Adolescent girls in physical education and sport: An analysis of influences on participation

by

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Being a dissertation submitted in fulfilment of the requirements for the Degree of Master of Applied Science

Faculty of Health and Behavioural Sciences

June 1999
I certify that the thesis entitled: **Adolescent girls in physical education and sport: An analysis of influences on participation**

submitted for the degree of: **Master of Applied Science**

is the result of my own research, except where otherwise acknowledged, and that this thesis in whole or in part has not been submitted for an award, including a higher degree, to any other university or institution.

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Abstract of Thesis

This study investigates the influences on participation in physical activity of thirty adolescent girls from a metropolitan secondary school in Victoria. It seeks to understand how they perceived, experienced and explained their involvement or non involvement in both competitive and non competitive physical activity during four years of their secondary schooling. Participants experienced physical education as both a single sex group in Years 7 and 9 and a coeducational group in Years 8 and 10. They were exposed to a predominantly competitive curriculum in Years 7 to 9 and a less structured, more social, recreational program in Year 10. These experiences enabled them to compare the differences between class structures and activity programs and identify the significant issues which impacted on their participation.

Large Australian population studies have revealed that fewer girls participated in sport and regular physical activity than boys. An important consequence is that girls miss out on the health benefits associated with participating in physical activity. Other research has found adolescence is the time that girls drop out of competitive sport. However, an important issue is whether girls who drop out of competitive sport cease to be involved in any physical activity. There are some studies which have reported good participation rates by adolescent girls in non competitive, recreational forms of physical activity and the possibility exists that they may drop out of competitive and into non competitive physical activity.

This study primarily utilises a qualitative approach in contrast to previous studies which have largely relied upon the use of surveys and questionnaires. Whilst quantitative research has provided useful information about the bigger picture, there are limitations caused by reliance on the researchers' own interpretations of the data. Additionally there is no opportunity for any clarification and explanation of findings and trends by the respondents themselves.
The current study utilised qualitative individual and collective interviews in three stages. Questions were asked in the broad areas of coeducation and single sex classes, preferences for competitive or recreational activity and body image issues. Some quantitative information focusing on nature and extent of current activity patterns was also gathered in the first stage. Thirty Year 10 girls participated in individual first interviews. Nine selected girls then took part in the second (individual) and third (collective) interview stages. Results revealed three groups based on the nature of physical activity involvement: [1] competitive activity group, [2] social activity group and [3] transition group. The transition group represented those who were in the process of withdrawing from competitive sport to take up more non-competitive, recreational activity.

The most significant difference between groups was skill level. On the whole those entering adolescence with the highest skill levels, such as those in the competitive group, were the most confident and relished competing against others. The social group was low in skill and confidence and had predominantly negative experiences in physical education and sport because their deficiencies were plainly visible to all. Similarly, a lack of skill improvement relative to those of ‘better performers’ affected the interest and confidence levels of those in the transition group.

Boys’ domination in coeducational classes through verbal and physical intimidation of the less competent and confident girls and exclusion of very competent girls was a major issue. Social and transition group members demonstrated compliance with boys’ power by hanging back and sitting out of competitive activities. Conversely, the competitive group resisted boy’s attempts to dominate but had to work hard to demonstrate their athletic capabilities in order to do so.

Body image issues such as the skimpy physical education and sport uniform along with body revealing activities such as swimming and gymnastics, heightened feelings of self-consciousness and embarrassment for most girls. When strategies were adopted by social and transition group members to avoid any body exposure or physical humiliation, participation levels were subsequently affected. However, where girls felt confident about
their physical abilities and body image, they were able to ignore their unflattering uniforms and thus participation was unaffected.

Specific teaching practices such as giving more attention to boys, for example by segregating the sexes in mixed classes to focus attention on boys, reinforced stereotypical notions of gender and contributed to the inequities for girls in physical education. The competitive group were frustrated with having to prove themselves as capable as boys in order to receive greater teacher attention. The transition group rejected teacher’s attempts to coerce them into participating in the inter school sports program. The social group believed that teachers viewed and treated them less favourably than others because of their limited skills.

Girls were not passive in the face of these obstacles. Rather than give up physical activity they disengaged from competitive sport and took up other forms of activity which they had the confidence to perform. These activity choices also reflected their expanding social interests such as spending time with male and female friends outside school and increased demands on their time by study and part time work commitments.

This study not only highlighted the diversity and complexity of attitudes and behaviours of girls towards physical activity but also demonstrated that they display agency in making conscious, sensible decisions about their physical activity choices.
Plain Language Summary of Thesis

**Adolescent girls in physical education and sport: An analysis of influences on participation**
by Julia Whitty
Submitted for the degree of Master of Applied Science
Deakin University
Supervisor: Dr Judy Ann Jones

This study investigates the influences on participation in physical activity of thirty adolescent girls from a metropolitan secondary school in Victoria in order to understand how girls’ perceived, experienced and explained their involvement or non-involvement in both competitive and non-competitive physical activity.

Qualitative individual and collective interviews were conducted. Questions focussed on attitudes about coeducation and single sex classes, preferences for competitive or recreational activity and feelings about body image. Some quantitative information about the nature and extent of current activity patterns was also gathered in the first stage. Thirty Year 10 girls participated in individual first interviews. Nine selected girls then took part in the second (individual) and third (collective) interview stages.

Results revealed three clearly different groups based on the nature of physical activity involvement (1) Competitive, (2) Social and (3) Transition (those in the process of withdrawing from competitive sport to take up more non-competitive, recreational activity). The major difference between groups was skill level. Those entering adolescence with the highest skill levels were more competent and confident in the coeducational and competitive sport setting. Other significant issues included boys’ domination, body image and teaching behaviours and practices.
Acknowledgments

There are several people I must thank for the support and encouragement that has been given to me in the preparation of this thesis.

Dr. Rob Sands for ‘getting me started’ and for his initial assistance with the topic and research.

Dr Judy Ann Jones, for her willingness to take on supervision of my thesis mid way through its development and for her support, guidance and attention to detail.

The thirty girls involved in the research, in particular the nine girls who provided several hours of their time to allow me to interview them and write detailed accounts of their experiences and attitudes.

My colleagues, Lynne Sheehan for her endless proof reading and her knowledge and advice in the area of girls in physical activity; Kate Palmer for her words of confidence and reassurance when ‘times got tough’, Lynne Evans for transcribing my interviews and Lois Martin who gave up her Easter to assist with some typing and formatting.

Finally, my brother Martin, housemates Liz and Cree and other close friends for their continued patience, encouragement and support throughout the process of completing this thesis.

Dedication

In memory of my mother, Stella Whitty, for her strength, support and unfaltering belief in me.
Chapter 1

Introduction

1.1 Background and rationale
This research focuses on adolescent girls' participation in physical education and sport during their secondary school years. It seeks to understand how they perceived, experienced and explained their involvement or non-involvement in competitive sport and non-competitive physical activity during four years of their secondary schooling.

In the last five years Australian federal and state governments have conducted large population surveys to map out the activity participation patterns of young Australians. Results have revealed that fewer girls were participating in sport and regular physical activity than boys (Booth, Macaskill, McLean, Phongsavan, Okely, Patterson, Wright, Bauman & Baur, 1997; Bauman, 1993; Department of Legal and Constitutional Affairs [DLCA] 1992; Australian Sports Commission, 1991a). Of particular interest to health, education and sporting organisations are findings which show that as many as 60% of girls drop out of organised sporting activity during adolescence (Chow & Fry, 1993; Department of Arts, Sport, Environment and Tourism [DASET], 1992; Junior Sports Unit, South Australia Sports Institute, 1992). However, initial reactions of concern from health organisations were based on the assumption that girls who drop out of competitive sport cease to be involved in any physical activity. In fact, smaller specific studies on Australian adolescent girls have reported good participation rates in other informal, “non sport” forms of physical activity. Findings revealed that girls enjoyed participating in physical activities that were socially rather than competitively oriented (Peggie, Lee, Gleeson & Rice, 1997; Wright 1996; Sparks & Webb, 1993).

School physical education and sport classes (compulsory for most Victorian students up to Year 10) have the potential to shape the future physical activity patterns of students. However, previous literature on the nature and structure of the secondary school physical education class has revealed barriers to participation for girls. In particular, the disadvantages and discrimination that girls experience in the co-educational physical education and sport setting have been widely documented. For example, boys’
aggressiveness and domination have been reported to affect the levels of enjoyment and participation by girls (Evans, 1993; Browne, 1992; Coakley & White, 1992). Further, sexuality and body image issues associated with mixed sex groupings have also been reported to negatively affect girls participation levels. These include physical harassment of girls by boys (Hargreaves, 1994) and the embarrassment associated with performing in front of boys (Kirk & Tinning, 1994; Coakley & White, 1992). In contrast, it has been suggested that single sex physical education classes are more conducive to girls' participation because of the more supportive, comfortable and less inhibiting environment created by and for girls (Hargreaves, 1994; MacDonald, 1989).

The dominance of competitive activities in the curriculum has also been found to represent a barrier to full participation in physical education by girls (Deem & Gilroy, 1998; Williams & Woodhouse, 1996; Sparks & Webb, 1993; Browne, 1992). The values of traditional male-oriented team sports with an emphasis on the competitive ethos, continue to be implemented in physical education programs in Australian secondary schools. This predominance of competitive team sports has been reported to affect the participation rates of adolescent girls. For example, Sparks & Webb (1993), in a survey involving four secondary schools in New South Wales, found that the majority of girls preferred to participate in recreational activities rather than the competitive team sports offered in physical education. A similar study by Browne (1992), reported that an over emphasis of competitive activity was one reason given by girls from eight government secondary schools for not selecting physical education as an elective study in year 12.

Fundamental to the rationale for this study are the health benefits for young women associated with participating in various forms of physical activity, including organised sport and informal activities such as walking, jogging and aerobics (Booth, Owen, Bauman & Gore, 1995). The physical benefits of regular, moderate physical activity include: a reduced risk of developing cardiovascular disease such as high blood pressure (Faggard, 1994; Wold & Anderssen, 1992) and diabetes (Helmrich, Ragland & Paffenbarger, 1994); reduced risk of lower back pain (DASETT, 1988); strengthened immune system (Shephard & Shek, 1994) and maintenance of healthy body weight and
composition (Bauman and Owen, 1991). Rowland (1996) provided evidence to support improved cardiovascular fitness by adolescent children participating in aerobic base activities. Additional research has shown that physical activity during childhood enhances bone density important for good bone health status in adulthood (Blair, Horton, Leon, Lee, Drinkwater, Dishman, Mackey & Kienholz, 1996; Gibbs, Naughton, Carlson, Wark & Morris, 1995). Psychological benefits of physical activity participation for girls include improved self esteem and confidence levels (Browne & Francis, 1993; Lirgg, 1992), more positive body image (Bauman, 1993; Stein & Motta, 1993), a greater ability to cope with stress (Caltabiano, 1995) and an improved sense of well-being (Robertson, 1992; McTeer & Curtis, 1990). Regular physical activity and sporting involvement have also been positively correlated to social benefits including increased self confidence in social situations, increased social contacts and improved quality of life (Lenskyj, 1995; Lirgg, 1992; Wankel & Berger, 1990).

