher in first year that did dance, but then she left and so we don't have a teacher anymore that takes it. But then some of the girls that take it, hang about with some of the girls in my year. So the way that they would treat the girls would be different. I think the teachers would at least not be friends with any of the girls so it would be different, but the girls who are taking dance like some girls more than others and so that would put me off going."  
Lorna- School D*

Lorna also described feeling alienated when the other girls formed large groups in the class, leaving her feeling unwelcome to join if her friend was absent. This is similar to the work by Hills (2007) who found that cliques in the PE class could increase exclusion, resulting in negative experiences of PE. For Lorna, this was a major reason for disengagement in the PE environment:

*"I didn't know what to expect and when I came up [to secondary school] it was like everyone from X [primary] was there, so it was different from what it is now. In my class there is only three of us that are really close pals. The rest of the girls go in another group, so the rest of the girls go with other people. One of the girls I'm friends with doesn't do PE, so when we get told to go into a group, its kind of hard for me to find a group, as the other girls are all friends together. I know the girls but we don't really speak, like if I walked past them in the corridor we wouldn't speak to each other. There's another three*

*classes where there are more girls that all speak and get on fine, whereas my class is quite small.* “Lorna- School D.

*“Yeah, we all looked to see who was picking what, and then I knew I didn’t want to do dance even though I like dancing.”* Catherine- School C

Some girls found it difficult to do PE with other girls they didn’t know. For many it was the fear of getting things wrong. It was also evident that there were girls who would bully others in the class, causing fear for some:

*“I remember I think we were doing gymnastics, and there was this girl, I think I did a cartwheel or something and she started going crazy because apparently it was the same thing she did. I think she started calling me names as well.”* Mairi- School B

Across almost all the girls, there was a desire to be better at PE and to be considered a ‘sporty girl’. However, importantly, this admiration was for girls who were able to retain their femininity whilst performing in PE. Often it was revealed that these types of girls were favoured by the boys and teachers, and so being good at sport was regarded as a positive trait. Although many of the girls aspired to be like this, it was not enough to motivate them to try harder in PE. Instead they implied it was a fixed identity; you were either good at PE and sports, or you were not.

*“It has something to do with the class I think, my class is kind of, there a few girls who are really sporty. The guys just like the sporty people, sporty girls and so you feel really embarrassed if you’re not one of the sporty people. And so I don’t like doing it ‘cause there are girls like that in my class. If everyone was sort of the same then I don’t think I’d be that embarrassed, but obviously it’s not so, so it’s that kind of feeling like you’re good at sports or you’re not. And the teachers always pick them for stuff and they always get the best scores and you know you can’t even try to be as good as them.”* Cathy- School D

There was also a feeling of being useless, with girls comparing themselves to the sporty girls in the class:

*“Yeah, like I’m in C5 right now we’ve worked out that boys are doing something and the girls are doing something instead of all doing something together. But that makes it even worse ‘cause there are more sporty girls in the other class as well. So it’s like, they are all soo good at sport in the other class. It’s just embarrassing, and you think well I can’t do anything here”. Chelsea- School D*

In one school, timetabling constraints resulted in some girls being put in a class with senior girls, who were of a much higher level than their second year PE class. For Lorna, this led to further disengagement with the subject as she felt intimidated by the senior girls.

*“Well, (sighs) we’ve just got put with the fifth and sixth year girls. The first six weeks we did hockey, and because Mr X knows them better and like they are all in the hockey team. So it felt quite embarrassing to be with them ... I think we’re doing athletics which is one thing I hate and we’re doing it with the fifth and sixth year which just makes it so horrible.” Lorna- School D.*

However, what was interesting is that Chelsea was also in Lorna’s class, and although she also thought being mixed in with the older girls was intimidating at first, she regarded this as a positive change, looking to these girls as role models:

*“Yes, especially when we were doing hockey. He got the sixth year girls to coach us instead of him teaching us and I think that was quite good because we got a lot done when we were with them and it was just different than having a teacher. At first it felt a bit intimidating maybe because they all do hockey and they are all really good at it and obviously because they are older, but they were really nice”. Chelsea- School D*

Social grouping in the PE environment was something which was evident in the interviews across the four schools, with many girls feeling intimidated by ‘other’ girls. Previous work has also indicated that adolescent girls are likely to form into hierarchically based

groups, controlled by levels of social status and femininity (George, 2004; Kehily *et al.* 2002; Renold, 2001, 2005). It has also been suggested that girls' gendered identities are constructed and regulated within such groups (Kehily, 2002). Many of the girls in this study insinuated that they knew where they belonged in terms of social status and popularity. The girls also felt that the 'sporty girls' were of a higher social status and in order to become part of such a group, you would have to prove your physical abilities. This supports Hills (2007) finding that girls who physically dominated the PE class were socially and physically strong. These girls controlled team selection based on those who had proven their competence or were part of their friendship group. Therefore, this thesis builds on previous work, showing that boundaries of competence and popularity are reinforced in the PE and the wider school environment.

### **11.2.3 Domination of the boys**

All the girls in this study were in co-education or mixed classes for their first and second year of high school PE (although this depended somewhat on which activity was delivered, as often classes were split up, for example, girls- netball and boys- basketball). In the first phase of interviews, many girls had experienced some PE activities as girls-only and some as co-educational, so were able to reflect on this. In all of the schools, girls were offered a choice of activity in S3 and/or S4 which enabled them to opt into girls-only activities. The significance of this change in class composition is apparent in Interviews 2 and 3, which are discussed in the following chapter. Yet, below, we see the effect that mixed classes had on the girls in their early high school years, before such changes were implemented.

In general, the girls in this study preferred single-sex classes, with many reporting increased embarrassment when boys were present. This was particularly true if they didn't think they were 'good' at PE,

as they felt they could not 'match up' to the force and skill level the boys played with. Boys were often reported as being too rough, dominating the activities and not taking the girls seriously. The literature presented in chapter 2, showed mixed results for girls class composition preferences, however, the results here confirm work by Browne (1992), Scraton (1993), Wright (1996), Biddle *et al.* (2005), Cockburn and Clarke (2002), Flintoff and Scraton (2001) and Jackson (2010) indicating that many girls prefer single sex to co-educational PE classes. Saima spoke about the boys being much better at PE as they played with more strength and force than the girls:

*"Yes, I probably enjoy it more when it is just girls. Because when it's the guys, especially for things like dodge ball, you can just hear them ... you can hear how hard they play, you can hear the ball smacking off the wall and you feel like 'oh my god, if I was in there I would get properly hurt'. And also I know it is sexist, but boys are better than girls at PE. Generally, because they are stronger or something. Because you are with girls you don't have to perform as well. It just feels you don't have to be as good."* Saima- School B

Cheryl described similar feelings about the boys in her PE class:

*"Like sometimes I like doing aerobics and stuff ... but when we do basketball you are kind of scared to do it front of the boys 'cause the balls so hard and they are really fast and stuff."* Cheryl- School A

Most of the girls also felt that the competitiveness of the sports increased when boys were present:

*"See how when we play together the boys sort of take over, and the girls are sort of hanging back a bit. The boys are so much more competitive and take over the game."* Nicola- School C

This supports work by Duda (1993) showing that girls are less likely to compete in competitive sports because they feel they cannot achieve as much as the boys. Moreover, social cognitive research



has indicated that male athletes are significantly higher in ego (rather than task) involvement than females, where superiority over others is the main aim. This superiority over others is also seen in previous research by Coakley and White (1992), Macdonald (1989) and Flintoff and Scratton (2001), suggesting that domination of the boys is a significant reason for girls' disengagement from PE. Almost all of the disengaged girls across the four different environments talked about boys taking over team games and dominating the physical space of the PE environment. Some girls also feared the boys in the class for their aggressive behaviour and bullying. What is worryingly evident in these accounts is the lack of teacher moderation of such dominating behaviour on girls:

*"They [boys] run up and nudge you and everything and shove you into the wall and stand right in your face and it just didn't feel right."  
Saima- School B*

Bullying or taunting was an issue for a few of the girls and for one girl Claire, this was her main reason for disengagement in PE. When asked why she didn't like/ didn't take part in PE she gave the following response:

*"Probably being made fun of is the main reason. I usually take part, it would only really be if I couldn't be bothered or was tired. Like, if it was an activity I didn't like then I would probably still take part but not really try and not really enjoy it, I would probably try and do the least I could"  
Claire- School B*

Wright (1996) and Scratton's (1993) work also shows that girls in co-educational PE classes often experienced ridicule, subtle put-downs and harassment in classes which influenced their (dis)liking for, and participation in, physical education. Wright (1995) also discusses the different positions girls take in terms of compliance towards discrimination and male domination in physical education. She proposes that some girls' accommodate this domination, while others

oppose and struggle for change. Her work indicates that girls who are more engaged and perceive themselves to be physically competent may be more likely to struggle for change as they would perhaps have more confidence to do so. This may account for why these disengaged girls, who don't believe they are good enough at PE, appeared to accommodate and accept this behaviour, rather than try to fight against it. One girl felt boys were more intimidating and threatening when they were grouped together, perhaps to impress other boys in the class.

*"Like see the boys that boss you about, they only do it when their pals are there. But like see when they're on their own, they just like agree with you and have a laugh with you. But see when their pals are there, some of them still do the same thing but the rest of them don't and just act up in front of their friends." Nicola- School C*

Hargreaves (1994) suggests boys may attempt to prove their ability and muscular strength in the presence of females by exhibiting sexist behaviour. This could include verbal and physical sexual harassment in order to appear more 'masculine'. In my research, the PE class appeared to provide an opportunity for boys to adopt such behaviour, which they may not exhibit in other situations. A minority of the girls ignored this sexist behaviour and although they considered the boys in their class to be competitive, they didn't perceive them to be a physical threat:

*"Well they started it this year [mixed classes], I think it's 'cause they don't have enough teachers or something so they are just putting us all together, I used to think it would be so much better to have it separate but now I've been thinking well the boys are actually okay. I've gotten used to it now, and the boys in my class are okay, they are like nice boys if you know what I mean. They are a bit competitive but they aren't nasty or anything." Mairi- School B*

Mairi's quote clearly shows that perhaps it is not mixed classes per se which are the problem, but it's the *type* of boys; their attitudes, behaviour and the relationships girls have with the boys which can be

problematic. In addition, it is also likely to be partly due to the overall ethos within the school and the way the PE staff handle mixed groups and male-female interactions. This is supported by the finding that girls who were friends with the boys in the PE class, were less likely to feel threatened and embarrassed. Nicole shows that her popularity with the boys made for a more comfortable environment:

*“Yeah but I don’t think if we didn’t talk to the boys it would be like that. I think that’s why we don’t mind ‘cause we are popular with them. Whereas some girls who know they aren’t popular with them feel uncomfortable around them. Whereas we talk to them so it’s fine.” Nicole- School C*

Generally, the girls in this study felt embarrassed in front of the boys in relation to their perceived ability in PE classes, and also felt intimidated by the competitiveness and force with which the boys played. The presence of boys in the PE class was therefore a significant barrier to many of the girls’ engagement, resulting in negative experiences in the PE environment. Jackson & Warin (2000) suggest that gender acquires a particular salience as an aspect of identity during transitions. They suggest that in the transition from primary to secondary school, pupils may rely on a sense of gender to cope with the unfamiliar. We see this in these girls as they move from a familiar primary PE environment, to one that is unfamiliar in secondary school. Their sense of being ‘different’ from the boys becomes evident in this new environment, compared to their primary experiences where gender differences in PE were not particularly relevant.

#### **11.2.4 The PE teacher**

The PE teacher was an important influence on most of the girls in my research. If girls disliked their teacher this would be a significant barrier to their engagement in the subject. Characteristics of PE teachers were discussed, such as gender, age and personality.

Having a female PE teacher was important to around a third of girls in the Fit for Girls Interim Report 1 (Inchley, Mitchell and Currie, 2010). This was investigated further in the focus groups, with girls revealing the importance of having a female teacher *at certain times*. For example, girls often found it easier to explain to a female why they were not able to do PE. Other girls agreed that a younger female teacher would be more understanding of what they wanted. However, in one school, the girls felt that their female teachers were tougher on them than the male teachers they had previously been taught by.