Most of the Australian research which has investigated the activity patterns of adolescent girls in sport and physical education, has relied on quantitative methods such as surveys and questionnaires (Booth et al., 1997; Sparks & Webb, 1993; Bauman, 1993; Browne, 1992). These quantitative studies have provided useful factual information about the bigger picture. However, the exclusive use of quantitative data is limiting because causes and effects, changes and influences which are all situationally specific and variable, cannot be provided. Thus, information about influences affecting girls’ interest and involvement (or non involvement) in various physical activities could not be provided from these aforementioned quantitative studies.

Given my concern to examine the influences on and reasons for differing participation patterns of girls during adolescence and the meanings which individual girls attach to these differing physical activity experiences, the current empirical study adopts a triangulated approach to the research process. That is, the use of a dominant qualitative method in the form of individual and collective interviews enables the experiences of girls and their attitudes towards physical activity to be thoroughly investigated. Further, a small quantitative component in the form of factual information gathered in the first interview
stage provides the basis for validation and verification in the subsequent individual and collective interviews. The girls involved in the current study have experienced physical education as both a single sex (Years 7 and 9) and coeducational group (Years 8 and 10). They participated in a predominantly traditional competitive physical education program from Years 7 to 9 and a recreational, informal oriented program in Year 10. Their perceptions of how the differing social structures of the class and the varying nature of activities in the curricula have impacted on their interest and participation levels, will provide greater understanding of the issues and concerns for girls as participants in secondary school physical education. Further, identifying and understanding the significant issues will allow physical educators to address and minimise the perceived barriers to participation by girls.

Two previous studies provide a useful framework for the current empirical study. The first study by Luke and Sinclair (1991) was largely atheoretical and utilised a questionnaire to investigate gender differences in the attitudes of Canadian adolescents towards physical education. The second study, by Coakley and White (1992) used an interactionist approach and qualitative interview methods to explore the decision making processes of British adolescents with regard to their sports participation. Both studies have provided insight into the factors influencing the participation of adolescents in physical education and sport, and will be discussed in more detail in chapter 2.

Chapter 2 provides a review of previous literature. Adolescent female and male physical activity participation rates and benefits are discussed. This is followed by a review of the issues known to affect girls’ physical activity participation - the family, class social structure, curricula content and body image. The chapter concludes with the theoretical framework and the aims for the study.

Chapter 3 provides a detailed overview of the research procedures. The advantages of utilising qualitative and quantitative methods in the one study are outlined and a systematic account of the three stages of interviews provided.
Chapter 4 combines the results and discussion and begins with a review of the three emergent groups. The subsequent sections report on the issues that significantly impacted on girls' participation, firstly that were common to all girls and secondly that were distinct for each group.

Chapters 5 provides a summary of major findings, implications of the findings and possibilities for future research.

In summary, given the evidence that there are physical, psychological and social benefits from regular physical activity participation, it must be recognised that a low participation rate by girls is very likely to have negative implications for their overall physical health and well being, including body image and self-esteem. The current empirical study, involving individual and collective interview methods, encourages girls to reflect on and interpret their physical activity patterns during adolescence. In particular, the impact of the class social structure and curricula content on girls' participation in physical education and sport will be examined. Further, the issue of whether girls who drop out of competitive sport during adolescence necessarily become physically inactive will be investigated. Thus, the key objective of this study is to examine the way in which girls come to understand and define their ongoing, decreasing or non involvement in physical education, sport and other physical activity.

1.2 An autobiographical note
An intense personal commitment and substantial experience provided the initial impetus to research the area I have chosen. First, having completed a Bachelor of Education degree in physical education, I subsequently taught physical education at a private secondary coeducational school for six years, three of these as head of the physical education department. Prior to this I had considerable experience as a pupil of physical education at the same school and a physical education student at teachers college. Whilst teaching physical education to girls as a single sex group for the first three years, it was disconcerting to both observe and receive feedback from many girls about their loss of interest and decreased participation in physical education and sport as they progressed
through secondary school. These observations became of particular concern during the final three years as a result of the school becoming fully coeducational and having mixed physical education classes. This stimulated my interest in exploring the girls' perceptions about the type of activities in the physical education and sport curricula (which predominantly consisted of competitive team games and sports), their attitudes about single sex and mixed physical education classes and the impact of these factors on their participation in physical education and sport.

My student and teaching experiences coincided with my experiences within the sport of netball. I became interested in why some adolescent girls continued and why others discontinued their netball involvement. My repeated impression was that other factors, in addition to playing skill, were at work. At the community, school and state levels, it became apparent that the pressures exerted on girls (from parents, coaches, teachers, peers and themselves), to perform well and 'make the grade' as they moved up the competitive ladder can be detrimental to the enjoyment and participation for many. Further, the shift in emphasis from 'fun' and 'participation' at the school and community level, to 'competition' and 'winning' at the elite level, can impact on continuing involvement.

A final factor, the development of a feminist perspective, also stimulated interest in this study of adolescent girls in physical education and sport. An increasing awareness of feminist literature and debates on issues of social justice encouraged a critical self-evaluation as a physical education teacher and as a Netball coach. I have developed a greater understanding of the importance of the social and cultural construction of gender in the teaching of girls' physical education and have become more sensitive to issues relating to sexism and gender relations. More importantly, I have developed a concern with raising girls' awareness of inequalities and the ways they can take action to change their status. This was reflected in my support for girls who lobbied for shorts to become part of the uniform when the school became fully coeducational. In short, I have begun to evaluate, from a feminist perspective, the ways in which content, structure and teaching practice impact on the level of enjoyment and participation in physical education and sport by girls.
1.3 Limitations and delimitations

The current study is confined to 30 girls enrolled in two Year 10 coeducational physical education classes in 1994 at a Catholic secondary school in the eastern suburbs of Melbourne, south east Australia. The small sample size represents a limitation and thus the findings from the current study cannot be generalised to other adolescent girls with similar capacities and interests.

These girls were selected from the 120 female students from the same year level who experienced single sex physical education in Years 7 and 9 and coeducational physical education in Years 8 and 10. For ease of access I invited the 15 female students aged 14 - 15 from each of my two Year 10 coeducational, physical education classes (n=30) to take part. Hence, they are not representative of the wider school population or of girls outside the school.

The effect of my dual roles, as teacher and interviewer, may also be perceived as a limitation. Girls’ interview responses about their activity preferences and participation patterns may be influenced by what they think a physical education teacher and sports enthusiast might like to hear. Further, girls may be reluctant to reveal their true feelings and attitudes because of fear of being judged. However, having known and taught the girls for four years had enabled me to develop a good rapport with them. It allowed me to establish a comfortable, non threatening environment in which they felt at ease to be open and honest and reduced the limiting effect of my teaching role.
Chapter 2

Literature Review

This chapter begins with consideration of adolescent girls' rates of physical activity participation compared to boys and relates participation to a broad range of health benefits. After that, the influences of the family, class social structure, curricula content and then body image issues will be reviewed. Finally, reasons as to why girls might prefer informal rather than structured activity will be considered.

2.1  Established patterns of physical activity for adolescent girls

2.1.1 Boys more physically active than girls

Physical activity is important during children's growing years to maintain normal growth and development (Fogel & Woods, 1995). However, various Westernised lifestyle factors including compulsory schooling from the age of 5 to 16, the shift from bicycles to automobiles during teenage years and increased computer technology, restrict the amount of free time for children and adolescents to be physically active (Kemper, 1994).

Epidemiological surveys on adolescent populations conducted in America and Canada have revealed greater physical activity levels in males compared to females (Casperson, Merritt & Stephens, 1994; Sallis & Patrick, 1994). Rowland (1990) illustrated that spontaneous physical activity diminishes rapidly between 6 and 16 years of age by almost 50% for both American boys and girls. However, results also revealed that from about the age of 6, boys were 10% more active than girls, and this continues through to 14 years of age. Similarly in Canada, females decreased their activity level from 49% for those aged between 7 to 14 years and 39% for those aged 15 to 19 years to 26% for those aged 20 to 24 years. The pattern of decreasing activity for females begins in adolescence and continues after high school age, whereas males show a decline only after reaching college age (Stephens & Craig, 1990).

Previous epidemiological studies on the physical activity levels of young Australians have revealed that fewer girls than boys participated in sport and other physical activities (DLCA, 1992, Australian Sports Commission, 1991b). Further, it was reported that as many as 60% of girls drop out of sporting activity during adolescence (DASET, 1992).
The Australian Sports Commission's (A.S.C) nationwide 1991 survey on the attitudes to sport of 1700 male and female adolescents, revealed that 36% of those surveyed were not participating in organised sporting activities. Although as many girls as boys in the 13 to 18 year old age bracket were represented in the 64% who played sport, the opportunities for girls' sports participation were more restricted. Girls predominantly participated in the few sports considered traditionally female while boys participated in the greater range of traditional male sports which also usually have larger team sizes. Hence, traditional sport is more accommodating of boys than girls because of more sports and bigger teams. Therefore, playing opportunity is greater for boys. These results were compounded by the fact that girls still perceived sport as a 'boys' game. This perception, it was concluded, was largely socially learned and reinforced by stereotypical expectations in a society which was conditioned to promote sports that are predominantly played by men (A.S.C, 1991a). It should be noted that the Australian Sports Commission naturally has a focus on competitive sport. However, to obtain health benefits, physical activity does not have to be competitive. It can be social, for example, and involve lifestyle activities such as walking, jogging, cycling and aerobics.

A 1992 population based survey of 4550 adolescents aged 11, 13 and 15 years living in New South Wales, confirmed earlier findings that girls were less likely than boys to participate in 'regular vigorous activity' and that regular participation declined in girls with increasing age (Bauman, Young & Nutbeam, 1993). 'Regular vigorous activity' was defined as any activity that was "vigorou enough to make you sweat or breathless" and of "at least 20 minutes duration". Although a qualitative analysis was not included in the study by Bauman et al., it was suggested that body image factors and peer group pressure may have been perceived by girls as important additional barriers to participation.

These epidemiological studies have identified lack of physical activity participation by girls as a problem area and helps justify the use of girls only, rather than girls and boys, as participants in the current study. A critical question is why girls' lower regular physical activity participation rates matter. The answer lies in the substantiated and broad health benefits which regular physical activity can provide.
2.2 Benefits of exercise participation for girls

It is well established that physical activity during childhood is important for the maintenance of normal growth and development (Bar-Or 1994). However, the advancement of technology and the mechanisation of work and leisure in recent times has raised concerns about the physical activity levels of our children. Health educators and professionals are asking whether “children and adolescents now get the physical activity required for healthy development” (Kemper, 1994, p. 293). The benefits of physical activity participation are interrelated but can be discussed under three broad headings - physical, psychological and social. These benefits, briefly mentioned in the introduction and some of which specifically pertain to girls, will be outlined in the following sections.

2.2.1 Physical benefits of physical activity

The physical benefits of participating in moderate levels of regular aerobic activity have been internationally documented. In fact, with cardiovascular disease the leading cause of death in countries such as America, Canada and Australia, much international research has focused on the benefits of exercise in reducing the risks of cardiovascular disease (Fagard & Tipton, 1994). In brief, American research has shown that more active people develop less Coronary Heart Disease (CHD) than their inactive counterparts, and when they do develop CHD, it occurs at a later age and tends to be less severe (Berlin & Colditz, 1990). Further, exercise can reduce the risk of cardiovascular disease by directly affecting the heart muscle, improving vasculature of the skeletal muscle and lowering blood pressure (Leon, 1997). An improvement in other coronary risk factors from exercise such as weight, blood lipids, and glucose tolerance has also been reported (Helmrich, Ragland & Paffenbarger, 1994).

Haskell (1997) states that many of the above benefits are achieved at exercise intensities that are well within the capacity of most people (children and adults) and adds that the cardiovascular risks of health-oriented exercise are minimal. Haskell also suggested that “no credits or advantages appear to be gained from being more active earlier in life” (p. 20). However, a previous American study revealed significant differences in the blood pressure of adolescents in relation to aerobic fitness (Harshfield, Dupaul, Alpert,
Christman, Willey, Murphy & Somers, 1990). That is, sedentary African American adolescents had significantly higher blood pressures (hence greater risk of developing cardiovascular disease), than active African American and White American adolescents. An intervention study on the same group conducted by Danforth, Allen, Fitterling, Farrar, Brown and Drabman (1990), reported that a 12-week program of regular aerobic physical activity resulted in significant reductions in both systolic and diastolic blood pressure in the sedentary African American group. This further supports the notion that exercise and regular physical activity should be ongoing with good activity habits being initiated during childhood and continued into adulthood.

Exercise physiologist, Christine Wells (1992), reported specifically on the health issues related to physical inactivity of American women. Although there has been limited research on girls and women, there is evidence to suggest that the sedentary lifestyle of many women contributes to problems of obesity and associated conditions such as hypertension, diabetes and excess cancers (President’s Council on Physical Fitness and Sports, 1989). Wells and others (Leon, 1997) call for greater research on the effects of exercise on women, and particularly on health related aspects of exercise.

Additional longer term physical benefits of regular, moderate physical activity include: strengthened immune system (Shephard & Shek, 1994), enhanced bone and muscle development and delayed onset of osteoporosis (Blair et al., 1996; Welten, 1994), control of diabetes (Bouchard, 1997), improved muscle flexibility, strength and endurance (Participation Division, Australian Sports Commission, 1997) and maintenance of a healthy body weight and composition (Bauman & Owen, 1991). Regular physical activity has also been shown to assist in the prevention and rehabilitation of lower back pain which results in a reduced quality of life (DASET, 1988).

Specific Australian research has demonstrated various physical fitness benefits associated with well structured and controlled physical activity programs for children and adolescents (Birchall, Carlson, & Naughton, 1995; Gibbs et al., 1995). Within these studies improvements have been shown in aerobic fitness, upper body strength and bone density.
Rowland (1996) provided evidence that both pre-adolescent and adolescent children have an improved cardiovascular fitness from training in aerobic based activities. Further, Carlson and Naughton (1996), demonstrated an interest in the area of critical periods of activity during childhood development and the links to healthy, physical activity choices in adulthood. Acknowledging that there is a "lack of sound epidemiological and longitudinal research in this area" they refer to "an emerging and significant body of knowledge indicating childhood as a critical period for physical activity in the bone health status acquired during a lifetime" (Carlson & Naughton, 1996, p.41). Bar-Or (1994) also focussed on the long term benefits of physical activity and reiterated that while the clinical end points of diseases such as cardiovascular disease and osteoporosis become manifest in adulthood, their development is seated in childhood. This adds further support to the importance of fostering good physical activity habits of children during their growing years.

2.2.2 Psychological and social benefits of physical activity

Regular physical activity and sporting involvement have also been positively correlated to psychological benefits including increased self esteem and self confidence (Browne & Francis, 1993; Lirgg, 1992; Feltz & Riessinger, 1990), a more positive self image (Bauman, 1993; Stein & Motta, 1993) and a greater ability to cope with stress (Caltabiano, 1995). Further, Lirgg (1992) specifically reports on research with females from fourth grade to adulthood which has identified positive relationships between self confidence and participation in both sport (Eccles & Harold; 1991) and exercise classes (Poag & McAuley, 1991; McAuley & Rowney, 1990). Additional research has also revealed that adolescent girls’ activity participation was associated with higher self esteem, more positive self concept and a greater sense of self-mastery (Fejgin, 1994; Marsh, 1993; Dyer, 1989).

Individual social benefits of physical activity participation include; increased self confidence and awareness, increased enjoyment of exercise and social contacts and improved quality of life (Wankel & Berger, 1990). A recent German study has also found that students who are involved in sport tend to perform as well as or better academically
than less active students, even though academic curriculum time may be reduced (Kaminski & Ruoff, 1996).

Earlier studies have reported on the varying social and psychological differences of female athletes compared to female non-athletes. The studies show that female athletes are more dominant, achievement-motivated and independent than non-athletes (Duda, 1989). Moreover, female athletes consciously relate aspects of good health to physical activity. For example, the typical female athlete was revealed to perceive her athletic participation as contributing to her confidence, a positive body image, higher energy levels, better health and a general sense of well-being (Lirgg, 1992). A more recent study of American male and female adolescents revealed that physically active adolescents tended to feel less lonely, shy and hopeless than did their less physically active peers (Page & Tucker, 1994).

Despite these benefits of exercising regularly, the relatively low activity participation patterns of Australian adolescent girls continues to be widely documented in the literature (DASET, 1992; DLCA, 1992, Australian Sports Commission, 1991b). Also reported in the literature are research findings which reveal that girls exhibit lower activity self-esteem and self-confidence, more negative self-concepts and more critical body images than boys (Lirgg, 1992; Jones, Swain & Cale, 1991) and have lower expectations of success at sport than similar aged males (White & Duda, 1994). These findings, along with contemporary Australian research which reveals a decline in physical activity and sports participation by girls during adolescence (Chow & Fry, 1993; DLCA, 1992), may be of particular concern given the view that the "school age years represent a critical period in the development of physical activity habits carried over into adult life" (Wold & Anderssen, 1992, p.344).

2.3 Influences of family on girls' participation
A review of the literature on children in sport indicates that parents and siblings significantly influence girls' (and boys), initial and ongoing participation in competitive sport and other forms of physical activity such as swimming, walking and jogging (Duda, 1997; Biddle & Goudas, 1996; Taylor, Baranowski & Sallis, 1994; Wood & Abernethy,
1991). The following section outlines the various ways that families can influence girls’ physical activity.

Positive correlations have been reported between parental participation in physical activity and children’s activity participation (Sallis & Hovell, 1990) as well as adolescent’s participation (Anderssen & Wold, 1992). Taylor et al., (1994) report on American literature that suggests that most parents are not physically active but that active parents are more likely to exercise with their children. Further, Anderssen and Wold (1992) reported that parental exercise was related to overall frequency of exercise in adolescents.

Most children and adolescents are dependent on the financial and emotional support of their parents and families for their continuing involvement in sport and other physical activity (Kirk, Burke, Carlson, Davis, Glover & O’Connor 1996; Taylor et al., 1994). Parents directly support children’s involvement through payment of membership and participation fees as well as the purchase of specific sports attire and equipment (Taylor et al., 1994). Sallis, Alcaraz, McKenzie, Hovell, Kolody and Nader (1992) found that parental transportation to and from activity venues was the parent behaviour most consistently correlated with children’s physical activity. Further, Coakley and White (1992) found that parental support in terms of money and transportation was especially crucial for young women because they were much more likely than adolescent males to have less flexible expectations about away-from home activities. That is, parents were perceived as being more protective of their daughters than their sons and hence girls’ leisure activity choices were more restricted. For example, special arrangements had to be made with family and friends if activities required girls to be out after dark. These expectations led many of the female respondents to reconsider their leisure activity and sports commitments.

Parents may also exert a direct influence over children’s physical activity through encouragement, prompting and pressure. For example, Epstein, Smith, Vara and Rodefer (1991) revealed that parental prompts for children to play outdoors rather than watch television or play video games, increased children’s level of physical activity. Similarly,
Anderssen and Wold (1992) found that parental encouragement was an important correlate of adolescents’ physical activity. More recently, Biddle and Goudas (1996) found parental encouragement related to more positive exercise intentions and actual physical activity engagement of British adolescents.

In 1995-96, the Australian Sports Commission funded a study to investigate the social and economic impact on family life of children’s participation in sport. Two hundred and twenty families in Queensland and Victoria were surveyed and another 27 families were interviewed from various sports such as netball, cricket and tennis. Consistent with previous studies, findings indicated that families make a substantial contribution to supporting children’s involvement in junior sport financially, emotionally and through commitment of their time. In addition, parents make a significant contribution through their work as volunteers as administrators, coaches and fund raisers for local clubs and associations to which their children are affiliated (Kirk et al., 1996).

Thus, evidence suggests that families positively influence children’s involvement in sport and physical activity through parental activity participation, financial and emotional support, time and effort such as transportation and volunteer work and through encouragement and prompting. Where this support is not forthcoming, children are more likely to be physically inactive.

2.4 Barriers to girls' participation in physical education and sport

The social environment of the classroom and the activities included in (or excluded from) the physical education curriculum can affect levels of enjoyment and participation for girls. Three areas which have been particularly reported as representing either environmental or structural barriers to participation for girls in school physical education and sport are; coeducation and boys’ dominance of activity space, competitive nature of curricula activities and body image factors. A review of the literature in each of these three areas follows.
2.4.1 Use of activity spaces

Previous research in Australian secondary schools has shown that girls in coeducational schools and classes were disadvantaged in terms of space, equipment and facilities in sport and physical education (James, 1996; Australian Education Council, 1992; Browne, 1992). The Australian Education Council reported that in many schools, groups of boys establish and maintain advantageous access to playground space, relegating to girls the use of whatever remains. Further, in some schools girls are forced to retreat to the toilets to establish a ‘girls only’ space. Additional data collected by the Australian Sports Commission (1991a), reinforced previous research by Dyer (1989) and Sampson (1991) that girls had fewer opportunities for sport involvement, were provided with less space, facilities and equipment in schools, and had more restricted access to sport compared to boys.

The Australian Sports Commission reported on the ways in which children’s own construction of gender in the playground disadvantage girls in terms of space allocation.

In terms of physical activity the ‘rules’ often disadvantage girls, who end up occupying the periphery of the open space and are frequently intimidated by boys should they venture into ‘male’ areas” (Australian sports Commission, Active Girls Campaign, 1991b card 8).