*“Like miss X and miss X, they tend to be tougher on girls than they are on the boys, maybe ‘cause they are women and they feel like all girls should be good at PE. I would rather have a male PE teacher I think, I enjoyed it more in second year when I had a man teaching us.” Nicole- School C*

Generally, the most important characteristic was the PE teachers’ personality and the relationship the girls had with them, rather than gender *per se*:

*“Yeah like it doesn’t really matter if they are male or female, it’s more about the teacher and how they are. It doesn’t really matter, as long as they don’t have favourites.” Chelsea- School D*

In one of the case study schools, there was a predominantly male PE department, with only one older female member of staff. The male teachers were fairly young and clearly had a good relationship with the girls. Although the girls I spoke to at baseline didn’t like PE as a subject, interestingly, they all held a general positive regard for the PE teachers. One girl, Sharon, spoke about her (male) teacher encouraging the girls:

*“If you didn’t win or that he has a laugh or that with you, he does this laugh, and like he makes sure you’re not nervous or that when you’re doing PE. Like when we started dodgeball all the lassies were like ‘I*

*don't want to do it 'cause I'm not good at it and don't know how to play it'. But then Mr X got us into it and said just to try and play it and you'll soon get into it more and most of the lassies that picked it have got into dodgeball now." Sharon- School A*

However, the picture was not as positive across the other three case study schools, with most of the girls indicating that one of the main reasons they did not like PE was due to the teachers. One of the reasons given for this was the lack of attention they received compared to 'sporty' girls and the boys. One girl, Catherine, spoke about how her engagement had decreased as she felt the teachers only cared about the girls who were sporty and good at PE. She talked at length about the 'good ones' being rewarded for their ability and the 'bad ones' being rewarded if they were well behaved. Consequently, she felt it wasn't even worth trying in PE as she was never recognized for her efforts. This had led to her not bothering with PE at all and instead concentrating on her after-school dance classes, which she had participated in and was excelling in since primary school. She was also sitting her 'dance teacher exams' to become a qualified dance teacher. This was something which the PE teachers and the school dance club were completely unaware of.

*"They always try and push the really good people to be better, but I don't think they actually care about the ones that take part twice a week, it's the ones that actually picked it. Like I do it, but I don't feel I get any encouragement. I think in first and second year they maybe try to get girls to pick it, but now 'cause we haven't picked it, it's just about trying to fill the time." Catherine- School C*

Lorna also felt this to be the case in her school:

*"I do think they favour the good ones and the ones that took standard grade, 'cause the teachers know them better, 'cause they've got PE four times a week. So they believe they are better than the other girls that didn't take PE". Lorna- School D*

This idea of PE teachers focusing their efforts on certificated (standard grade and higher) pupils and picking the skilled, well behaved and capable (aptly named the 'ethos of elitism' by Boyle *et al.* (2008)) has been supported by previous research on teaching practice (Hunter, 2004). For example, the S4 (15/16 year old) pupils in Gray *et al's* (2008) research felt the teachers selected the most able performers for demonstrations of skills in PE. This could influence pupil's perceptions of competence in PE. Similarly, in this thesis, Catherine clearly felt the teachers 'did not care' about the non- certificated PE students. This was also evident in some of the other girls' baseline accounts of PE experiences, with one explaining that the teachers "*didn't even know my name, he only knew the sporty girls' names, and got them to demonstrate. He never really came over and if he did he would never say my name*". Across the four schools, girls often described certain teachers as 'having favourites'. These were typically the girls who were considered more able. As many of the girls in the focus groups considered themselves to be less able and competent at PE, they described themselves as having 'less motivation' to try as they felt their efforts were not recognised. This behaviour of focusing on the sporty girls could be detrimental to PE engagement, both in terms of avoiding certain teachers and certain activities which were dominated by 'sporty' girls' who would capture the teacher's attention. In Catherine's case, she avoided dance during PE time, although it was her passion outside of school.

Girls across three of the schools were aware of the teachers picking the 'best girls' for after-school sports clubs and so they often felt that they would not be welcome to go along. If girls were not selected by the teachers to come along, they felt they were 'not good enough' to join:

*“Yeah I think if some girls are good at a sport you can see some teachers like calling them back and saying come along to this sport, and everyone else is just standing thinking well I won’t go along then ‘cause I’m obviously not good enough .Cathy- School D”*

*“If there is a club they always say ‘she’ll be able to do it’ ‘cause if you ever do a sports thing, like a relay, there is a lot of girls who could do it. But he always picks out who he thinks could do it.” Lorna- School D*

In the fourth school, teachers seemed much more open to getting all the girls along to the after-school clubs. This, however, was viewed negatively by the girls as some claimed to feel pressurised, with the girls in one focus group saying:

*Mairi - You are pressured into them. Especially Miss X.*

*Eilidh - Shoving forms up your nose. Take this one. ‘You are not fit enough. Join fitness club.’*

*Becky- It was a few weeks until the prelims and there was supported study clubs on as well and she said to me three or four times ‘join fit club’ and I was like ‘are you saying I am fat? I know I need to lose a bit of weight but that is offensive’.*

Encouraging low active and overweight girls to be active is clearly a sensitive issue and we see here that girls may be offended by teachers’ approaches to encourage them to do PA. This is an area which has relatively little literature and so future work with girls and teachers would be valuable to understand how such sensitive issues can be addressed.

Some girls did try the after-school clubs, but often their participation was not sustained due to other commitments or girls reporting they were ‘not bothered’. Among adults, Sleaf and Wormald (2001) suggest womens’ reasons for not participating, such as feeling tired, working and studying to be a ‘polite disguise’. Indeed, a proportion of the research which has focused on girls’ lack of extra-curricular

involvement has been quite critical of girls' reasons for non-participation. There appears to be an expectation that women and girls should be participating in these extra-curricular activities. However, often there are complex social and environmental contexts that restrict girls' involvement in such activities. For example, in my research, Melissa talked about badminton, as the 'one activity' she liked in PE. She felt she was good at this so decided to try the after-school badminton club. However, before getting changed she looked into the hall and realised she was the only girl there, so left before the teacher saw her.

*"They [teachers] always do more for the boys. For after school they will sometimes have clubs on in the hall, it's mainly for boys and it's mostly boys that go. There was a badminton one and I wanted to go and I turned up. I looked in the hall before I got changed and it was all boys, so I never got changed and left as I don't want it to be just me." Melissa- School C*

Therefore, in this example, Melissa's non-participation was a result of the context that this activity was being delivered in, rather than a 'problem' that was internal to Melissa herself. This supports the notion that the 'problem' with girls' disengagement in PE may lie within the curriculum and the pedagogic content rather than with the girls themselves (Ennis *et al.* 1997; Flintoff and Scraton, 2006; Sandford and Rich, 2006; Griggs, 2008).

Teachers treating girls and boys differently was an issue that came up for many of the girls in this study and is an issue that has arisen in previous research on girls' experiences in physical education (Biddle *et al.* 2005). Some have argued that co-education classes are "simply an invitation for girls to participate in the physical education of boys" (Vertinsky, 1992, p. 378). My work shows that often the girls felt their teachers favoured the boys as they were seen as more competent. As Wright (1995, 1996) explains, there is a dominance of



masculine discourses of sport with particular value placed on strength and technical knowledge. This can result in girls being positioned as 'marginal and inadequate'. The following quote illustrates this differential treatment of boys and girls and Cathy's frustration at not being given the same opportunities as boys when it came to performing in PE:

*"We always kind of did that, like in dodgeball we split into boys and girls 'cause the boys are better, which kind of annoys me, its kind of not fair. Like when they split us up in rugby the girls don't get to do the same as the boys, and I know girls are weaker but they don't give us the choice to do what the guys do. Like in handball we have different sized balls from what the guys do, and like sometimes they will say boys aim for the top bar and girls you can just aim for halfway as its hard, and they don't let us try sometimes ... I know they think it's dangerous and stuff for girls and I know boys are stronger and stuff than girls but it would be nice to have the choice. I mean not all girls would want to do the same things as guys but it would be nice. Right now it's just, right guys are doing this and girls this, rather than okay guys are doing this, girls you can do this, or this if you don't feel like you're up to it. But they don't give us that kind of choice". Cathy- School D*

*"But like I don't know if it's like boys will play basketball and girls' will do like something completely different ... you know sometimes you ... you would rather play basketball." Nicola- School C*

As discussed in chapter 2, Young's (1990) extensive work on gender in relation to physical activity suggests that young women and girls are encouraged to experience their bodies as objects, which are observed and 'gazed upon'. She also stipulates that girls are encouraged to experience their bodies as lacking skill, power and strength, and "a bodily timidity that increases with age" (p. 154). Many of the girls in this study also perceived boys to be 'biologically stronger and fitter' and felt they were naturally more powerful, skilled and competent at sports and PE:

*"I mean like sometimes, this is just my thinking, it is true boys are much better at PE" Siama- School B*

This chapter has shown there are various individual and social reasons for girls' disengagement in the PE environment. In summary, the baseline focus group data and interview 1 indicated that:

- Many girls felt they did not have the skills to perform in PE classes and would compare their ability in PE to their peers.
- PE was often seen as not 'worth the hassle' due to the unsupportive nature of the PE environment.
- Girls find it difficult to remain sporty and feminine and so many opt for the latter. Also, many girls believed they did not fit in with fixed identities that are evident in the PE environment, such as dancers and sporty girls.
- Friends are an important influence on girls' engagement in PE classes, but the relationships girls have with each other can be complex.
- Boys can dominate the PE class and the presence of boys can cause identity conflicts for girls that want to appear feminine, yet still want to engage.
- The teacher relationship is important for girls' engagement. If girls don't feel valued, acknowledged or encouraged this can lead to further disengagement.

The most powerful themes to come to light in this chapter are related to: 1) perceived competence and demonstrating competence in front of significant others. 2) Peer relationships and belonging in the PE environment. 3) The importance of the teacher in the PE environment and 4) girls' image and identity as central to engagement.

Many of the girls appear to have low levels of perceived competence in the PE environment which was exacerbated by; other sporty girls demonstrating competence, boys dominating the activities and a

general lack of teacher encouragement and recognition of efforts. Interestingly, there were contradictions in the activities in which girls felt 'on display'. Some said that competitive games made them feel inadequate as they were evaluated by team mates. Other girls felt more visible in individual activities such as running, where you could be seen to 'come last', therefore preferring team games where their inadequacies could be masked by the stronger team players. On the whole, it is evidently down to the individual and their experience with that activity/sport.

The second key theme to come out in this chapter was the influence of peer relationships and feelings of belonging in the PE environment. At one level peer relationships appear very complex, with some girls feeling intimidated by 'other girls' and finding it difficult to fit in with these apparently fixed identities. However at another level it seems simple, just having someone you know in the PE class, whether active or inactive can be enough to create a more comfortable and supportive environment.

The PE teacher clearly has an influence on girls' engagement with the subject. Gender is not particularly important, rather it is the teachers' personality and the relationship the girls have with them that can influence behaviour. The importance of the girls' relationship with the PE teachers over time is discussed in more depth in the following chapter.

Finally, girls' image and identity is central to their engagement and experiences in the PE environment. As girls struggle with their identity during adolescence, the other factors in the PE environment can be difficult to contend with. If girls feel they do not fit in to a certain 'sporty' or 'dancer' identity this can leave them feeling inadequate and turned off the PE environment.

This chapter has discussed the main factors related to girls' disengagement in the PE environment, focusing on data from the baseline focus groups and Interview 1. The following chapter will show how changes to the PE environment (implemented during the Fit for Girls programme) affected these girls' experiences and engagement as they moved through to the end of their fourth year at secondary school.



## **Chapter 12 Changes in the PE environment and impact on girls' engagement and experiences**

This chapter follows the changes in fifteen girls' engagement and experiences as the Fit for Girls programme was rolled out in each of the four schools. Part One focuses on the *changes the schools made* (physical and structural/curricular) to engage girls in the PE environment. Part Two will show the *changes in girls' attitudes, behaviours, relationships and awareness of the school changes*. The included quotes are extracted from the second and third Interview data. References to the literature are only used when relevant in this section as the aim is to focus on *the selected disengaged girls* processes of change in specific contexts.