A number of equal access strategies such as assigning boys’ days and girls’ days for particular areas of the playground and for borrowing sports equipment were suggested to address this resource issue.

In their qualitative study of sport participation among 60 British adolescents, Coakley and White (1992) found that limited access for girls to sporting facilities at school was viewed as a barrier to participation by some. One 15 year old school girl remarked that if “girls were supposed to play sports at her school, they should not have been assigned a gym so small that they couldn't play any active games” (p.27). She was aware and critical of the fact that boys were allocated a larger gym for physical education and sport and concluded that “the physical education teacher had not taken young women seriously enough as sports people to give them an equal share of the sports facilities and resources at the
school" (p.27). Although this young woman challenged the allocation of space, it is likely that other girls accepted the message that boys' sports needs had priority.

More recently, James (1996), used a questionnaire to explore the relationship between perceived ownership of recreational space and the physical activity levels of 276 Year 10 girls from ten different schools in Western Australia. One of the major findings was the alienation from recreational space by girls. Many girls avoided school active areas and perceived these areas to be for boys more so than girls. Girls generally felt self-conscious using the 'active areas' of the school basketball courts, public swimming pool and school gyms with some stating that they would use these areas more if boys were not around. In addition, many of these girls feared intimidation, rough play or exclusion when they tried to play mixed games. Forty four percent of girls were in favour of having "girls only" and "boys only" times for using the school active areas during free time (James, 1996).

The evidence therefore suggests that girls do not perceive that they have an equal share, with boys, of formal sports space, and that they are discouraged and even intimidated by boys when using such space.

2.4.2 Influences of gender composition of classes on girls' participation

A National inquiry into 'Equal Opportunity and Equal Status for Women in Australia' in 1992, led to the development of a National Action Plan for the Education of Girls (Australian Education Council, 1992). One of eight new educational policies from this national initiative involved reforming the curriculum to provide "access for girls to all areas of the curriculum, and establish the skills and confidence necessary to utilise this access" (Australian Education Council, 1992, p.22). Responding to this national directive, most Australian secondary schools have moved to adopt a common physical education and sporting curriculum for boys and girls. However, some schools implemented the equal opportunity policies by continuing to run their classes as single sex groups while others have adopted a coeducational approach. There has been considerable debate over whether the single-sex or coeducational class provides the most equitable environment for the teaching of physical education and for the potential of girls to enjoy ongoing involvement
in physical activity. The advantages and disadvantages of mixed and single-sexed classes for girls have been documented in the literature. The following represents an overview of the arguments for and against coeducational physical education classes for girls.

Advocates of mixed sex groupings in physical education initially believed that coeducation would ensure equal opportunities for girls in all areas of the curriculum (Talbot, 1993, 1991; Browne, 1992; Scraton, 1990b, 1992) because girls would have equal exposure to all sports including those that have been traditionally regarded as 'male' sports and largely taught to males in sex segregated classes. However, Browne (1992) and Scraton (1992) cautioned that this 'equal access' provision would not easily overcome the stereotypical notions of 'masculinity' and 'femininity' associated with differing role expectations for males and females. They argued that these notions are socially and culturally constructed and may be reinforced and perpetuated in sex segregated physical education. Further, arguments for coeducation included physical and social benefits for girls; for example, coeducation was heralded as advantageous to 'some' girls (that is, the more proficient girls) because the better competition provided a greater challenge for girls to realise their full potential and thus improve their physical skill level (Browne, 1992; MacDonald, 1989). Browne further noted that from a social perspective, coeducation was claimed to improve acceptance and understanding between the sexes by encouraging communication and co-operation when boys and girls work together as team members. In summary, proponents of coeducation argued that it would provide access to a greater range of activities, provide more challenge for gifted girls, and improve cooperation and communication between the sexes.

On the other hand, critics of mixed sex physical education classes identified the overriding disadvantages for girls. Coeducation, it was claimed, was simply an invitation for girls to participate in the physical education of boys (Evans, 1989; Vertinsky, 1992). 'Equal access' to all activities and sports could not be equated with 'equal opportunity'. "We opened the doors", so the argument goes, "so why didn't they come in?" (Lenskyj, 1993, p.2). While the more proficient girls could participate, the less skilful majority were often excluded by boys who dominate team sport games and activities, along with teacher
attention (Evans, 1993; Lenskyj, 1993; Browne, 1992; Scraton, 1992). Vertinsky (1992) added "insufficient attention had been paid to the obvious fact that boys and girls differed in their sporting capacities, interests and previous experiences" (p.378). Ignoring gender and allowing equal access to a curriculum that was male-centred and strongly gendered only exacerbated rather than dissipated differences between the sexes, and thus created hostility and reinforced students and teachers stereotypical attitudes (Evans, 1989).

Lenskyj (1993, 1990) has been influential in her writings about the disadvantages for girls in physical education and sport in Canada. She raised concerns about the notion of a 'compulsory heterosexuality' which, she argued, was emphasised more in a coeducational setting, particularly during adolescence. Both Browne (1992) and Scraton (1992) reiterated these concerns in their respective research on Australian and British adolescent girls. They suggested that girls quickly learn a female physicality during adolescence and in a coeducational situation, many girls have been found to demonstrate nonassertive behaviour characterised by hanging back and sitting out during competitive team sport activities.

Teaching strategies proposed in feminist pedagogy have taken on an affirmative action or 'girl friendly' approach to the teaching of physical education for girls. Such an approach relies on single-sex classes which may be seen as opportunity (if only short term), to compensate for the disadvantages accruing from earlier sex role stereotypes (MacDonald, 1989). Hargreaves (1990), noted the advantages of separate playing areas for girls which (for some) provided:

the only setting for them to gain confidence and enjoyment in their sporting bodies. Closed space for women (and girls) removes fears of harassment, ridicule and inhibition which they might experience in mixed groups and affords important opportunities for female bonding (p.293).

Evans (1989) supported the concept of separating students on the basis of gender or ability in physical education as a legitimate short term means for achieving long term interactive goals.
MacDonald (1989), also duly noted that decisions to introduce single sex or mixed sex physical education classes in schools (which have largely been based on time-table and curriculum restrictions) have failed to 'take a systematic account of the attitudes of the pupils'. In an effort to consider student perspectives, MacDonald used a 35 item questionnaire on 400 students from five Queensland high schools to reveal their perceptions and attitudes to physical education programs and groupings. In particular, MacDonald focused on students' preferred activity groupings. Approximately 56% of both male and female students enjoyed the mixed sex rather than single sex physical education classes. A majority of females felt 'relatively happy' to perform with boys, except in gymnastics. Interestingly, while the majority of girls indicated that the mixed setting was more fun, they favoured many of the activities listed being taught to all girls groups. Whilst it was McDonald's intention to consider student perspectives, this could not be achieved in any real depth using a questionnaire method. Whilst details of the data analysis was not provided, it was clear that results could only provide a global and complex picture of students attitudes to class groupings. In order to better understand how students think and feel and the reasons for behaving the way they do, more qualitative research techniques need to be employed.

Although researchers have presented arguments to justify their individual preference for either coeducational or single-sex groupings, there is recognition that both environments can have positive and negative effects for girls. In short, the arguments advanced against coeducation emphasise the power of the gendering of physical education by the way in which the curricula content, teaching methods and behaviours and social values were differentiated between the sexes and which largely served to disadvantage girls. The arguments against single sex classes emphasise the inequality of access for girls to all sports and activities, limited opportunity and challenge for talented girls and lack of opportunity to foster cooperation and communication between the sexes.

2.5 Influences of physical education and sport curricula on girls' participation
Much of the literature on the effect of gender differences in motivation to participate in physical education and sport has focused on the competitive versus recreational nature of
activity. In particular, previous research has reported that girls tend to be more motivated to participate in physical activity for social reasons while males demonstrate greater motives for competition and winning (Williams & Woodhouse, 1996; White & Duda, 1994; Rykman & Hamel, 1992). These findings are consistent with Australian research which has reported that female adolescents prefer to participate in activities with a social and recreational emphasis rather than competitive activities and team sports (Sparks & Webb, 1993; Clough et al., 1992; James, 1993).

Williams and Woodhouse (1996) surveyed approximately 3000 British adolescents from nine urban coeducational schools about their perceptions of physical education and sport. Results indicated that the social and fitness aspects were primary motives for participation for female students while competition and challenge were strongest among the male students. More specifically, 74% of boys compared to 29% of girls preferred to participate in the winter team games. Conversely, 49% of girls compared to 9% of boys enjoyed dance as an activity. Similar figures were quoted with regards to perceived ability levels by boys and girls for these activities. With regard to physical activity participation outside of school, competitive team games such as soccer, cricket and basketball dominated boys' preferences while girls' choices were broader and included non competitive activities such as swimming, walking and tennis.

Findings from a 1992 survey of the general activity participation patterns of primary and secondary school students in the Australian Capital Territory revealed low participation rates for adolescent girls in school and community sport (Clough et al., 1992). However, when asked to list favoured leisure activities, some of those reported were informal, social physical activities such as bicycle riding, swimming and skating. It appears that a clear definition of "sport" and "sporting activities" was not provided in this large population study and hence reporting of actual physical activity participation may have been neglected. For instance, Clough et al. (1992) noted that whilst girls ranked "sport" alongside "being with friends" as their favoured leisure activity, actual participation in representative school sport and community sports clubs was low. Perhaps the girls'
definition of "sport" was not specifically restricted to competitive organised sports associated with school teams and community clubs but included informal activity as well.

A similar Sydney based study by Sparks and Webb (1993), on the physical education and sport interests of girls in their final year of high school, revealed there was greater participation by girls in individual activities than traditional team games. Sparks and Webb noted a considerable gap between what was being offered in the physical education and sports curriculum and what girls actually preferred to participate in. They concluded that girls would participate in exercise if they had activities they enjoyed and were motivated to do.

Gray, Sutherland and Yang (1993) conducted a study at a coeducational high school in Sydney on the level and type of participation in sport of girls aged 14-15. [This study was part of a major research project investigating the influence of selected cognitive, affective and demographic variables upon the level and type of participation in sport of 2000 girls.] Results from this one school indicated that all 98 girls played sport at school but almost 62% did not participate in any sport outside of school. Only 16% played sport with a club outside of school. Interestingly, the girls had positive perceptions of their level of sports participation and competence and believed they would continue their involvement at school in order to maintain health and fitness (Gray et al., 1993). This finding could suggest, that an incompatibility exists between the researchers’ and respondents’ definition of the term ‘sport’. Thus, conclusions suggesting that girls are not involved or interested in varying forms of physical activity, informal or organised, may not be entirely accurate.