### **12.1 Part 1- changes to the PE environment**

#### **12.1.1 The power of choice**

One of the biggest changes to the four PE environments was introducing a choice of activity when girls moved into S3 and/or S4. As we see in the following extracts, this was the most significant factors in engaging girls in PE classes. All but three of the fifteen girls had a more positive opinion of PE in their school, participated more often and had increased awareness of the benefits of PE and physical activity. Three of the schools (A, B and D) offered girls a choice of activity as an outcome of the Fit for Girls programme, as shown in their action plan in chapter 10. School C also offered girls a choice of 'activity block'. However, this was not something which was an outcome or action of the FfG programme, but a procedure they had introduced to the S3 and S4 pupils in previous years.

Girls often reported choosing the same activities as friends, and selected activities that were 'girl-friendly' such as fitness-based activities, which the boys tended to avoid.

*“Yeah ‘cause we’re all in PE at the same time, but now we can choose separate activities, so the boys can do their activities like football and girls can do theirs like dance.” Cheryl– School A*

Many of the girls also chose activities that were not dominated by ‘sporty girls’ or girls who were seen as intimidating.

*“We just choose and then whoever puts their hand up then you look and see who’s in the activity it ... because sometimes other girls can boss you about and that so if you don’t feel confident. But we just told the teacher we still wanted to do dance even though the other group of girls who we don’t get on with were doing it. So the teachers let us choose it but we’re in two different groups ... so my friends are doing dance now.” Sharon- School A’*

Often, activities that were unpopular and therefore had smaller numbers taking part were also desirable to some girls:

*“It’s got a bit better ‘cause in third and fourth year you get to pick activities, which makes a difference. The groups that do different things, I picked, ‘em tennis, that was a bit of a smaller class so that was a bit better.” Chelsea-School D*

This process of choosing the activity is shown below in an extract from Melissa. This clearly shows her thought process and consideration of all the factors before making her choice. It also clearly highlights that the activity was not important in itself as she could not recall what this was. However, the teacher taking the activity and Melissa’s own ability in certain activities were significant factors in her decision:

*“In third year you had to pick what teacher you wanted to go w[ith], with the activities they were daein [doing]. Then in fourth year we were to dae it again but the only one that sounded decent to me was the ... I can’t even remember what it was. All the other ones ... I liked Miss M’s one because that was badminton, but there was gymnastics in that and I am no[t] good at that so I was like ‘no I don’t want to do that’. Mr B’s was fitba [football] and all that. And all the boys ... and I*

*thought, I'm no going there. And then Miss F's was gymnastics, trampolining and all that and I thought I'm definitely no going there. So I picked Mr F's class." Melissa- School C*

Most of the girls felt that PE was a much better subject when they were offered a choice of activity. For many, it wasn't just about doing the activity they wanted to do; it was because they felt the environment PE was delivered in was more supportive. The teachers asked them what they wanted to do and followed through. This minimised the embarrassment of 'performing' in front of the boys and other groups of girls.

*"It's just in PE classes if they're saying like "If yous' want to do something, yous' need to tell us". Or if, the fitness stuff is beside the table, our table tennis bit, and they're saying like "If some of yous' want to do the fitness and the table tennis at the same time.." like it's ... so it's good like that way." Mairi- School B*

*"That's what's good about third year 'cause you get to pick and like in first and second year I hardly done PE 'cause I didn't like the things that the teachers made us do, like in rugby you used to get pure mocket [dirty] so I didn't like doing it and started bringing in notes, but I do PE now in third year 'cause we get a choice." Cheryl- School A*

However, some found it difficult to express activity preferences.

Cathy did not want to suggest an activity as she felt this would be unpopular with the rest of the class.

*"They have asked but I don't think anyone really wants to speak up. I don't think they've asked for a while, maybe at the beginning of third year. But you don't want to make a fuss and you think well if I suggest softball and then no one joins and if I'm the only one then you think, well what's the point." Cathy- School D*

A couple of girls were also apprehensive about choosing an activity as there was added 'pressure' of making sure you made the right choice:



*"It is a bit better. It is a wee bit better. It's okay because you are with your friends. You just need to be careful what subjects you pick because ... I think now ... before whatever you were in, you were in it. But now you need to choose carefully because it's your responsibility for what happens next. It is quite ... if they tell you, you are not to choose this and things it is quite ... a lot of pressure really because you don't get to choose each one individually you have to choose a block. You don't have to choose one every couple of weeks." Claire-school B*

*"Yeah It's good. I think there are good options, they can't get them perfect but they are trying" Saima- School B*

Some girls also spoke about having options as a way to work out what activities you are good at and would want to carry on with out of school.

*"But if you done an activity you thought oh I might want tae [to] take that out ... outside o' school ... if that'd help. I suppose, like, the more options you have, the stuff you find out you're good and not and that. And then you can actually pick up" Lorna- School D*

Overall, offering a choice of activity in third/fourth year appeared to be successful for girls. The main reasons for this were: consultation in a supportive environment, choosing sports pupils were good at or felt comfortable trying, being in a class with friends, and smaller classes that were often single-sex. Indeed, previous research has explored pupils' experiences of activity choice in PE. For example, Smith *et al.* (2009) found that, although pupils considered activity choice to be a positive feature in the school curriculum, many expressed dissatisfaction with the limitations and range of activities on offer. Further, many felt restricted by "*the little or no room for consultation or negotiation*" and "*saw themselves as being free to choose but not in the conditions of their own choosing*" (Smith *et al.* 2009. p. 215). It is likely that schools have much to gain if they listen to pupils, particularly the disengaged. As Rudduck (2005) noted, "*One of the strengths of consultation is the opportunity it provides to*

*hear from the silent pupils and to understand why some disengage and what would help them to get back on track” (p.2).* Thus if schools want to engage pupils, they must first investigate the reasons why they are disengaged. However, despite the advantages of consultation that are evident in this and previous research, a number of researchers have commented that there are still few opportunities for young people to contribute meaningfully to shaping their school experiences (Alderson and Arnold, 1999). My research contributes to the scant amount of research which has shown that by consulting with girls when designing the PE curriculum, or indeed giving them a voice to express activity preferences, results in more positive and engaging PE experiences (Brooks and Magnusson, 2006; Griggs, 2008; Enright and O’Sullivan, 2010; Boomer , 1992; Brooker and Mcdonald, 1999; Glasby and Mcdonald, 2004). Therefore this work strengthens the contention that an environment which provides consultation can harness student interest and potential and give girls a voice for negotiation, both of which are central to girls’ participation and engagement in PE classes.

### **12.1.2 Activity preferences**

Many of the girls felt restricted in the early years of high school PE as they were given competitive games-based activities to suit mixed classes. However, the options on offer in third and fourth year made it possible for girls to try new activities, which many of them preferred. In particular, single-sex classes facilitated new opportunities, as described by Sarah (School C):

*Sarah- “Em, we do different activities than we did in first and second year. In first and second year I never really done like trampolining and anything like that. But I have done that a few times. Just different activities.”*

*Fiona- “How have you found that?”*

S- "Fun."

F- "Were you offered trampolining in first and second year?"

S- "no, because our classes were mixed we had to dae stuff that the girls and the boys would want to do together but now I am just in a class with all lassies [girls] so I get to dae lassies stuff."

In the latter interviews which took place during S3 and S4, many of the girls spoke about having 'girls' activities now, which were typically fitness based activities, rather than competitive games. These were often preferred as girls felt they did not need to be 'good at PE' to participate:

*"Mhmm, yeah, 'cause it's like, it's really different [fitness]. And it's not really, it is hard, but it's not, you don't really need to be good at anything to do it." Claire- School B*

However, although much of the literature does support the idea that many disengaged girls prefer fitness-based activities and dislike competitive games (Sparks and Webb, 1993; James, 1993), this was not strictly true for all the girls in my study. Most of them did prefer fitness-based activities, as they felt they were not 'letting the team down' if they did not have the skills. However a few expressed a preference for competitive games-based activities as they were considered to be fun, as long as they were not taken too seriously.

*"No, I don't mind it, it depends what activities we're doing. Like I prefer basketball and games rather than fitness-type activities, because everyone does it and you're not being tested. You can just have fun with it. Like I'm not doing it to win, there's people in my class that are really competitive, that's annoying, but I'm not really bothered so I just play it and don't take it seriously." Becky- School B*

Others felt that games-based activities could hide your ability more than other activities, such as running:

*"I don't think it's that bad, maybe it's 'cause I'm better at badminton than I am at running, but I don't feel that embarrassed doing that kind of sports. 'Cause it's not like in running where you can actually see the person running away with you, people can see the gap spreading, but in games you don't really notice. So you don't look so stupid." Cathy- School D*

My research therefore challenges the contention that disengaged girls do not like competitive sports. Further, it increases our understanding as to *how and why* some girls may prefer certain types of activities.

The most surprising finding from the research was that all of the disengaged girls in School D mentioned girls' rugby as an activity they would like to play. This school was based in an area that has a rugby culture with the local teams performing well. Therefore, the school also had a strong sense of 'rugby identity'. There was also the same regard for women's hockey, however many of the girls were put off school and local hockey clubs as they did not feel they were skilled or experienced enough. This particular school was in an affluent part of the country. Bourdieu (1978; 1984) suggests that sport is a social practice that distinguishes between individuals from different social classes. As rugby is perceived to be a predominantly middle class sport in the UK (Mortimer, 2007), this may have played a part in the girls desire to play. This is corroborated by the fact that girls' rugby was not mentioned by any of the girls in any of the other case study schools. This 'sports culture' may therefore be linked to the girl's social identity with the local cultural norms. Indeed, the girls may have been trying to challenge the boundaries of such cultural norms by the desire to play girls' rugby, rather than the expected hockey.

After talking to the girls about these sports, it emerged that competence was one of the reasons the girls wanted to play rugby

over hockey. The idea was appealing because all girls would be at the same level. None of them would have any experience of the sport and so there would be no level to match up to:

*“None of the girls really do much rugby out of school so everyone would be the same at it. Whereas most of the girls do hockey, so they are all really good at it as they go to training.” Lorna- School D*

What was interesting is that the school had offered girls touch rugby during PE time and it was also offered as an after-school club for a short time. However this ‘softened’ version was deemed not competitive or physical enough:

*“And in rugby, girls just do touch rugby, but I think it would be fun to properly tackle and get tackled. I did it once and it was fun, but it’s not as fun when its just touch, you can’t even really feel it ... like the person rips off the tags on your side and half the time they are like, ‘em I got you ‘cause you don’t even know, you keep running with the ball. I know they think it’s dangerous and stuff for girls and I know boys are stronger and stuff than girls but it would be nice to have the choice. I mean not all girls would want to do the same things as guys but it would be nice” Cathy- School D*

It is possible that the desire to play full contact rugby was more about gender equality, with the girls wishing to be offered the same opportunities as the boys. Similar findings are shown in Williams and Beward’s (2001) research where the girls also felt it was unfair that they were denied access to a range of activities which had been defined as ‘male’.

*“If it was full contact it would be better, I think it’s unfair that the boys get full contact and the girls don’t. There are a few girls in our class that would rather they had the choice and got treated like the boys.” Eva- School D.*

Lorna who had tried rugby after school, felt the teacher gave more of his time to the boys and the girls were ignored:

*“yeah girls’ rugby, like we had Mr X doing it, and like he was like never keeping his promises ‘cause he always had other stuff to do, but for the boys’ rugby he was always there. He just didn’t care about the girls’ club.” Lorna- School D*

This finding is critical to our understanding of disengaged girls’ decisions for participation in activities. There are clearly broader social and cultural influences that enhance the appeal of certain activities, as these girls talk about their experiences (or lack of) in sports that are often considered masculine. These were girls who disliked PE and many of the activities on offer to them.

Another reason for the girls desire to play rugby may have been related to the physical challenge it offers. Work by Young (1997) and Scraton *et al.* (1999) has shown that women often report feeling a sense of pleasure in competing in such masculine sports due to the risk and rough elements. However, Young (1997) also found that although the women enjoyed the ‘powerful’, ‘competitive’ feelings they reaped, many were still concerned that they would not be perceived to be as feminine as they wished. Scraton *et al.* (1999) also found that women can experience *“tensions between their active physicality ... and what is deemed ‘safe’ heterosexual femininity”* (p. 108). My research builds on these findings demonstrating that girls who wanted to play rugby also appeared to show tensions between active physicality and femininity. This was shown by their aversion to messing up their hair and make-up during PE activities. Therefore, the *idea* of being part of this powerful and competitive sporting culture may be more compelling than the actual reality of playing. This is an area worth exploring in more depth in future research, particularly with other disengaged girls that live and attend schools located in areas with a similar ‘sports culture’.

### 12.1.3 Girls as role models

As part of the Fit for Girls programme, one school (School C) selected girls to be Fit for Girls 'role models', to train and deliver physical activities during lunch and after school. These girls were selected by PE teachers as role models based on their physical competency in PE and sport. During an informal conversation with the Principal Teacher of PE, he mentioned that he was 'fed up' of working with hard-to-reach and badly behaved kids and thought that they would use the FfG materials to reward the 'good kids' for once. As the primary aim of the programme was to work with low active girls and create innovative ways to get them more active, this school clearly neglected the project objective. This obvious disregard of the programme's core purpose resulted in the disengaged girls not actually being reached. The girls I worked with did not seem to know much about the activities that were being delivered by the role models and consequently, none of them were participating in these:

*"Cause there was a couple a' girls on my home room<sup>8</sup>, like we hear it in home room but they don't really ... explain it." Catherine- School C.*

*"They don't really tell you. Just like the, in the bulletin. Like they say Fit for Girls one and they read it, who's involved. But they don't really say what's ... What it is and who can go." Melissa- School C.*

In addition to a lack of awareness about what activities were being run by the role models, there was also confusion about who could attend these:

*"I heard it's just like a club or something but like they do announcements and that's really all I've heard." Nicola- School C.*

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<sup>8</sup> Homeroom is the classroom session in which a teacher records attendance and makes announcements.

Sarah felt girls would be more likely to go along to activities run by the role models if the options and activities were made clearer:

*“if it was like explained more I think it would probably give the girls more option and like make them more aware of fitness and ... probably they’d go along if the teachers would explain like, what it was.” Sarah- School C.*

Interestingly, one of Sarah’s friends was a selected ‘role model’. She therefore knew more about it than the other girls, but this did not affect her motivation or desire to participate in these activities as illustrated in the following dialogue. She did not perceive Fit for Girls as something which was relevant to her:

*Fiona- “Does the term Fit for Girls mean anything to you?”*

*Sarah- “Uh huh. My best pal does Fit for Girls, Samantha.”*

*F- “So, do you know what it is then?”*

*S- “Is it no that they try and get equipment and stuff and try and get girls more intae PE and something. I am no too sure.”*

*F- “Okay, would you go along to any of the Fit for Girls activities she’s involved in?”*

*S- “No really. She does this club on a Wednesday, it’s a trampolining club. But I don’t know, I’ve never really ... I’ve never thought of going to it. There is quite a few girls that are in it. But probably quite a lot of girls don’t know it’s going on. Like, I only know about it because of Samantha, because she was telling me about it.”*

*F- “So who can go along to these clubs? “*

*S – “Em, well, it’s sporty girls I think, ‘Cause I think the teachers picked them. I am no too sure how it works but I probably wouldn’t have got picked anyway because I never picked PE.”*

*F-“ Okay, so why do you think the school is doing this?”*

*S- “I think they are just trying to get girls to dae more clubs. And some of the girls do this dancing thing. I don’t know what it is but you hear them talking about it, this dancing. Other girls come at lunch*



*and do the trampolining, like, but I don't think they do it with the other girls. I think it is just to work on their routine for their proper PE class."*

*F- "You said that some of the girls are doing dancing. Would you be interested in doing that?"*

*S-"No. I think the teachers picked them for that as well. But it doesn't really bother me. I like going to dancing outside of school."*

Although Sarah knew a bit about this scheme through her friend, she wasn't really sure who could go along to these clubs and wasn't interested in going along herself. She also felt you had to be 'picked' to join in with these activities and so clearly the role models were not engaging the low active girls as they should. We also see the lack of peer influence and her expression of individuality; her best friend was running a trampolining club, yet it didn't seem to make any difference to her engagement. She stated: *"cause my group, my pals love PE and I don't. It doesn't really matter what your friends are doing, it is up to you."*

Sarah's point is important as it challenges the notion that social factors have a stronger influence on PA behaviour than individual factors. This is discussed further in section 16.1.2.

As reported in Chapter 11, the girls expressed concern at PE teachers having 'favourites' and selecting the 'best pupils'. This is clearly shown here, with the teachers selecting the 'best' girls to be role models. The girls involved in my research did not seem to know who could participate in these activities run by the role models, and so many presumed you had to be picked or asked by a teacher to take part. Role models have been shown to be an effective way to engage girls in sport and physical activity (Yancey, 1998). However, in this case, it appears the girls' roles and the activities on offer were not advertised enough, so girls did not feel they were welcome.

Instead of engaging the low active in activities run by other girls, this school appears to have simply widened the divide between the engaged and the disengaged. Moreover, the PE teachers thought this scheme was and would continue to successful, as feedback about the activities was only sought from the role models and related to their experiences of delivering an activity. The teachers were not aware as to who was/was not attending activities and why. This clearly highlights how important *the process* is, when using role models to engage other girls in physical activity. My research has revealed the significance of consultation and allowing girls to have a voice. Crucially, if a range of girls had been consulted regarding what attributes a role model should possess, (what she would look like, what qualities would she have, what should her role be, how should role models be advertised) this would likely have increased the success of such a scheme among the intended target group.

#### **12.1.4 My influence as the researcher on the data collection process and girls' experiences of PE**

As I had spent quite a bit of time talking with the girls over the two years, it is not surprising that I influenced them in some ways. As I was asking them questions about PE, all of them said that they had thought about PE more since they had been involved in the interviews and most of them said it had motivated them to participate more frequently:

*"I want to get better at it ... I just kind of think about PE more and know I probably should be doing it more." Cathy- School D*

An outsider's presence along with the Fit for Girls programme itself may have made girls reflect more about things that could be improved in PE:

*Fiona – “Do you think me coming in to speak to you has affected your attitudes or your opinions about PE at all”?*

*Cathy- “yeah...because just stuff like before like you came to the school, I just thought like PE it’s something that we need tae put up with....and then like I didn’t know about Fit for Girls ... or anything like that.” Catherine- School C*

It could be said that my interviews and focus groups with the girls were part of the programme, and therefore the consultation process may be as important as the physical changes to the school. Most of the girls felt that my role was to make PE better for them in their school. I felt bad about this, as I think my presence may have given the girls false hope that things might be improved. Although it would have been useful to notify the teachers about what the girls had said, it was more important that I retained confidentiality and trust with the girls. As the teachers were aware which girls I was working with, this small sample would have been identifiable to them. One girl, Cheryl, felt that just talking to me about PE could make it better:

*“Like, you just sit and think about what you can dae in PE and how to change stuff. And when you go back it is all changed for yae [you]. I think that is what ... just sitting and talking to you can make it change.” Cheryl- School A*

As many of the girls presumed my role was to make PE better, I was seen as someone ‘different’ from the teachers. Many also felt I was ‘on their side’.

*Fiona- “Have you felt like I’ve been part of the school trying to do something or I’ve been something quite separate?”*

*Catherine- “I felt like you’ve been trying to help the school and tae ... get ... girls try to join the clubs and stuff but ... I think they’re not doing as much as what you’re doing.”*

This particular girl, Catherine, felt that being listened to and given a chance to talk about how she felt was much more useful than what

the teachers were doing. If the schools employed a consultation process which allowed each girl a voice, this could result in more effective PE experiences and engagement. However, it may be more effective with an outsider carrying out the consultation, as some girls would not give their true opinions to the teachers:

*“Like if a PE teacher had to ask me probably I’d just lie and say like “Oh no I like PE ... and the activities you’re doing”... like I suppose this way you’re not telling them directly but ... maybe they’ll get the message.” Catherine- School C.*

In conclusion, it seems that offering a choice of activity was an effective way to engage girls in the PE environment. The process of change, resulting from offering new activities in PE is shown in more detail in Sharon’s journey in Appendix H. The culture of local sport and school ethos can also play a role in girls’ engagement of activities, which was seen with rugby in School D. The girls viewed this sport as socially desirable and so wanted to become involved. One of the schools was seen to select female role models to deliver activities as a way to get girls more active. This didn’t appear to reach the targeted girls, however it may be that with more time, consultation and advertising this could perhaps be successful (providing the girls chosen were perceived to be ‘appropriate’ role models). Researcher influence was evident in the study with many of the girls reporting that they felt listened to and had increased awareness and motivation after consultations about the PE environment. This is a key finding in my research and shows that giving pupils a voice is critical for bringing about change in behaviour and attitude. Finally, the context in which PE is delivered appears to be central to understanding girls’ engagement and experiences. Consulting and offering girl-friendly activities to adolescent girls can result in improved engagement, which will be shown in the following section.

## **12.2 Part 2- Changes in girls' attitudes and engagement in the PE environment**

There were varying degrees of change in girls' attitudes throughout the research period. As all of the girls were disengaged when they were first selected (when they were in S2) there was a prevalent negative attitude towards the subject. By the end of the data collection period, when the girls were nearing the end of their fourth year of school, considerable change was noticeable in many of the girls' attitudes and emotions towards the subject. The activity sheets used in the focus groups and each interview phase clearly captured this change in emotions in some of the girls. The activity sheets are provided for the selected girls' journeys in the following chapters. There were however, other examples where there was no such change or more subtle changes that were uncovered when analyzing the interview data.

Where there was a positive change in attitude towards PE, the girls generally felt that the insecurities they had in first and second year, such as (lack of) perceived competence for the activities, feeling on display, embarrassed about performing in front of others, and a teacher and class they did not know, appeared to be less of an issue by the time they were in S4. For example, by Interview 3, Saima felt that her experiences had moved from negative to positive from S1 to S4:

*"They kind of changed from negative to positive. Before, I guess the teachers were new and the subject no-one really liked and your friends were not with you and some you just knew them and stuff like that. PE was not good." Saima- School B*

By S4, many of these girls felt they enjoyed the subject more and didn't 'dread going' to PE class as they had in S1 and S2. This may

have been a consequence of consultations about activity choice, and so feeling more valued in the PE environment. As discussed in Chapter 3, the Theory of Planned Behaviour (Ajzen, 1985), suggests that a person's behavioural intention is influenced by their *attitude* toward performing certain behaviours, and so a change in attitude is very important if there is to be change in behaviour. As a result of a change in attitude, many girls felt they were a *"bit more involved now"* and had the motivation to *"take part and try harder"*. Nicola- School C

Chelsea thought this was due to getting older and becoming more confident:

*"... Probably just as I am getting older. I know a couple of my friends do stuff and I go along with them. It is probably more just getting older."* Chelsea- School D

Discussions with the girls suggest that a number of factors were important for such changes in attitude. For example, as the girls got older they had better relationships with the PE teachers, they knew the girls in the class better and became more confident. These developments resulted in girls feeling more comfortable around the boys when they were in mixed activities. It is also likely that the programme influenced the teachers to make the PE environment more supportive for girls. Giving girls a voice through consultation was also a major facilitator for attitude change.

*"It depends what we're doing, but we have been doing dead fun things in PE this year. I've enjoyed it more this year. Last year we were with the boys in PE, and I didn't really like the subjects we did but 'cause I was with my class that I was with for two years you didn't really mind and you were comfortable around them. Yeah and it depends on the people I've got in my class, 'cause this year I've got girls that I'll talk to but I don't really know them that well."* Sarah- School C

*“A bit more confident, because it’s like a lot of my friends ... and there’s like no boys in our class just a few. So that like brings your confidence up a bit.” Mairi- School B*

Others revealed they put in more effort in S4 and were working harder in the subject. Sometimes the motivation to work harder in PE was based on body image and a desire to lose weight:

*“Just because I need tae, like I realise I need tae work harder ‘cause I have been putting on weight.” Nicole- School C.*

Some of the girls likely improved in ability from exposure to the same activities over time. Many felt they had learned the basic skills for certain activities in first and second year and so by third and fourth year they felt more competent with these activities. This was also evidenced when each girl was asked to give themselves a mark out of ten for “how good they think they are at PE?” at each interview as a way to monitor if perceived competence improved over the research period. Ten of the fifteen girls quoted higher numbers (higher perceived competence) in Interview 3 compared with Interview 1. Girls that showed an increase in perceptions of competence were also generally participating in PE more. Mairi felt that the maturational changes in herself contributed to better PE experiences:

*“I think it’s just maybe me myself, in like the way I see things and, ‘cause it’s different classes and there’s like less boys and stuff, and that really does make a difference. And just maybe because I’m older and I’m like, well, the teachers aren’t teaching us anything, it’s just everything they’ve taught us from first year and stuff. So just like go along with it.” Mairi- School B.*

Two of the girls felt their competence decreased over time (Catherine and Siama) while three of the girls (Mairi, Claire and Sarah) did not feel they had improved in ability as such, but they still enjoyed PE more than they had in earlier years.