Gray et al., (1993) report further on the nature and organisation of the school's physical education and sports programs and revealed that the school had adopted specific policies and practices to encourage and promote active participation by girls. Some of these practices included: single sex groupings which were success oriented, discontinuation of inter school competition (in which only a few highly competent students participated), the inclusion of a variety of gender inclusive activities and sports, and the introduction of
interschool 'Gala Days' where the emphasis was on fun and participation. The support of both school staff and administration were also integral factors in the success of the program. Gray et al., (1993) added,

Participation, enjoyment and competence in sport activities for all students became a priority...In this regard, staff have made a concerted effort to convince girls that 'sport is not just a boys game' where they have no place to be. That the girls have begun to see themselves as active, competent and entitled to be involved is evident from the findings of this case study. (p.5)

Whether this school was atypical compared to the other schools included in the major study remained to be explored. However, it provided an example of a successful attempt to address a significant educational and social issue for the benefit of girls by de-emphasising competition and emphasising social aspects.

Teacher behaviour in the coeducational environment has been reported to negatively affect girls' participation in physical education and sport. For example, in Luke and Sinclair's 1991 study of 488 Canadian adolescents' attitudes towards physical education, the teacher was identified as the second-ranked determinant of negative attitudes by males and females. Approximately 32% of negative statements concerned the teacher, the highest percentage emerging from female students choosing not to take physical education after Year 10. Although a detailed discussion of specific teacher behaviours was not provided, the four behaviours viewed most negatively were: methods of evaluation (based on fitness level only or one off skills tests), autocratic teaching style (the lack of opportunity to take part in decision making and always being told exactly what to do), lack of fairness in the coeducational situation and unfavourable personal qualities.

MacDonald (1989), focussed on teacher behaviour and preferred sex of teacher in her Australian study on students perceptions of physical education programs and groupings. She commented, "how the pupils feel about the classroom climate and their teachers' equitable or truly coeducational behaviour in physical education should inform the grouping decision" (p. 4). A greater percentage of males (50% compared to 29%) and females (61% compared to 24%) agreed that female physical education teachers were
more encouraging than male teachers if you were not very good at an activity. Further, 70% of girls from single sex classes expressed greater confidence in and satisfaction with the attention received from female teachers. The girls in mixed sex classes did not report receiving the same quality of attention from female teachers.

It is clear from the research that many girls primarily prefer to participate in physical activity and sport for social, health and recreational reasons rather than for the competition. Specific teacher behaviours such as autocratic teaching style and lack of fairness in the mixed setting were reported to negatively affect girls’ participation in the physical education setting. Further, female teachers were reported to be more encouraging than their male counterparts. Given the strong evidence above that girls have different needs in sport and physical education, it is anticipated that the current study will give insights into these needs and how they can be met.

2.6 The influences of body image factors on girls' participation

Previous literature has suggested that the physical changes of body size and shape during adolescence are likely to exacerbate body dissatisfaction in adolescent girls which may be influential in activity choice and frequency of involvement (Crossen & Raymore, 1997; Garrett, 1996; James, 1996; Malaxos & Wedgewood, 1996; Coakley & White, 1992). This is consistent with previous Australian research by O’Dea (1994), Huon, Morris and Brown (1990) and Tiggemann and Pennington (1990) which found that adolescent females expressed greater body dissatisfaction as compared to males; they rated their current size as larger than the ideal and tended to underestimate the size of the female body that boys rated as attractive.

According to Furnham & Humewright (1992) and Nagel and Jones (1992), body dissatisfaction in adolescent girls can be attributed to the wider community's obsession with female thinness. Further, studies of Australian high-school students by O’Dea (1994), Shaw (1991) and Paxton, Wertheim, Gibbons, Szmukler, Hiller & Petrovich (1991) found that in order to conform to these societal expectations and media images to be thin, adolescent girls were turning to extreme and unhealthy dieting strategies rather than
turning to exercise and its associated benefits. In particular, Paxton et al., found that 27% of adolescent girls who fell within the normal weight range classified themselves as overweight or very overweight. Although these girls generally believed that exercise was the best way to lose weight, the study reported that they spent significantly less time exercising in a given week than males. Further, "thirteen percent of female subjects reported using one or more extreme weight loss behaviour at least weekly" (p.362) and 30% believed that extreme weight loss behaviours were "helpful", despite being characteristics of eating disorders such as Anorexia Nervosa (self starvation) and Bulimia Nervosa (binge-purge syndrome). Thus, despite the belief that exercise was a more healthy alternative to dieting for losing weight, many girls were opting for extreme weight loss behaviours.

In their qualitative study of British adolescents' involvement in physical education and sport, Coakley and White (1992) found that body image factors inhibited the participation of adolescent girls. In particular, interviews revealed that physical education was often associated with feelings of discomfort and embarrassment. Girls felt self conscious about their weight and their incompetencies at performing certain activities whilst wearing the compulsory tee shirt and skirts or shorts during physical education. Gymnastics and running were commonly cited as activities in which they felt particularly self-conscious and awkward. In addition, they were often turned off physical education and sport because of the rules and arrangements pertaining to changing and showering. Girls disliked the lack of privacy with the open showering blocks and the associated embarrassment they felt with having their bodies on display to others (Coakley & White, 1992).

Two recent studies of adolescents' perceptions of physical education and sport in Western Australia found body image factors to impact on the participation by girls. In a survey of 276 Year 10 girls from ten different schools in Western Australia, James (1995) reported that they often avoided "active areas" at school [such as the basketball courts, gymnasium and the swimming pool] because they felt self conscious, particularly when boys were around. These feelings of self-consciousness were associated with having to wear
inadequate clothing and with low perceived ability levels and athletic competence in relation to their peers.

Malaxos and Wedgewood (1996) reported similar findings in their quantitative study of teenage girls. A total of 1,065 and female students in Year 8 to Year 12, from sixteen Western Australian, coeducational schools were surveyed. Results revealed that girls were less inclined than boys to participate in activities such as swimming and basketball because of the compulsory uniform requirements, which exposed much of the body. As a recommendation to sports clubs and recreation centres for increasing the participation of girls, Malaxos and Wedgewood suggested that they be given the option to wear clothes in which they feel comfortable and less self-conscious. Examples given included the option of wearing shorts rather than skirts or tunics in netball and basketball and rash vests and board shorts over bathers for swimming.

While the above studies focused on body image as a barrier to girls' physical activity participation, a previous study has reported on the way in which body image can be used to promote participation by girls. Whatman's (1993) case study of an Australian secondary school examined the possibility of utilising the powerful media images (of the ideal 'thin' female body shape) to motivate adolescent girls to participate in a school based, health related fitness program. Whatman claimed that the long term promotion of benefits of regular physical activity had little impact on improving the participation patterns of girls. Alternatively, she reported on results from her own and other research findings by Anderssen and Wold (1992) and Fox (1990) which indicated that "the most powerful motivational factor for adolescent girls to adhere to physical activity and healthy eating behaviours was the improvement of perceived body image" (Whatman, 1993, p.9). Whatman's case study reported on a 'relatively successful' (p.10) health related fitness program operating in a Queensland secondary school. Although Whatman did not detail the specifics of this program, she described the attempts made by the staff to remove the barriers which have previously been reported to dissuade girls from engaging in regular physical activity in schools. These practices included: effective role modelling, provision of more than equal access to facilities for girls and girls' preferred activities such as
aerobics and weight training. Interviews with physical education staff and students revealed that girls engaged in regular physical activity both in and out of school and that they intended to continue this involvement. However, findings also indicated that these adolescent girls had not attained their ideal body shape [despite being assessed as 'extremely fit' and in 'good shape'] and because this was of primary importance, they were prepared to keep exercising until they achieved it. Whatman recognised that health related fitness is problematic in that it has a very narrow interpretation of health and serves to reinforce stereotypical expectations such as the ideal 'trim, taut and terrific' body for girls. Further, an inappropriately conceived and organised Health Related Fitness program has the potential to perpetuate a socialisation process which can be detrimental to adolescent girls' well-being (p.12). For example, such a program might encourage girls to be over conscious of their body size and weight and maybe undertake extreme dieting and/or exercise measures in order to achieve the 'ideal'. Despite these potential problems, Whatman believed that the health benefits of the Health Related Fitness program would outweigh these problem areas. Unfortunately, she did not elaborate on how the health related fitness program used in her case study could be improved so that girls were properly educated about healthy activity and lifestyle practices and the dangers of unhealthy ones. Finally, Whatman posed the question, "why not re-define adolescent girls' ideals and expectations of attractiveness once they are already engaging in health-enhancing behaviours" (p.12).

Other writers such as Kirk (1993), have explored the ways in which school sport and physical education along with the cosmetic, beauty, fitness and leisure industries (assisted by the visual and print media) contributed to the social construction, normalisation and commodification of the body. In contemporary Australian culture, the slender, mesomorphic, 'trim, taut and terrific' body emphasises social values such as fitness, health, and success. Kirk suggests that school physical education and sport, with an emphasis on physical fitness and health, are specialised sites for the production of the 'trim, taut and terrific' bodily discourse.
Kirk and Tinning (1994), used a study of male and female adolescent experiences in school physical education, to explore the issue of the socially constructed body and its pivotal role in the formation of self-identity. They argued that while the intention of school physical education was to promote health and physical activity as a way of life, it could in fact be "reinforcing dysfunctional associations between physical activity, body shape and self identity" (p.601). Recognising that adolescence was a period where the body and self became focal areas of concern for most, they explored the ways in which adolescents strategically negotiated the processes of constructing their bodies in and around physical education. For most students, this process was centred around the notions of "normality, of feeling accepted and of avoiding exposure or embarrassment" (p.607) and involved negotiations whilst performing physical tasks, interacting with others and occupying various space. Kirk and Tinning gave two examples of routinised and institutionalised physical education teaching to show how boys typically occupied more space and engaged in physical education more vigorously and enthusiastically than girls, for example by throwing themselves around, taking the competition very seriously, being more vocal and performing mock punches and kicks during a dance class. Girls' minimal involvement and apparent lack of enthusiasm was explained in terms of the objectification of the female body (as a thing to be gazed upon) and the situatedness of women in general who are conditioned by their sexist oppression in contemporary society. It was also suggested that the loose and baggy clothing worn by girls (as opposed to the body hugging apparel worn by boys) could be a further strategy to make their bodies less visible, as a form of protection of themselves and their identities.

Thus, previous research both in Australia and overseas has shown that body image factors represent barriers to participation for girls in physical education and sport. In particular, the physical changes of body size and shape during adolescence have been associated with greater body anxiety among girls. Additionally, there are societal pressures placed on girls to be thin. It has been suggested that as well as the media, school physical education and sport contribute to the pressures on girls to conform to the ideal "trim, taut and terrific" body. Many girls, feeling these pressures, adopt a number of strategies including avoidance of participation, to evade body exposure or embarrassment in the physical
education setting. Particularly disconcerting are the findings that revealed that adolescent girls were adopting extreme, unhealthy dieting strategies rather than turning to physical activity and exercise and its associated benefits.

In summarising the literature, research evidence indicates an apparent decline in physical activity and sports participation by girls during adolescence. This is a concern because there are a range of physical, psychological and social health benefits associated with formal and informal physical activity participation. However, the picture is somewhat clouded by the fact that physical activity has been equated with sport. Some studies have revealed that girls are participating in a variety of activities that are individually and socially oriented rather than competitively based team sports and which may not always be reflected in sports participation research. Additional evidence reports that there are barriers to participation for girls in physical education and sport. Three areas of particular concern which have been found to affect enjoyment and participation levels are: coeducation classes (including unequal access to space and equipment as well as negative teacher behaviours), competitive nature of activities involved in the physical education and sports curricula and body image factors associated with the physical changes of adolescence and the socially constructed 'trim, taut and terrific' body.

2.7 Major previous studies

Two previous studies provide a useful framework for the current empirical study. The first by Luke and Sinclair (1991) was largely atheoretical and utilised a questionnaire to investigate gender differences in the attitudes of Canadian adolescents towards physical education. The second study by Coakley and White (1992) used an interactionist approach and qualitative interview methods to explore the decision making processes of British adolescents with regards to their sports participation.

Luke and Sinclair (1991) conducted a qualitative survey to examine the potential determinants of female and male adolescents' attitudes toward physical education in Canada. The study was prompted by previous research which indicated that adolescents' activity levels decreased with age and they were choosing to opt out of school physical
education programs once they become elective (Fitness Canada, 1988; Earl & Stennett, 1987; Godin & Shephard, 1986). Evidence which reported that fewer females were participating in school physical activity programs compared to males was of particular concern. Thus, the study was primarily aimed at identifying the factors which contributed to the development of positive or negative attitudes toward physical education and whether these were different for males and females. It was anticipated that the identification of those factors associated with students' choice to elect or avoid school physical education would provide useful information to teachers "wishing to improve the appeal of their curricula content and instructional practices" (p.32). Potential determinants of adolescent attitudes towards physical education for four groups of students were investigated. These were females (1) and males (2) who elected physical education at year 11, and females (3) and males (4) who did not. A total of 488 students (233 males and 255 females) from four secondary schools in Canada were asked to comment on their school physical education experiences from kindergarten to grade 10 and to identify those events and factors that caused them to like physical education and those that caused them to dislike it. Two methods of data collection were used; a short questionnaire providing demographic information and a critical-incident report form focusing on student attitudes. The critical-incident report form is an open-ended instrument that allows each student to comment freely on selected events in their physical education experience. Although details of the instrument were not provided, it was considered to be a useful technique in that it "obtains a record of specific behaviours from those in the best position to make the necessary observations and evaluations" (p.32). Both instruments were administered to students at the same time with data from the four schools collected over a one week period. Student comments were classified into 'meaningful' major and minor categories based on a content analysis of words and phrases used by students. Major categories were primarily considered as determinants of positive and negative attitudes toward physical education as identified by the students. Results indicated that the five major determinants of attitude in ranked order [which interestingly were the same for male and female students] were: curriculum content, teacher behaviour, class atmosphere, student self perceptions and facilities.
The second study by Coakley and White (1992) was prompted by the British Sports Council in response to a relatively unsuccessful campaign to increase the sport participation of adolescents who had either dropped out of or never participated in organised sport. Participation in organised sport was defined by the Sports Council as being "constructive and healthy leisure pursuits" (p.21). Although Coakley and White's study was initiated to provide a qualitative evaluation of the "Ever Thought of Sport?" campaign, their primary focus was to collect data on the sports participation choices made by adolescents, social and relational contexts in which these choices were made, and ways in which adolescents perceived themselves and their lives.

The study used an interactionist approach. The interactionist perspective is an attempt to explain and understand the concept of sports socialisation through 'identity formation'. The 'socializee' is seen as an active and reflexive participant in this process, who is concerned with developing and supporting certain role identities in terms of sport participation that she/he perceives desirable and valued (Stevenson, 1990a). Thus, as Coakley and White explain of their study, it was not assumed that young people somehow get socialised into sport simply in response to external influences but that they become involved in sport through "a series of shifting, back-and-forth decisions made within the structural, ideological and cultural context of their social worlds" (p.21). They did not elaborate further on this rather broad concept but cited two previous studies in sport which also utilised an interactionist approach and which were applicable to their own study. For example, Stevenson (1990a & 1990b) applied the interactionist perspective to the process of identity formation among young elite athletes as they became firstly involved and, then committed to pursuing their chosen sport a career. The interactionist perspective suggests that individuals make decisions about whether to be involved in a particular role and/or relationship with an 'other' based upon anticipated outcomes. This process, Stevenson explains, involves a cost benefit analysis where, for example, an individual's decision to become involved in a sport and all the relationships this entails is based on a reflexive evaluation of costs and benefits likely to result from this involvement. This evaluation is influenced by support from significant others and by a variety of environmental
influences, options and opportunities (derived partly from structural factors as social class, gender, ethnicity and so on). Applying this to his study Stevenson notes that:

an athlete is seen as actively making these career related decisions and choices as a part of his or her ongoing work of creating and confirming those identities he or she perceives to be valued or desirable (p.240)

Unlike Stevenson (1990b) who concentrated on elite athletes, Coakley and White (1992) focused on young people whose involvement in sport was neither a priority nor a central source of self-identification. They investigated the factors that affect the decisions of adolescents to participate or not participate in formally organised sports and in informally organised physical activities. Coakley and White were particularly interested in exploring the ways in which adolescents act as agents to create their own sports lives within the constraints of the social situations in which they make choices about what they will do and who they will be. This is consistent with the concept of 'agency' developed by Jary and Jary (1991) which will be discussed more fully in section 2.8.2.

Indepth semi structured interviews were conducted with 26 female adolescents and 34 male adolescents, aged 13 - 23, only 3 of whom were older than 18. Respondents were divided into two types of participants and were equally represented in the study: type 1] those that were actively involved in a series of sports programs promoted in conjunction with the 'Ever Thought of Sport' campaign and type 2] those identified by teachers or program organisers as 'dropouts or non participants'. The qualitative analysis involved an interpretation of responses in terms of how behaviour was influenced by social settings in which choices about behaviour were made. Factors such as age, gender, social class and ethnicity as well as the nature of important relationships in the person's life were considered. Decisions about sport participation were found to be influenced by social constraints such as access to material resources, the school physical education and sport environment and in particular the dynamics of gender relations.

In summary, the above studies by Luke and Sinclair (1991) and Coakley and White (1992) are relevant to the current study as both were concerned with adolescent attitudes about physical education and decisions to participate or not participate in sport. However, these
studies differ from the current study in that they included both males and females in their sample and discussed gender differences only in relation to participation, rather than including preferences for activity context and format.

2.8 Theoretical framework for the current study

The current empirical study isolates adolescent girls as a focus group and explores experiences in, attitudes to and influences on participation in both physical education and competitive sport. The study also investigates the reasons why some girls might prefer informal rather than structured activity.

Coakley and White (1992) used two types of participants in their study, those that were actively involved in sport and those who had dropped out or were never actively involved. The interactionist approach used by Coakley and White, in investigating the ways in which young people become involved in sport was only vaguely defined and broadly applied. For example, they did not adequately elaborate on how sporting behaviour could be influenced by "structural, ideological and cultural contexts" of an individuals social world, nor did they detail the concept of 'agency' which was considered crucial to the way young people created their own sports lives. Alternatively, the current study will use social-cognitive theory as a framework for the development and understanding of girls with varying activity interests and for explaining how sports participation or non participation can be influenced by various cognitive and environmental factors. Further, the concept of agency whereby individuals can also act independently of social and environmental constraints is also applicable and will be discussed and applied.

It is assumed that girls involved in this study will have some common social-cognitive learning experiences and behaviours with regards to their physical activity involvement, hence social-cognitive theory is most relevant. However, it is also recognised that individuals will also have different experiences, attitudes and perspectives and therefore the concept of agency can also be considered to analyse significant differences in attitudes and perceptions which occur.
2.8.1 Social learning and social cognitive theory

Albert Bandura (1969) formulated a comprehensive theory of observational learning that has been expanded to encompass acquisition and performance of diverse skills, strategies and behaviours. Bandura's 'social learning theory' postulates that much human behaviour, including the learning of specific social roles, occurs in the social environment by a process of observation and imitation of significant others. Essential processes involved in social learning include "modelling", "imitation" and "vicarious learning" (Bandura, 1969). A child first observes and attends to the behaviour of a significant other - the model. If the child is able to interpret the model's behaviour in some symbolic way, he/she acquires and retains the behaviour by means of rehearsal, both vicariously and in actual behaviour (ie: imitation). The behaviours leading to satisfying outcomes and which are thus reinforced, are subsequently exhibited in appropriate situations. The models for this imitation process can be real (eg: adults, peers) or symbolic (eg: television characters).

Sports sociologists, Loy, Kenyon and McPherson (1981) applied elements of social learning theory to the process of socialisation into sport. They used as a frame of reference three main elements of the socialisation process. They proposed that, prior to adolescence, entry into sport was dependent upon the role of "significant others (socialising agents - family, peers, teachers, coaches, school, community, mass media) who exerted influence within social situations (socialising agencies - the home, school, neighbourhood) upon role learners who were characterised by a wide variety of relevant personal attributes". Thus, according to this model, a child's involvement in sport is dependent on the influence of significant others and the surrounding environment and their own characteristics.

One of the limitations of Bandura's social learning theory and of the sports socialisation model proposed by Loy et al., (1981) is the emphasis on individuals as mere passive recipients of their socialised roles. It is assumed that children are passive participants in the learning process relying primarily on external stimuli to influence their behaviour and actions. In 1986, Bandura expanded his social learning theory in order to address ways people seek control over important events of their lives through self direction of their thoughts and actions. This became known as 'social cognitive theory' which holds that
people are neither driven by inner forces nor automatically shaped and controlled by external stimuli. Rather, social cognitive theory suggests that behaviour, environmental variables and personal factors (such as cognitions, preferences, competencies and personality attributes) interact as determinants of each other. This bidirectional interaction between determinants is known as a ‘triadic reciprocity’ model as shown in figure 2.1. Within this framework, learning is construed as an information processing activity in which knowledge is cognitively represented as symbolic representations that serve as guides for action and behaviour. The interactions of determinants within Bandura's triadic reciprocity model are reflected by the differing interests of girls in this study.

Behaviour is represented by varying levels and types of physical activity involvement. It is assumed that girls displaying similar participation patterns will also have some similarities with regards to the interaction of personal cognitive factors (including competencies and preferences) and environmental variables (including curricula, access to playground space and role models such as family and friends) and their physical activity behaviours. However, there may also, of course, be differences.