*"I'm still rubbish. But I don't really care any mair [more] because I enjoy it." Sarah- School C*

However, there wasn't such a positive change in attitude towards PE across all the girls. Catherine's attitude towards PE became more negative from Interview 2 to 3, preferring PE classes at the previous stage of data collection. She said she put more effort in the early years of high school PE, but now she was in Fourth Year '*there's no point ...*'. As shown earlier (section 11.2.4), Catherine took part in dance outside of school but felt she was not recognised for her talent within the PE environment. This negative change in attitude as the years went on was likely due to Catherine not receiving any recognition from the teachers, consequently enjoying the subject less. Catherine also attended the school which selected 'role models' which may also have affected her motivation and attitudes.

Overall, there seemed to be positive changes in twelve of the disengaged girls' attitudes towards the PE environment, which were likely to due to a combination of factors. However, it is worth noting that for three of the girls (Catherine, Lianna and Cathy) attitudes did not change or appeared to get worse.

### **12.2.1 Changes in participation in the PE environment**

In addition to the notable changes in attitude towards PE, there were also changes in girls' participation in the subject. Many of the girls commented that they often opted out or avoided PE classes in First and Second Year. However by Interviews 2 and 3 they were taking part more often and trying harder. Many of the girls also felt that they enjoyed the subject more, which was often due to their choice of activity and a single sex PE class. This was a result of the Fit for Girls programme in three of the schools.



*Chelsea- "The first two years I didn't really want to do it so much. I didn't like it and I felt a bit stupid doing it."*

*Fiona- "What about the last two years, third and fourth year, how would you sum those up?"*

*C- "I have enjoyed it a lot more. I am happy to do PE now. Even if it is something I am not too keen on, I still don't mind doing it."*

In two of the schools (B and C), girls were offered activity choices in blocks, and so they would pick one block which contained three of four fixed activities. Often there was one or more of these activities they did not like as much in their chosen block and so this could affect participation when these were delivered. Melissa describes how she would participate in the activities she favoured, but would only 'pretend' she was participating in others:

*"I quite liked in Miss X class because it was all lassies. I am trying to think of the word ... I just felt better in that class. Mr X because it is a guy and there's a few boys in the class ... there is a lot of us in that class. I liked it when it was the wee class. I do it more now. If it is something that I like I'll try my best at it. But if it is no, then I'll just sit there and kid on I'm doing it." Melissa- School C.*

The change in class composition, an outcome from offering a choice of activity, was a major reason for increased participation in the PE environment. Almost all of the girls reported feeling more confident and enjoying PE more as a result of girls' only classes:

*"I find it a lot better because the classes have split up into boys and girls. So the fact that it's like that now has made it all girls I don't feel as nervous so I'm enjoying it a lot more" Chelsea- School D*

*"Well I've enjoyed them a lot more than I would've in third year or in second year, I suppose I just feel more confident and comfortable in PE now because its girls only" Eva- School D*

For some, participation in PE increased in their fourth year as it was seen as less serious and they had fewer worries about participating.

Many girls felt that by fourth year, they were under less pressure in PE, compared to their other subjects. It became more fun and the teachers were perceived to be more relaxed:

*"It differs every day. Now I am like PE, okay fine. A period you don't have to worry about. You can be yourself and do whatever you want. It's not like you are going to sit an exam in it." Claire- School B*

*"Yeah. I'm ... I'm ... before I didn't really want to go to PE and stuff but now it's fun. It's something like different than other subjects and it's quite different I guess..." Saima - School B*

*"It's a lot different, but it's more fun, 'cause it's just like totally recreational and there's a, it's a lot less strict and we get to choose what we want to do and stuff. So it's much better." Mairi- School B*

A few girls also mentioned that when they were in mixed activities, the boys had calmed down and were more bearable. This of course could be due to maturity that occurs during adolescence as boys get older. This served to increase girls' participation:

*"Things change because you have got a choice to do activities. Some of the boys have calmed down ... they have mixed up the boys and girls tae." Cheryl- School A*

Sharon also commented that over the years she felt more at ease with peers in the class:

*"I used to be like ... I never used to talk to anybody. I used to just have a laugh with ma pals. Now I've got more confident I can have a laugh with everybody." Sharon-School A.*

It seems that girls were just generally happier in PE now than they had been in earlier years. Their familiarity with the secondary school environment along with development changes, such as increased confidence and a greater sense of identity, resulted in more positive experiences:

*"I dinnae feel like unwanted or embarrassed a lot or like depressed or anything anymore, because like ... there's nothing to worry about anythin' ... anymore because like they've all grown up and they get tae ha[v]e like whatever ... choice we want tae have." Sharon- School A*

*"Cause you just play. I don't know what it is, you just, sometimes you just play better when you're just. When you know everybody else is just doing it for fun and it's not really properly serious." Saima- School B*

However, for one girl in School A, Lianna, there was no change at all in her participation and attitude towards PE. Interviews with Lianna were difficult as even with a lot of probing she didn't say an awful lot about the subject. She thought '*nothing really*' had changed for her since S1 and S2, and she still tried to get out of participating whenever she could. For Lianna, the issue seemed to be '*people looking at her*', particularly girls she did not know.

A few of the girls also mentioned being healthier and feeling better as a result of increased participation levels:

*"I think I have got healthier. From primary at least, from like P7 or first year. I'd say from about the start of third year. 'Cause in primary I was a wee fat thing." Melissa- School C*

*"That's what's good about doing it, to stay healthy. And it makes you feel good about yourself after you have done it." Linda- School D*

Some girls also felt PE gave them more energy for the rest of the day:

*"I feel like ... am like excited an' like mair [more] energetic because like...you get like music to go ... like ...when you're dance ... like no dancing but like daing fitness and you get tae like dae stretches and stuff ..." Sharon- School A*

However, often it was activities outside of school that girls felt made a real difference to their fitness and health, as many thought that an

hour or two a week (in school) wasn't enough to increase physical fitness levels.

*"No, I think it was just me, like 'cause I've never really noticed anything from the school. But 'cause I've done my own exercises outside of the school and that I feel a lot more confident." Eva - School D*

As we can see from the changes in attitudes and participation, girls seemed to be more engaged in the subject by the end of their fourth year in high school.

### **12.2.2 Relationships with teachers**

Girls appeared to have more appreciation and respect towards teachers after they had been offered a choice of activity in S3 and/or S4. This was heightened when the teachers consulted the girls as to which activities they would like to do in PE time. This process resulted in the girls feeling listened to and empowered when given the activities they asked for. For Mairi, this change in teachers' behaviour came as a surprise:

*"Well last year they were like not caring or that but this year it has been a surprise 'cause they are trying to make things better for us with giving us a choice and stuff. The people that didn't like, like PE that are trying to get into now 'cause they see the fun stuff that's going on now." Mairi- School B*

*"Cause they, they've started doing new things. And like teachers are saying like 'If yous' want to do dance, if yous' want to do zumba, if yous' want to do fitness ...' like things we really, didn't really do much of in like first to third year, so we're getting a bit more time and stuff, and like especially with fitness. 'Cause we've got all the equipment we never used to get to use, and now they're saying like 'If you want to do it, we'll teach you how to use it". Sharon- School A*

Girls also felt the teachers were friendlier. This may have been due to a combination of factors, such as the girls getting to know the teachers better as they got older. It also may have been that the girls respected the teachers more as they felt that they were trying to make PE better for them. This change was particularly apparent in the girls in school B, with Saima noticing a change in teachers' behaviour and attitude:

*"Really just everything together. The teachers are more friendlier to you now than they were before. So ... there is a difference in teachers and I guess your interest has changed because at that time you didn't take stuff that seriously that you don't have to and it is kind of like one free period." Saima- School B*

Some girls felt that the teachers were more supportive and provided positive encouragement:

*"They [teachers] encourage you to like do mair [more] stuff because they just ... they basically say, if you dinnae [do not] dae PE there is nae point you being there because if you just do nothing ... and they try and encourage them to do PE and give them mair activities to choose so the ones that dinnae like to do, they can do it." Sarah-School C*

This positive encouragement was something that was really valued by the girls for improving their confidence. Harter's Competence Motivation Theory (1978) maintains that the evaluative reinforcement of others is important for affecting feelings of competence. This feedback from the social environment also impacts the likelihood of a behaviour being repeated. We see in Mairi's quote below that the teachers' feedback was key to her increased confidence and her attempt to try the high jump:

*"Well the teacher does give me compliments more now, which I really appreciate 'cause you need to know you are doing okay. And also when we were doing high jump she got all the boys to go out of the gym so that we weren't embarrassed, and it meant all of us did try it.*

*She just said to us if I get the boys to go out will you all try and we said yes. So she was good, she was trying to make it better for us. Mairi- School B*

By the final interviews, generally the girls felt their teachers were trying to make a better PE environment for them, which may have been a consequence of the programme:

*“He said he would try his best to get us doing more fitness stuff. He said he’d try to get us split up from the boys but it might be quite hard because it’s only him teaching and he can’t really have two classes but he’d try his best.” Chelsea- School D*

The school that did consult with the girls about which activities they would like to do (School A) then offering these activities (rather than just offering a blocks of activities for girls to choose) appeared to be the most successful for increasing engagement in the subject, resulting in more positive PE experiences. The girls in School A genuinely felt the teachers cared about what the girls wanted to do:

*“... like they ask you if you like ... like this kindae PE or ... like they sit down and talk to you about it before you want ... before they tell you like that you’re gonnae do it and if ye dinnae like it they’ll like try and think of something else for you to do.” Cheryl*

They also appeared to have a good relationship with the teachers in this school (which had the male dominant PE department)

*“We’ve got ... it’s like a big board we’ve got and we just like copy of the board ... We have competitions like wi[th] the teachers and ... that ... a’ve won wi[th] Mr X and he went in the huff and he wasn’t very happy until he won ...” Sharon*

In School D, one teacher did consult with the girls, however this consultation wasn’t carried out until just before the last set of interviews. The girls seemed happy the teachers had asked them what they wanted, however at that point no changes as such had

been made from the consultation. Lorna spoke about the consultation in her final interview:

*Fiona - "Was anyone scared to say what they thought?"*

*Lorna – "To start off with but then Mr X was like, he was okay about it. Last time we were at PE hardly anyone done it and everyone has turned up and done it this week." Lorna- School D*

In School C, offering some new activities in the activity blocks appeared to engage some girls:

*"Yeah they like, like see in first and second year they done basketball and badminton and all that but now they've started doing trampolining and gymnastics and that more. The boys could have done it but we've never done it so its like getting a different teacher means there is different things they are good at so that's better for us." Sarah- School C*

In School B, although the girls were not asked what activities they would like to do, the girls felt that the teachers were trying to make a better PE environment:

*"Yeah, they've [PE teachers] tried. They've said to us like, oh, if there has been a few boys in our class, they've like "Oh, well, we know you play better without the boys, so we'll try and get that sorted". So, yeah, I think they have. But there's not really much else you can do with girls, 'cause it's just like really up to them and stuff." Mairi- School B*

### **12.2.3 Girls' awareness of the programme and school changes**

Although there were changes going on in the schools, which were likely to be related to the programme, it was sometimes difficult to tell if these were new developments in the school. For example, if the after-school clubs for girls were new, or if these were existing clubs that these disengaged girls had simply not known about. The PE staff focus groups I carried out as part of the national evaluation were useful for clarifying or investigating information I had from the girls.

For instance, I was able to find out what had actually been implemented to get girls, particularly low active girls, more active.

When analysing the data, it was clear there was some awareness from the girls that there were some things 'going on' in the PE department. However, as discussed previously, as the schools (apart from School C) did not brand anything as 'Fit for Girls', it was difficult to assess what could be attributed to the programme (this is also discussed in the Final Evaluation Report, *in preparation*). Therefore, this theme of girls' awareness about the programme and school changes was sometimes difficult to code. If girls made reference to things improving in PE, such as offering a choice of activity, or having a better relationship with teachers, this was considered to be a more positive PE environment and so was coded initially as 'Fit for Girls' then this theme was refined to specific themes, such as change in attitudes, change in behaviour. This section reflects the theme 'positive PE environment'.

Many of the girls mentioned that things seemed to be 'getting better'. The consultation carried out with the girls after the follow-up questionnaire, (School D) was appreciated by the girls:

*"Yes, they have. Especially after we filled in the questionnaire last week. Our teacher spoke to us for the rest of the lesson, just asking us what we would prefer and ... if there is anything he could do to make us want to do PE a bit more. I think the main thing that came across was that we didn't want to do PE with the boys. And we would be happier if it was just the girls. We sort of ... we sort of said we'd be more interested in the fitness side of things than actual sport."*  
*Chelsea.*

The girls implied that this process resulted in a more supportive PE environment:



*“Well, it has started to improve. I really didn’t like it at the start but then we spoke to our PE teacher, when we were filling in our questionnaire, and we told them what we thought and we have just recently started using the wee gym, which I was doing just now. He has split us up so it is boys and girls.” Lorna*

Across the other schools, many of the girls felt that the teachers were trying to make things better for them, which was better than how it had been previously:

*“Yes because we were like in ... we went to this like ...we had like a wee ‘hing about like subjects and Miss Jones was wonderin’ how ...what we like in PE and wanted ... tae ken [to know] what was like going on and like how you feel about it and then we all like. All the girls like told them what’s goin’ on and then the boys told them and then Miss Jones like reported it to the PE department and I ‘hink they fixed it and ... made it okay for us now.” Sharon- School A.*

*“Yeah ...They just started this I think ...with fourth year and just pick like for a whole year. They just give you this ... activity choices and you just like kind of choose it and ... it’s quite good it’s better than first year’s and that ...”Saima- School B*

There also seemed to be some acknowledgement of new equipment which was bought with the Fit for Girls money (each school is awarded £700 to use for something sustainable to increase girls’ participation).

*“Like they’ve got like, new fitness stuff in and like new ... like these ... it’s like ... like these wee ... these mats like you can do exercises and stuff and everything on them ... because the other ones like were old and ripped because people kept rippin’ them but ... they said that they can trust us now.” Sharon- School A*

However, when I asked Saima in School B if she had noticed any differences in the PE department there didn’t seem to be any awareness of any changes the school had made:

*“I’ve not seen anything so I guess no. It’s not just for girls, that Zumba thing is on for everyone. I can’t see what things might be*

*different. It's just like, for me and my year group it is more like you got more, but I don't know ... No. They just treat everyone equally and that is the best part. But have I noticed anything to try to make girls ... but no ... but right now Miss X is really friendly and everything ..."* Saima- School B

However, another girl in this school felt that there was more focus on the girls than the boys and this was not how it should be:

*"Actually there seems to be a lot of girls only clubs and I think that is kind of sexist. They have girls' fitness, they have girls' football, they do have boys' football ... it's the kind of like girls' fitness like they kind of think that girls are obsessed about how they look or how fit they are. Why isn't there a boys' fitness club?"* Claire- School B

When I asked Mairi if this was a recent development, or if there had always been a lot of girls only clubs, she wasn't sure:

*"I don't know. I can't really remember there being so many in first or second year. I think it is fairly recent, although I don't know. That may have been the case when I was in primary school."* Mairi- School B

In School C the girls were aware that the school was trying to do more related to health and fitness. However Catherine they didn't think this was very successful:

*Catherine- "I think it's tae [to] try and like the school are trying tae promote health and like that kinda' stuff to. I don't 'hink they do what they should ... they don't like ... I don't know they're saying "You should always stay fit and stay healthy" and everything and the activities they do it's just ... they're not like stuff that would keep you healthy."*

*Fiona – "Right, okay, what kind of activities is it then?"*

*C- "Like it's just games, like there's one called the ...The Castle and it's just like running from like ... like a rugby ball or something ... but like the amount o' times you stop and you start it's like ... its not like fitness".*

This “new focus” was seen negatively as one of the girls felt that it was just ‘games’ that were of no benefit to your fitness:

*“If they offered me it like you see how it’s a period of fitness and it’s a period o’ games ...we don’t get that anymore, it’s kinda’ just it’s all games. They should promote something like ... something that would actually benefit you...” Nicola- School C.*

Although the girls in this school were aware of the focus on promoting health and fitness, the way this was delivered to them made them feel they were being ‘lectured’ to:

*“It’s like every time we go in tae PE there’s a different lecture ... like they say like “If you don’t exercise you’ll get a heart attack” like they’re just trying to scare you in tae I ... And then like the PE teachers don’t make effort to know if you do like, activities outside o’ school. So they just assume that this is the amount o’ exercise you’re getting ... and even when they do that it’s like ‘that’s all you’re giving us’.” Catherine-School C”.*

In another school (School D) the girls felt there was more being done for the sporty girls, or the girls that already liked PE, rather than working with the inactive girls to get them more active.

*“I don’t think they have pushed to make people who are not interested in sport more interested in it ... I think they are more going towards the people who are sporty and doing something for them. Because like ... you know people who like music there are music clubs and people who like doing this there is different clubs. But for PE if you are good at sport and you like doing sport, then there is a sport club for you. It’s not for people who want to be better at it. It is for people who are already good at it or pretty good at it and want to go along because they like it.” Eva*

There was less awareness of ‘changes’ as such in School D.

However, Lorna felt there were a few activities that girls could go along to after school, but often these were not advertised enough.

*“There is and there is not. We used to be able to play hockey but because it is fourth year now they have got a team and ... other things I can think of. Badminton and just like Zumba and stuff. But they don’t really advertise it a lot so you don’t know when it is on. They do try quite a bit to get after school stuff on but ...” Lorna.*

Eva also felt there was insufficient promotion of the girls’ activities:

*“I have seen posters and stuff but I don’t really feel that they have done enough to get it across to you that you can do it. It’s basically just put a poster up and expect you to notice it and go and talk to the teacher about it. But I think if they did something for an assembly it might get it across to a few more people.” Eva.*

Overall, there did appear to be some awareness of the changes within the school but, as can be seen from the extracts above, these were not always viewed positively by the girls.

#### **12.2.4 Out of school activities and future intentions to be active**

Almost all of the girls spoke about going to the gym when they were older. This type of exercise may have been a way to avoid highly-structured, teacher-organised, sports activities, preferring ‘adult-like’ activities. The girls did speak positively about opportunities to choose activities associated with the transition to adulthood. Coakley and White’s (1992) work showed that adolescents did not want to be associated with activities that were considered ‘childish’ preferring activities which offered a more adult identity. Similarly, Smith and Parr (2007) suggest that more adult-like activities on offer to girls in the later years, in addition to less teacher control over their PE experiences (such as offering a choice of activity) is important to young people’s desire for increased autonomy and control over their lives more generally (Flintoff and Scratton, 2001).

In addition to the desire for autonomy and control over activity choice, girls were also motivated by certain activities for weight loss.

The main reason given for going to the gym was to lose weight or keep in shape.

*“Well there’s a couple of girls in my year that believe they need to lose weight so they’ll do that because they want to be thinner. Its not ‘cause they want to be healthy I think they just want to get thin.”*  
Lorna – School D.

*“I know I really need to go to the gym because I don’t do much exercise and I need to lose a little bit of weight. But I probably will try to when I’m older”* Nicola- School C

*“For me is to lose weight, its kinda’ one of those things that’s always on girls minds.”* Chelsea- School D.

The gym was seen to be a desirable activity choice, as you could work at your own pace without pressure from others. Girls also felt they did not have to be ‘good at sports’ to go. Almost all of the girls mentioned they would like to get fitter and be healthier. There was also the idea that you “*don’t have to be in front of a class of people to do it [exercise]*”

*“Yeah well I’m trying to get a lot fitter and I’m trying to lose weight and stuff, I think that I am actually getting there. I’ve lost a bit of weight, I think I’m getting better but it’s a slow process.”* Cathy- School D

*“You don’t have to embarrass yourself in front of people you see every day in other classes but if you go to a gym or something ... you only see them once or twice a week.”* Claire- School B

Some of the girls already had their own strategies for keeping fit out of school:

*“Yeah it is ... but I don’t really have time right now ... little home ... little home exercises like dancing around and that’s that ...”* Saima- School B.

For Sharon, her change in PE participation and attitude had also motivated her to do more physical activity out of school:

*“That is something that has changed. I used to be totally lazy like a couch potato. Just sitting doing nothing but I just got up and go for jogs and that.” Sharon- School A*

Only a few of the girls also talked about walking, and classed this as physical activity and as a means to keep in shape. Melissa in particular brought up walking in all her interviews:

*“I don’t know. The only activity I normally do is walk. I walk everywhere because my mum and dad don’t drive. So we walk everywhere or get a bus. I’ve just got used to it. I prefer walking. I get up in the morning, I walk about the house, walk to school, walk about the school, walk home, walk about the house, walk when I am going out, walk about when I am out and then walk home. So walking all day. But I get used to it. But when I was at outward bound [Scottish outdoor activity centre] there, we had to walk for five hours straight. Oh my god!” Melissa- School C.*

This is interesting as she didn’t mind walking when it was on her own terms, such as getting to and from places or walking around at night with friends. However, when she was forced to walk as part of a school trip, she claimed she didn’t enjoy this:

*Fiona- “So did you enjoy the trip?”*

*Melissa- “Nah, it was boring. It’s just most of the things are heights and water and I cannae’ swim and I am terrified of heights so I didn’t enjoy it. But we climbed up part of Ben Nevis and I actually pushed myself to do all that, so I’m quite proud of myself. Only because the instructor wouldn’t let me no do it so I had to do it.”*

*F- “Did you not enjoy it at all?”*

*M- “No. Have you ever been up to the top of it? It is freezing! The wind and everything. It was murder. I couldn’t wait to get home! I wanted to come home on Wednesday, but they wouldn’t let me. Well, they were letting me but I couldn’t get anybody to come up and bring me home. That is the only way you get to go home so I thought ‘oh*

*I'll just stay'. But I suppose it was worth it because the Monday, Tuesday and Wednesday were boring but Thursday and Friday were quite good."*

What was interesting about Melissa was that she would show off how much walking she did, telling me at every opportunity that she 'walked everywhere'. However when it came to talking about the school trip, she claims she found it 'murder'. She briefly mentioned the satisfaction and how she pushed herself to keep going. However, she was quick to then go back to the negative experiences she had while 'forced' to do it. According to Dobbins (2009), being made to engage in certain behaviour may result in less intrinsic motivation to engage in an activity that was previously viewed as fun. So, pupils might become de-motivated to engage in physical activity or PE classes because they perceive it to be 'work'. This may be the case with Melissa, as she was trying to act as if she didn't like anything associated with the school. She insisted she only used walking as a practical means and as a social activity: *'I'm out every night so I'm just walking about the streets with my pals.'*

By the third interview, Melissa reverted back to talking about how much she walks in her own time. She claimed she was walking five hours a night one week:

*"Well I still walk, still walk everywhere. I walk further now. I mean 'cause like it was for a week solid I walked up there, walked back down then while I was out ... while we were out we walked a bit. So it was ... I'd say it was about five hours every night we walked."*

In summary this chapter shows the environment in which PE is delivered is central to understanding girls' experiences and engagement. There were subtle, as well as clear changes in most of the girls, which is related to girls feeling more comfortable in the PE environment. The data from interview 2 and 3 data indicated that:

- Offering a choice of activity is important, but girl's choices are often influenced by factors other than just the activity. Peers and the teacher are also important.
- Consultation and giving girls a voice is central to changing attitudes and behaviour
- A supportive PE environment, including good relationships with PE teachers, is critical for engaging adolescent girls in PE classes.

There were two powerful overarching themes from this chapter; 1) familiarity with the PE environment, including relationships with teachers and peers and 2) the power of consultation.

Many of the girls talked about changes related to age, so it is likely that the PE environment including the teachers, activities and class peers simply became more familiar to them over time. The changes that were made in schools, such as activity choice and single- sex PE likely contributed to this and resulted in a more supportive PE environment overall. The relationship with teachers changed considerably, with many of the girls mentioning that their teachers were 'friendlier' than they had been previously. This may be because the teachers found it easier to relate to older teenagers. It is likely that developmental changes in both the girls and boys allowed for more inclusive PE classes, as many girls said they felt more confident and comfortable within themselves. The boys were seen to have 'calmed down' over time and did not appear to be as rough as they had in earlier years.