**Figure 2.1**

**Bandura's model of triadic reciprocity** (Bandura, 1986).

![Diagram of Bandura's model of triadic reciprocity](image)

### 2.8.2 Agency

According to Jary and Jary (1991 p.9), agency refers to "the power of actors to operate independently of the determining constraints of social structure". The concept of agency is relevant to the current study's concern with the decision making process of adolescents with regards to their physical activity involvement. Consistent with Coakley and White (1992), it is not assumed that young people merely get socialised into sport in response to
external influences such as media, family and school environment. Rather, individuals act as agents making their own decisions about whether or not to participate in competitive sport, physical education or informal physical activities. As illustrated by McDermott (1996), these behavioural decisions are made and negotiated within the constraints of the social situations in which they find themselves. For example, girls' decisions about whether to participate in a physical education lesson may be negotiated according to the social structure of the class, mixed or single sexed, and the nature of activities undertaken such as competitive or recreational. Further, as Coakley and White reported, such decisions may be mediated by other personal factors such as perceived physical competence and relationships with others (such as parents, male and female peers).

Coakley and White (1992) suggest that human agency is crucial to the way young people become involved, decrease their involvement or have minimal involvement in sport. They conclude that sport participation/non participation is the "result of decisions negotiated within the context of a young person's social environment and mediated by the young person's view of self and personal goals" (p.34). They call for greater research in sport which focuses on the decision making processes in the lives of young people rather than simply on participation and non participation. "To do this there must be a concern with process, context and agency" (p.34).

Lisa McDermott (1996) applied the concept of agency to show how the notion of physicality (which has been synonymous with male physical power and masculinity) can be used to embrace and express women’s lived experiences of physical activity. Defined as “physical power”, physicality is conceptualised as physical agency in terms of the embodied agent. McDermott suggests that

it is potentially through her physical agency that a woman learns to resist (or accommodate) the dominant structural constraints circumscribing her physically active, bodily experiences. Doing so enables her to create subjectively meaningful ones within these constraints. (p.20)

McDermott (1996) used the example of Beth, a woman she had interviewed, to illustrate the concept of physical agency. Describing herself as having a “real weight problem”,

Beth related her experiences about having to learn to ride a bike for the first time at age 34. She emphasised the sense of joy and accomplishment she felt about overcoming her fear of riding and being able to solely rely on her body to achieve this. She was able to be an active agent in constructing her own meaningful body experience within the constraints of a dominant ideology emphasising feminine identity and body beauty. In the context of the current study, physical agency may be useful in explaining how some girls are able to create meaningful physical activity experiences within the social constraints of the coeducational and competitive physical education and sporting environment.

The current study is concerned with how the girls with varying levels and kinds of physical activity involvement make decisions about their physical activity participation within the constraints of the physical education and sporting environment, in particular, the coeducational and competitive sport setting. The concept of 'agency' is particularly relevant for explaining and understanding the decision making processes and participatory behaviours of girls with varying activity interests. That is, whilst girls with the same activity interests may share some common activity experiences and behaviours, it is probable that they made some different decisions and negotiations within similar social constraints and thus participated in different ways.

2.9 Research aims

The aims of this empirical study are:

1. To determine the issues which impact significantly on the participation of adolescent girls in physical education and sport.

2. To investigate whether girls who drop out of competitive sport necessarily become physically inactive.
2.10 Definitions of key terms

**Physical Education:** The subject and curriculum of the secondary school physical education program.

**Sport:**

An institutionalised competitive activity that involves vigorous physical exertion or the use of relatively complex physical skills by individuals whose participation is motivated by a combination of intrinsic and extrinsic factors (Coakley, 1998, p.21).

**Informal physical activity:** Active, unorganised, non-competitive, recreational pursuits involving bodily movements that increase energy expenditure above the basal level.

**Body Image:**

A loose mental representation of the body's shape, form and size, which is influenced by a variety of historical, cultural and social, individual and biological factors, which operate over varying timespans (Slade 1994 p.502)
Chapter 3

Research Procedures

3.1 Introduction

The current study primarily utilises qualitative individual and collective interview methods but also includes some initial quantitative data collection. The choice of method in terms of the advantages of utilising both quantitative and qualitative methods in the one study will be outlined. A systematic account of the selection of participants and procedural steps used in the study will reveal how each methodological component contributed to the research process. Further, outlining the strengths and weaknesses of individual and collective interview methods will highlight the importance of utilising a multimethod approach that also reflects feminist perspectives as part of the research process.

3.2 Choice of method

Much previous literature on gender issues in physical education and sport has its roots in a male dominated sociology. Green, Herbon and Woodward (1990) suggest there has been an over-reliance on positivist methods of measurement involving the collection of quantitative data, for example, questionnaires and surveys. Further, specific studies which have examined the activity patterns of adolescent girls in sport and physical education, both in Australia and overseas, have largely been cross-sectional and have relied on large population based surveys (Booth et al., 1997; Bauman, 1993; Gray et al., 1993; Sparks & Webb, 1993; DLCA, 1992; Australian Sports Commission, 1991a). The importance of quantitative research in gathering facts and providing precision and control through reliable measurement cannot be underestimated. As Burns (1994) notes, quantitative methods “provides answers which have a much firmer basis than the layman’s common sense or intuition” (p.7). However, the exclusive use of quantitative methods does have limitations. While quantitative studies have provided useful information about the bigger picture, some are limited by their reliance on the researcher’s own interpretations of the data and most exclude opportunity for any clarification and explanation of findings and trends by the respondents themselves. Burns (1994) reiterates that quantitative methods fail to take into account people’s unique ability to interpret their experiences, construct their own meanings and act on these.
In contrast to quantitative methods, qualitative interview methods recognise the importance of meanings that are attached to personal direct experiences. Linked to these meanings are perceptions and interpretations of 'reality' which may be socially conditioned and which are variable and multiple rather than fixed and singular (Green et al., 1990). Burns (1994) notes that one of the primary advantages of qualitative over quantitative research is that reality is not taken for granted given that attention must be paid to the multiple realities and socially constructed meanings that exist within every social context. Qualitative methods allow the researcher to contextualise the perceptions and experiences of the participants being studied and enhance the discovery of multiple forms of understanding and the deeper levels of individual meaning. Burns (1994) adds:

The task of the qualitative methodologist is to capture what people say and do as a product of how they interpret the complexity of their world, to understand events from the viewpoints of the participants; it is the life world of the participants that constitutes the investigative field (p.9)

Feminist research which has supported qualitative methods of analysis have demonstrated distinct advantages for studying girls and women. For example, interview methods allow girls and women to tell their own stories and to explain their behaviour in their terms. Rehnharz (1992) adds:

It offers researchers access to women's ideas, thoughts and memories in their own words rather than in the words of the researcher...in this way learning from women is an antidote to centuries of ignoring women's ideas altogether or having men speak for women (p.19)

Finally, interviews can be flexible and adaptable in that the interviewer can modify the inquiry according to the respondents' answers so that the key issues and underlying motives can be further investigated (Robson, 1995).

The use of two or more methods of data collection in the one study is known as 'triangulation' (Denzin, 1978). The research design for the current study is consistent with the triangulated “dominant-less dominant design” model advanced by Cresswell (1994). In this design, the study is presented within a single dominant method with one small
component of the overall study drawn from the alternative method. The current study adopts a dominant qualitative method in the form of individual and collective interviews conducted in three stages (first, second and third interviews). A small quantitative component is represented in the form of factual information gathered in the first stage (ie: first interviews). The advantages of this approach include a greater consistency between each stage of the research process, verification of findings, the opportunity to explore important issues in more depth and a better overall understanding of the concepts being explored (Cresswell, 1994). Burns (1994) also noted the primary advantage of adopting a triangulated approach in terms of improving the internal validity of a study. Triangulation prevents the researcher from accepting too readily the validity of initial impressions and contributes to verification and validation by checking out the consistency of findings generated by different data collection methods. Thus, in the case of the current study, any quantitative data deduced from the first interviews can be validated and verified in the subsequent second (individual) and third (collective) interviews.

Reinharz (1992) reviewed examples of feminist studies which have adopted triangulated approaches to demonstrate the advantages of utilising multiple methods and to highlight the special relation triangulation has with feminist concerns. Reinharz summarised,

feminist descriptions of multimethod research express the commitment to thoroughness, the desire to be open-ended, and to take risks...Sometimes multiple methods reflect the desire to be responsive to the people studied. By combining methods, feminist researchers are particularly able to illuminate previously unexamined or misunderstood experiences. (p. 197)

Reinharz (1992) adds that the use of multiple methods by feminist researchers is an attempt by them to “cast their net as widely as possible in search for understanding critical issues in women's lives” (p.210).

As the research involved girls with varying physical activity interests and participation patterns, a multimethod approach enabled me to be 'responsive' to these individual differences. For example, the use of informal individual and group interview methods allowed the girls to reveal their experiences, attitudes and opinions at a time they considered most suitable and comfortable for them.
3.3 Recruitment of participants

The girls selected for the current study which began in November 1994, were from a Catholic, Independent secondary school situated in the outer metropolitan area of south eastern Victoria. For ease of access I invited all 15 female students (aged 14-15) from each of my two Year 10 coeducational, physical education classes (n=30) to take part. All were willing participants in the study and written permission was obtained from their parents and the school Principal (see Appendices 8 & 9). The project was also approved by the Deakin University ethics committee. Further, these girls were approached because of their varied experiences in both the single sex and mixed physical education setting. They represented 25 % of girls at the school who shared this experience. When they were first enrolled at the school in Year 7 in 1990, the school operated as two single sex campuses with physical education classes also separate for boys and girls. In 1991, when the girls were in Year 8, the school became fully coeducational, with physical education classes becoming mixed for all years except Year 9. They therefore experienced their physical education as a single sexed group in Years 7 and 9 and as a mixed group in Years 8 and 10.

The girls were first interviewed in November 1994 when they were in Year 10. They were interviewed either in the gymnasium, the classroom or playground during recess or lunch and after school. These interviews were fairly informal and were conducted away from other noise and distractions.

Second and third interviews occurred between April and June, 1995, when the girls were in Year 11. All interviews were conducted in a classroom with no other distractions. The individual interviews took place during student free lessons, lunchtimes or after school. The three collective sessions were conducted over consecutive weeks, each of approximately one and a half hours duration. Permission was given to use a pastoral lesson immediately before or following lunch to allow an uninterrupted interview time. An upstairs classroom was selected so that the interviews could be held without being disrupted by lunch time noise.
3.4 Study design

The current study involved three stages in its design as represented in the following model:

First Interviews
quantitative and qualitative
30 girls
▼
Second Interviews
qualitative
9 girls
▼
Third Interviews
qualitative
9 girls

Stages two and three involved nine girls from the original thirty because a) the smaller group was more manageable for longer indepth second interviews and collective third interviews when there was one researcher only with limited time and b) they were representative of varying activity interests and participation levels within the group.

3.4.1 First interviews

First interviews were conducted with each of the thirty Year 10 girls from two separate coeducational physical education classes. The purpose of these first interviews was to establish the types of physical activity involvement and time spent participating in such activities. Also important was to identify variables affecting participation in physical education, sport and informal recreational activity. Participants recalled their experiences in physical education and sport from both primary and secondary school years along with their involvement in sport and recreational activities outside school. Interviews were informal and conversational in nature and ranged from 20 to 30 minutes in duration. Note taking was used for record purposes by me.
Broadly speaking, the interviews were semi-structured in nature and encompassed the following areas: organised sport and physical activity participation in and outside of school since primary school; likes and dislikes about their participation; experiences in and preferences for single sex or coeducational physical education; and views about physical education curricula including activities enjoyed/not enjoyed. The general questions used for each interview also enabled me to collate some basic quantitative data such as nature, amount and duration of physical activity undertaken per week, preferences for single sex or coeducation and most and least preferred activities in the physical education curricula. This information was not only useful for clarification and expansion in subsequent interviews, but allowed me to quantify some issues as a starting point in the analyses of results.