Consulting with teachers about reasons for disengagement and activity choice, appeared to be the most effective strategy in engaging girls. In addition, my consultation with the girls appeared to



have an impact on attitudes and awareness of PE and physical activity. By giving the girls a voice, they felt empowered and acknowledged and so were more likely to engage in the PE environment.

Previous work with girls has shown that being unheard at school and home can be both frustrating and de-motivating which can provoke disruptive behaviour or withdrawal Crudos and Haddock (2003). This has implications for my work, as girls who were disengaged from the PE environment often felt that their voices were not heard or were undervalued in comparison with certain others, such as the boys and the 'sporty' girls. Conversely, when girls were consulted and did feel *listened to*, this often resulted in behaviour and attitude change.

As discussed previously, short narratives for three individual girls' journeys of change are provided in Appendix H. Each girl's journey touches on the key themes from the results chapters in different ways, showing how different influences can affect different girls experience in the PE environment. Conclusions to the thesis will now be presented.

## Chapter 13 Conclusions

### 13.1 Research questions- Part 1

The first overarching aim of the study was to investigate:

*What are 'disengaged' girls' experiences in the school PE environment?*

More specifically to explore:

1.1 How do individual / predisposing factors (perceptions of competence and PE identity) affect girls' experiences and engagement in the PE environment?

1.2 How do social influences (reinforcing factors) influence girls' experiences and engagement in the PE environment?

1.3 How does the PE environment (enabling factors) affect girls' experiences and engagement?

#### **13.1.1 Individual factors relating to girls engagement and experiences**

The results from chapter 11 revealed that most of the girls did not believe they had the skills to perform in PE classes and would compare their ability in PE to their peers. Girls felt this 'lack of skill' was a result of not being taught the skills needed for PE in primary or early high school. Although they felt primary PE was 'fun' and 'not serious', many did not feel they were adequately prepared for the competitive games which often dominate the secondary school PE curriculum. Consequently, this made it difficult for them to keep up with others who were naturally more competent or who had been exposed to sports/ activities out of school. This left girls feeling

embarrassed and thus they failed to engage in this new PE environment. The girls also disclosed that they were not given enough time in the secondary school 'activity blocks' to practice the skills, so for some, they did not feel they were able to 'do' the activities until S4.

Girls' identities were also shown to play a large part in their PE experiences and engagement indicating a complex relationship between being 'sporty' and 'feminine'. This relates back to the literature in chapter 1 where it was suggested that the development of girls' physical education was underpinned by the gender ideologies of middle class femininity, motherhood and sexuality (Scruton, 1992). Over a century ago, girls were encouraged to display appropriate gender-specific behaviours, roles and characteristics in PE classes. Clearly girls still struggle with these ideologies about retaining femininity in sport environments today. For example, many of the disengaged girls held back from getting 'stuck in' to PE classes, often due to the fear which revolved around appearing un-feminine or un-skilled in front of others. If we return to Oliver *et al's* (2009) work which was introduced in Chapter 2, we see the parallels between the girls in their study and the girls in this study. In both cases the adolescent girls created their own barriers in PE, based on what was 'acceptable for their identity'. In this thesis, many of the girls decided they were not the 'sporty or dancer type' and so did not feel confident doing such activities. Many struggled to find an alternative identity which would allow them to engage without being particularly 'skilled'.

This is extremely important and warrants further exploration in the PE field. In particular, it would be valuable to investigate how PE teachers might facilitate other types of acceptable identities within the PE context.

Finally, as girls' identities were often fixed around ability, many decided they were either sporty or not sporty. This lack of control over their PE /sporting ability left many feeling they could never be someone who is considered 'sporty'. This finding is also critical in terms of the type of environment PE is delivered in. A task orientation environment (compared to ego) would allow all girls to see the potential for self-improvement irrespective of how they compare with others.

### **13.1.2 Social factors relating to girls engagement and experiences**

This thesis showed that friends were one of the most important factors when girls were offered a choice of activity. Many of the girls revealed that they would 'wait and see' who else was selecting the activity before choosing it, as friends in the PE class made for a more comfortable environment. This supports Coleman's (2007) work, introduced in Chapter 2, indicating that friends (and family) had a more significant influence on participation levels than individual psychological factors *in many* of the adolescent girls. However, some girls, such as Sarah (section 12.1.3), felt that they didn't need to rely on friends to do PE, which therefore challenges much of the research which stresses the importance of peers in PA participation. Similarly, in Cathy's story (Appendix H), her negative perceptions of competence override the other aspects of the PE environment. Therefore, we cannot ignore the significance of individual/predisposing factors, such as perceptions of competence. Consequently, rather than advocating that one factor is more important than another, it must be acknowledged that this is a multi-factorial issue. More specifically, it is the interaction between factors for each individual that is central to their experiences.

Although the social experiences girls have in the PE environment are important for their engagement, the relationships girls have with each

other can be complex. In this study the disengaged girls were often intimidated by 'other' girls, particularly those who were socially and physically strong and perceived as superior. Additionally, girls were seen to judge others on their appearance and behaviour in the PE environment. As discussed previously, work by Hey (1997) supports the notion that girls employ their own 'unofficial prestige system' to identify peer acceptability and the capacity to embody successful femininity. This involved girls making judgements on others appearance, disposition and behaviour. The girls in my research also appeared to subscribe to this, labelling those who were feminine whilst being good at sports as 'popular girls'. Interestingly, some of the disengaged girls were friends with such popular and physically able girls. In such cases, girls were proud of the friendship and would often discuss the friendships in the interviews. However, those who were not friendly with such girls, branded them 'show offs' and did not like being in the same PE class. According to Hills (2010):

*"PE can be a space where girls socialize, have fun and learn skills. However, it can also be a space where girls tease, ostracize, exclude and belittle each other, often drawing on discourses and practices relating to sporting skills."* (p. 111)

Therefore this 'prestige system' girls employ is complex and has implications for girls' wider school experiences and life- long activity patterns. Those who are socially rejected in the PE class may then struggle to make friends in other classes and this may put girls off future physical activity pursuits.

The importance of friends in the PE class also supports the relatedness component of Deci and Ryan's (1985) Self Determination Theory, which states that social-contextual factors (e.g., the autonomy-support or control by significant others) will influence an individual's motivation toward a particular activity.

According to the theory, the influence of these factors is not direct but exerted through the satisfaction of basic psychological needs. That is, the extent to which social factors fulfil basic psychological needs will determine the type of regulation guiding the behaviour (Deci and Ryan, 2000). Currently, there has been fairly little research exploring the influence of friendships in the PE environment and so my findings contribute to our understanding of these issues. Future research could also build on these findings, exploring how girls who are seen as socially successful can influence other girls to be more active. This would be important for informing future initiatives on using adolescent girls as role models.

### **13.1.2.3 Boys**

As shown in previous research, girls perceived the boys to physically dominate the PE class and many felt more embarrassed and uncomfortable in mixed PE classes. There were mixed opinions among the girls about males being naturally better at PE and sport, with some feeling that biologically, boys were stronger and fitter. Others asserted that girls could be just as good at sport, if not better than boys. Indeed, it was made clear by these girls that there should not be a presumption that males are more physically able. Hills and Croston (2011) suggest that progress is being made if girls and boys are assessing male and female sporting ability, rather than assuming male superiority:

*“the potential for girls to interpret perceived difference between boys and girls as related to ‘thinking’ [about] or experience can provide an initial step in incorporating sportiness within definitions of femininity and challenging stereotypes of male superiority” (p. 9).*

Finally, an important finding from my thesis which furthers our understanding on social influences in the PE environment is the different effect that male and female peers can have on adolescent

girls. Other girls were generally considered as competition regarding: ability, bodies, looks, popularity and status. However, the boys in the class were perceived as judges, critics and observers. While girls may compete with other girls regarding looks and material items, they are competing for attention (or seeking to avoid negative attention) in the presence of boys. This distinction is valuable for future work with girls in *all* PA settings as it is likely girls will behave in different ways depending on who is present.

#### **13.1.2.4 Teachers**

The baseline focus groups generally revealed that girls did not have good relationships with PE teachers (particularly in the earlier secondary school years) and for some this was a major reason for their disengagement in PE. However, interestingly, gender of the teacher was not a significant issue for many of the girls. In one case study school (School A), the PE department consisted almost exclusively of males, yet the disengaged girls did not mind this gender composition. Further, many of them stated they preferred the male PE teachers to the female PE teacher. This corroborates the notion that it is the teachers' approach, attitude and relationship that is important. Teachers having favourite students and ignoring those who were less able in the PE class, was the main issue expressed by the girls. This left girls feeling invisible and unvalued, which resulted in a lack of motivation to engage. This lack of attention and recognition left many concluding they were not good at PE.

#### **13.1.3 PE environment**

My research clearly shows how important it is to have a supportive PE environment for engaging adolescent girls in PE classes. Girls typically became disengaged following the transition from the primary school environment, which was considered safe and non-threatening. When faced with an unsupportive secondary PE

environment, the girls generally felt overwhelmed by the class size and composition, along with the new competitive game based activities. Largely experiences and engagement were affected by *who* was there just as much, or even more so, than the activity on offer.

Overall, the baseline data highlighted important features of the PE environment which can cause disengagement. Conclusions will now be drawn from interview 2 and 3 data, in relation to the second set of research questions.

### **13.2 Research questions Part 2**

The second overarching aim of the study was to investigate:

*Does a school physical activity programme affect 'disengaged' girls' engagement and experiences in the school PE environment?*

More specifically to explore:

2.1 How, and in what ways, are girls' participation and attitudes affected by a school physical activity programme?

2.2 How, and in what ways, can a school physical activity programme 'enable' girls' engagement and experiences?

2.3 Do relationships between PE teachers and girls change as a result of taking part in a physical activity programme? If so, in what way(s) and how does this impact on girls' engagement?

#### **13.2.1 Activity choice**

Offering girls a choice of activity was clearly a significant factor for engaging girls in the PE environment. Many girls felt that being



offered a choice of activity broke down the barriers they faced in PE, as classes generally became single sex. Girls were also able to choose activities with friends and particular teachers and avoid activities which included 'other' girls they did not get on or fit in with. Also, classes tended to be smaller and so the girls did not feel 'on display' in activities. Interestingly, the actual activity chosen was often the least important factor, with girls tending to make their choice based primarily on the other factors. As these were the key barriers to girls' engagement, offering a choice of activity was successful for many.

### **13.2.2 Consultation and having a voice**

Girls were generally more engaged if they were consulted with about the activities they would like. Girls valued being asked and listened to, and ultimately, this was what prompted attitude and behaviour change. Many of these girls felt invisible in the PE class and so being given the chance to express their activity preference and to talk to teachers and myself about their PE experiences resulted in them feeling acknowledged. Sharon's story (Appendix H) indicates how consultation and being offered a choice moved her from disengagement to engagement in the subject, in addition to participation in out of school PA and a healthier lifestyle. Therefore, a supportive environment where girls are listened to and included is crucial if girls are to move from disengagement to engagement in the PE environment.

Although for Sharon and others there are clearly changes in attitude and behaviour, it is also just as important to discuss the cases where there were no changes to identify what factors are missing for PE engagement. Cathy's story (Appendix H) is therefore critical as it shows us that she did not feel the PE environment was inclusive enough to speak her mind when offered the opportunity to suggest a

choice. Clearly, this needs to be investigated further. Some girls do not have the confidence to speak up, or if they do, their voice is not listened to. Undeniably, each school context affects individuals differently, and may appear to be more inclusive to some. For example, other girls in Cathy's school, such as Lorna, believed the consultation to be effective and felt she could speak her mind when asked about activity choice. Therefore, individuals can have a very different experience of the same consultation process. Consequently, consultation needs to be carried out in an environment which is supportive to all. Public choice may not represent a real opportunity for all so there may need to be the option for private comments or suggestions.

### **13.2.3 A supportive PE environment: relationships with peers and Teachers**

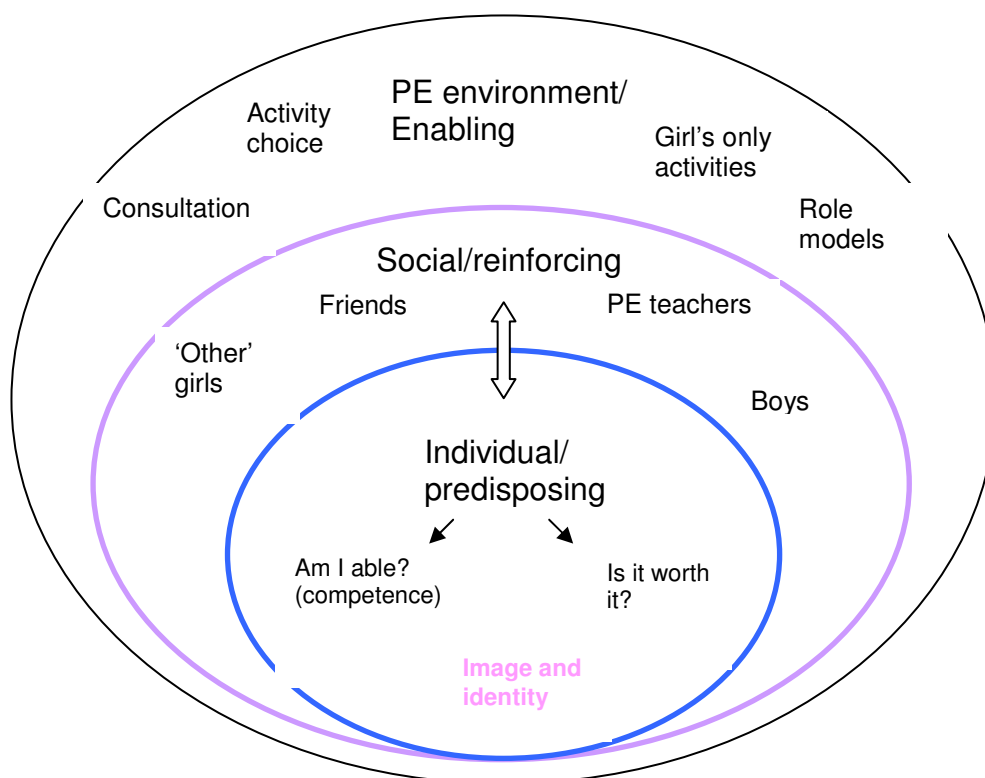
The major strength of this study was the longitudinal design, as this showcases how the girls' relationships developed and changed over time. Generally, as the girls got older they felt more comfortable talking to other girls and new friendships formed. By the time the girls reached the end of their fourth year, the final round of interviews indicated it was not as important to have friends in the PE class as in the earlier years. Indeed the recent HBSC Scotland Report (Currie *et al.* 2011) shows that the amount of time girls spend with friends out of school also decreases from age 13 to age 15, therefore suggesting girls may rely on friends' company less as they get older. Although there are likely to be a number of reasons for this decrease of time spent together, this may be partly due to maturational development. As girls become more confident in themselves this results in less need for peer approval. Developmental changes associated with maturation are likely to have played a large role in the changes in girls' behaviour and attitudes as many of the unfamiliar factors in the early secondary years became familiar over

time. Insecurities about ability may also have eased off after more exposure to activities and caring less about what others think.

Girls' relationships with their PE teachers also generally improved over time. Many girls felt the teachers treated them differently as they got older, reporting them to be less strict and more friendly. Through informal discussions with the PE staff, it was apparent that maturational changes in pupils were acknowledged by teachers, resulting in less disciplinary and authoritative teaching methods. This is evident in Sharon's story (Appendix H), with improvements in her relationships with teachers being critical to her shift in engagement. We therefore see the importance of relationships with the PE teacher for girls' engagement in the subject. In the cases where girls did not feel this relationship improved, they generally remained disengaged.

### **13.3 Welks (1999) YPAP model**

Since Welks' (1999) model is relatively new, it hasn't yet been applied to much youth physical activity research (Rowe *et al.* 2007; Dollman and Lewis, 2009; Chung and Chow, 2010). However, it is a promising theory for this purpose and was very relevant for understanding adolescent girls' motivations for behaviour and behaviour change in this thesis. Therefore, it is recommended for future work with adolescents in PA and PE settings. The diagram below (16.1) shows the important factors to come out of this thesis, within this framework, and also the interaction between the individual and social factors which affect engagement and experiences.



**Figure 13.1 Welks (1999) social ecological approach to understanding the factors in girls' engagement and experiences in the PE environment.**

An implicit premise of this model is that determinants of physical activity behaviour are likely to be context specific, which has clearly been illustrated in my research related to the PE environment. The importance of the local context was also shown with, for example, the girls' desire to play rugby in one case study school. Clearly practitioners delivering sport and PE need to take into account the wider socio-cultural influences which may entice girls' interest in certain activities/ sports and capitalise on these (rather than ignoring them). Indeed, back in Chapter 2, it was questioned whether the school PE environment is the right context for engaging adolescent girls. Following the results from this thesis this point is returned to.

As we have seen, the PE environment can be intimidating and upsetting for girls. However, I have shown that these issues can be

overcome for many girls, providing schools are able to provide a supportive PE environment for those who are disengaged or struggling with the subject. One main consideration should be allowing girls to work together in friendship groups in secondary school PE as this could provide a more supportive PE environment. PE teachers may benefit by capitalising on the strengths of girls' networks to enhance enjoyment and engagement. However, importantly, girls only PE classes are not always emotionally secure, with examples in my research showing that, along with support and encouragement, girls can also tease, marginalize and exclude their friends. If teachers are able to facilitate the inclusion, co-operation and motivation to participate and create a supportive PE environment which includes autonomy, competence and relatedness components, this will likely result in more positive PE experiences.

#### **13.4 Summary of findings and my contribution**

This thesis not only adds to the literature by investigating the barriers to girls' participation in PE, crucially it illustrates how the school environment can facilitate or inhibit girls' transitions from disengagement to engagement. This type of research has been advocated by others (Brooks and Magnusson, 2006) for addressing the decline in adolescent girls' physical activity levels. In addition, my methodology is unique by tracking the process of change in each selected disengaged girl. This furthers our understanding of how and why change may occur in different individuals and in four different PE contexts. Further, by identifying girls as disengaged through a questionnaire, rather than teacher selection, this thesis addresses the recognised limitation of only having 'well represented' pupils in the research. Thus providing in-depth accounts of disengaged girls PA and PE experiences. Ultimately, I believe my biggest contribution to the sport and exercise psychology and PE field is providing accounts that showed giving girls a voice was central to behaviour

change. Furthermore, highlighting PA programmes which demonstrate a change in girls' behaviour and attitudes is something which needs to be celebrated, As Florence cautions us, "*it is hard for people to change behaviours. It is even harder to change attitudes*" (1998, p. 140), therefore, capturing change in these girls is, without doubt, worth sharing and disseminating.

It is important to note that although my thesis has shown changes in disengaged girls across the four case study schools, it is unlikely that the changes in girls are due to the Fit for Girls programme alone. Consulting with the girls and offering a choice of activity were clearly important; however in one school this had been implemented previously and so cannot be attributed to the programme. Also, girls familiarity with the PE environment (including the teacher and peers) in addition to maturational and general transition stages, likely played a large part in the changes observed. Therefore, I contend that such changes in the girls are not solely attributed to the PA program, taking on board what Pettigrew (1995) notes: "*explanations of change are bound to be holistic and multifaceted*" (p. 94). He advises not to 'gloss over' or reduce the conditions of change to a single variable or grand theory:

*"The task is to explore the complex, haphazard, and often contradictory ways that change emerges and to construct a model that allows for an appreciation of conflicting rationalities, objectives and behaviours. There is an explicit recognition that change is multifaceted, involving political, cultural, incremental, environmental and structural as well as rational dimensions. Power, chance, opportunism and accident are as influential in shaping outcomes as are designs, negotiated agreements and master plans".* (p. 93).

As one of the aims of the programme was to make sustainable changes to how the schools deliver girls' PE and extra-curricular activities, it is hoped that the behaviour change in the girls will be maintained in the longer term. As shown in chapter 4, PA

interventions can increase activity levels in the short term. However, often these return to previous low active behaviour after the programme period (Gauvin *et al.* 2001). Consequently, an aspiration would be that the changes the schools made during this programme will be continued on with other year groups and embedded within their school development plan and curriculum. Finally, a recommendation would be for more work to be done which investigates the long- term effects of multi- component PA programmes, including PE classes, on later life physical activity as, to date, no such studies have been conducted (Slingerland, 2011).

### **13.5 Limitations and challenges**

Following on from the point above, although one of the main strengths of this thesis was the longitudinal design, due to timescale and funding of the three year PhD studentship, longitudinal data could only be collected over a two year period. Thus, while I have captured attitude and behaviour change in some of the girls, it is difficult to assess whether these changes will be long term. It would be of great value and interest to see if such changes are sustained in the girls following the secondary school years.

In addition, I am aware that my presence within the school and my relationship with the staff may have influenced the endorsement of the programme. The schools may have felt a sense of responsibility to deliver their proposed actions, as they knew I would be collecting data about their progress. Indeed, early on in the research, one case study school dropped out of the research and another was recruited a few months later. Apparently the school was worried about being 'in the spotlight' for girls participation in PE (or lack of). Thus, after the girls' baseline questionnaire data was collected they decided to withdraw. Recruiting another school in the same local authority and

catching up with the data collection was one of the main challenges in the first year.

It is also possible that my presence and my relationships with the staff and girls affected the data. For example, the teachers and the girls may have told me what they thought I wanted to hear. My involvement with a selected group of participants over a sustained period of time may also have led to a degree of subjectivity.

Finally, as with all small scale case study research, there are issues with generalisability and applicability of the findings. Thus, although several steps were taken to ensure trustworthiness of the data (as discussed in chapter 8) I recognise that there are methodological limitations in adopting such an approach.

### **13.3 Implications for practice and future PE curriculum**

The data from the girls indicated that the difference from the primary PE environment, compared to the secondary PE environment is significant in girls' experiences. This poses the question; what needs to be put in place to make transitions easier?

This thesis clearly indicates there needs to be more focus on building girls competence and confidence in primary PE to prepare them for the secondary PE environment. Since 2001, a programme 'Basic Moves' has been introduced in Scotland in an effort to improve levels of movement competence and focus on building core skills. Although this programme has become the catalyst for numerous curriculum, pedagogical and professional development initiatives (Penney and Jess, 2004), perhaps more work needs to be done with girls alone, to help them feel they are adequately prepared for the secondary PE environment. Some researchers have suggested that it could be a 'lack of fitness' which leads to low levels of ability in adolescents



(Boyle, 2008), in addition to PE teachers suggesting that there is a discernable difference in basic skill level between those who are active outside of school and those who are not (Boyle, 2008). Therefore, it is important that work is done to increase both skill and fitness in children to prepare them for lifelong PA. Vitally, work with girls to increase fitness and skills must be done in a way that is appropriate for this population. As we have seen in this thesis, fitness and skills testing may be psychologically damaging and embarrassing. Therefore, this should be done in a supportive environment with positive reinforcement from significant others.

Finally, Scottish policy and curriculum documentation indicates that PE teachers are to have an increasing role in health promotion (Scottish Executive, 2004b; 2006). My research indicates that PE teachers may have to adopt a broader view and understanding to tackle the issue of disengaged girls in the PE environment. Schools also need to adopt a girl-friendly approach, such as providing single-sex classes and consult about activity choice. In addition, physical educators should ensure the environment is emotionally safe and there is equity in opportunity for all students regardless of gender or skill level (Garcia, 1994). There are many wider influences which contribute to girls disengagement in PE. However, some of these can be addressed in the PE class to provide a more inclusive and enjoyable experience for girls. This study has shown the importance of the curriculum and activities on offer in Scottish schools. If policy makers are to tackle the decline in adolescent girls physical activity levels it is important that PE is delivered in a way which is more leisure orientated and cognisant of existing peer relations and friendship groups. Then such policies are more likely to “*work with the grain of young people’s pre-dispositions and interest, rather than work against them*” (Feinstein *et al.* 2006, p.324). Finally, based on the evidence presented in this thesis, the key finding is the

importance of consultation and allowing girls a voice. This is an essential step in facilitating the journey from disengagement to engagement and enabling girls to become more physically active.



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