The semi-structured nature of the interviews allowed for further expansive questioning and discussion as required for each girl, in an environment that was completely non threatening. As their physical education and/or homeroom teacher I already had a sense of trust and rapport with the girls. This enabled them to feel relaxed and comfortable, both with me and with the interview itself. It was important to allow each girl to "open up" and discuss her experiences in and attitudes towards physical activity involvement. It was also my intention for the girls to identify the significant issues and thus have the interviews largely "led" by the data. These interviews allowed the girls to "tell their own stories" about their physical activity experiences and were suitably flexible to allow prominent, unique issues and events to be probed and elaborated.

Thus, the objective of these first interviews was to draw out the significant issues they perceived as important to their physical education and sporting experiences and which could be explored further in the second interviews and the collective interview sessions. The issues which were of most significance in terms of participation levels included; coeducational physical education and the domination of boys; perceived ability levels; over emphasis of competitive activities and sport at school; the influence and impact of teacher behaviour and body image factors.
With regard to conducting informal first interviews, McNeill (1990) notes that they are limited because of an inability to draw any valid or reliable conclusions from such discussions. The data obtained can only provide useful guidelines as to what areas should be followed up in the main inquiry. In response to criticism about informal interview methods being 'impressionistic', Bailey (1994), argues that the flexibility of such interviews whereby the researcher is especially open and sensitive to new ideas, new suggestions and new directions is more pertinent and of greater advantage to a study. He notes further,

The point of this sustained effort at naivety is to facilitate the researcher's receptivity to the respondents' perceptions and understandings...Inevitably, then, in the early stages of qualitative research good practice is for the research to be impressionistic - this is one of its hallmarks (p. 180)

Another limitation of utilising open ended interview methods in qualitative research has been reported in regards to researcher bias whereby the researcher's perspective colours the data generated. There is the possibility that the interviewer's own assumptions affect what she/he perceives, records and reports (Robson, 1995). However, Robson notes that provided the researcher is alert to the possibility of bias and the need for neutrality, the interview process can remain unbiased. He warns that in order to achieve this the interviewer must be conscious of writing/asking unbiased questions and of eliminating cues which lead interviewees to respond in a particular way. The current study guarded against researcher bias in two ways. Firstly, I was aware that girls might respond according to what they thought I, as their physical education teacher and sports enthusiast, would like to hear. It was therefore made clear at the start of each interview that their honesty and openness was paramount and that no judgements would be made by me or other girls involved in the study. Secondly, the fact that I had known and taught the girls in physical education and other subjects for four years also made it easier for them to be honest and open because they had learned that I would not be overly concerned by differing opinions and had often sought their opinions.

Thus, the first interviews essentially served the purpose of identifying current physical activity patterns and significant issues to be followed up in subsequent interviews. As a
consequence of analysis of these first interviews, I discovered that girls could be sorted into three logical categories according to the nature and extent of their activity participation. These three groupings were as follows:

1. Those who had been and still are actively involved in competitive organised physical education and sport during adolescence.

2. Those who are decreasing their involvement in competitive organised physical education and sport and increasing their participation in informal physical activity during adolescence.

3. Those who had never been involved in formal competitive organised physical education and sport but who maintained their participation in informal physical activity into adolescence.

For the purpose of these classifications, involvement in organised competitive activity was defined as the participation in one or more organised competitive sports with a club or team outside of school, as well as an active participation in physical education and sport at school. Informal physical activity is defined as active, unstructured, social, non-competitive, recreational pursuits such as walking, jogging and roller blading.

Hendry's (1978) work constructing case studies about adolescent views on physical education, sport and recreation, served as a useful reference upon the emergence of the three groups in the current study. Whilst Hendry's selection and construction of case-studies centred on two extreme groups, competitive versus non-participant adolescents, he also included a number of 'recreatives' (students who prefer to participate in recreational activities rather than competitive ones) so that all adolescent interests were reflected (Hendry, 1978). However, in this study, the 'competitive' versus 'recreational' issue appeared to be a varying rather than stable influence for these girls over time, as revealed during the first interviews.

More recently, Coakley and White (1992) used two types of participants in their study but also included those adolescents who had dropped out of competitive sport. The two groups were 1. those who were actively involved in sport and 2. those who had dropped out or were never actively involved. This model has been adapted and expanded to three
groupings for this study to reflect different and changing activity patterns: 1. Competitive group; 2. Transition group and 3. Social group. They are worth treating separately because the group that have “dropped out” of competitive sport or are in transition, provide valuable insight into long term effects (increasing age, changing physical environment, changing social environment) that occur. Also, the transition group could provide valuable information since they are more likely to have experienced and thought about the advantages and disadvantages of formal versus informal activities and are more likely to provide social-cognitive explanations.

3.4.2 Second interviews
Three girls from each of the three activity types above (n=9), were selected for further interviews in an attempt to ensure that varying individual interests, experiences and participation patterns were reflected in the indepth analysis. These nine girls were particularly selected by me, not only because they were representative of the three activity types, but they were more expressive and reflective in their first interviews and more eager to self disclose. It was anticipated that they would contribute more fully in the second interviews and the group discussions to follow.

These second individual interviews enabled me to focus on specific and personally defined areas that were empirically grounded and significant, whilst allowing the girls to clarify and explain their responses to the first interviews. In order to categorise responses from the first interviews, a coding analysis process was undertaken as outlined by Robson, (1993). ‘Coding’ involves using concepts or themes in order to classify or categorise responses from interviews. It is a method of systematically organising data into specific areas which can be further analysed or reported. Robson, (1993) suggests further that an issues analysis strategy is an acceptable means of organising and selecting material. Thus, in this study, the common issues revealed by the girls in the first interviews formed the basis of the three major areas to be further investigated in the second and third interviews.
The three areas of particular focus were;
1. Single sex and coeducational physical education.
2. Competitive and recreational activity.

The compilation and development of additional and expansive questions on the identified areas formed the basis of both the semi structured and open ended questions (see Appendix 6). The indepth interviews with each of the nine girls ranged from between 45 and 60 minutes and were recorded on audio tape.

3.4.3 Collective interviews
Three collective interview sessions were then conducted with all nine girls together as one group. Conducting these interviews as a large group enabled girls to discuss and share their respective memories of, experiences in and attitudes about the social structure of the physical education class, the nature of activities included in the physical education curriculum and body image issues related to participating in physical education and sport. Priority was given to discussions about 'how' and 'why' girls came to have the views they hold in an effort to reveal the social processes by which they were constructed.

The rationale for the use of collective interviews as a method was to explore more thoroughly the three areas which emerged as particularly significant and which impacted on the varying activity interest and involvement for the nine girls selected for the indepth analysis. Specifically, collective interviews enable girls to share their memories and experiences of physical education, sport and informal physical activity as a group. Although the girls had varying experiences and attitudes it was anticipated that small group discussions would allow them to reflect on their own ideas and clarify or reconsider their own position. Further, the presence of others may act as a catalyst for discussion of ideas and attitudes not readily surfacing in the individual interview. That is, another person's comments may "trigger off" memories, feelings and attitudes of others who could further contribute to the discussion. This enables links to be made and opens ideas thus
enabling a deeper analysis of the significant issues for girls, which may be common or
different both within and between the three types of girls represented.

The three additional emergent issues provided broad structure for the collective interview
sessions with the nine girls as one group. Three one and a half hour sessions, each
addressing one of the three issues were conducted over consecutive weeks. Two methods
of recording, audio tape and note taking, were used in combination for the three sessions
in order to obtain full and accurate accounts for each girl within the group. The themes,
along with the examples of related issues that were discussed during each session are
outlined in appendix 7. While the aim of these sessions was to have the girls share their
experiences and discuss their attitudes about the three areas of focus, I was ready to
prompt, to ask probing questions in order to clarify points and to lead reflective discussion
on any of the significant issues not earmarked. Further, although the focus of the first
session was on the area of single sex and coeducational physical education, issues relating
to body image and the nature of activities included were interrelated and also discussed.
Upon re-examining the data between group sessions I was able to determine the focus and
the new leads for the succeeding sessions and thus readjust the nature of the discussion
accordingly. Specifically, I wanted any differing views, interests and experiences explored
and explained more thoroughly and subsequent interviews allowed this to occur. For
example, the issue of the inappropriateness of the physical education uniform, raised as a
concern in the coeducational environment in the first session could be clarified and
discussed in terms of body image issues in the third session.

The limitations of collective interview methods must also be considered. It becomes
difficult to follow up the views of individuals in any indepth way given the time
constraints and the necessity to consider views of the whole group. Further, as Robson
(1995) notes, "group dynamics or power hierarchies effect who speaks and what they say"
(p. 241). A particular problem occurs when one or two persons dominate the discussions
and do not let others contribute. Robson advises that in these circumstances, the
researcher should be aware of others' body language indicating they wish to contribute
and/or overtly appeal for their contributions. The current study was also exposed to the
effects of "power hierarchies" in the group interviews to which Robson refers mainly because of the three types of participants who were represented. For example, two girls from the competitive group tended to speak first when a new question or lead was given. As Robson advised, I called for contributions from others whenever the discussions were dominated by one or two people. At one point during the second collective session, one of the girls jokingly asked Kellie to "shut up and let some of us have a go". However, these occurrences were minimal considering the relatively large size of the collective group involving nine girls. In fact, the group dynamics and interactions were generally positive and receptive considering the varying activity interests and experiences of the girls represented. Although much useful information was obtained, in hindsight, it would have been useful to interview the three girls from each type as a separate group before the larger group interviews. In this way the commonalities and differences within each type may have been fully explored as girls from one type may have been more inclined to open up and share their experiences. This would have been particularly useful for types 2 and 3 who may have been reluctant to speak openly about their attitudes towards and decisions to decrease or have minimal involvement in sport and physical education.

3.5 Summary
As stated previously, the current study adopted a triangulated approach by incorporating quantitative data gathering in the first interview stage and two different types of qualitative research; subsequently, they were individual and collective interviews in the second and third stages. The main advantage of this approach is that initial findings from the first interviews could be validated and further explored during subsequent interviews. Further, recognising that there are limitations to specific interview methods, the combined use of individual and collective interviews is another strength of this study. The use of informal first interviews identified the significant issues for girls with regards to experiences in physical education, sport and informal recreational activity during secondary school. These key issues could then be validated and explored more thoroughly via indepth interviews by allowing girls to explain, clarify and reflect on their own experiences and preliminary responses. The collective interview method was introduced to enable selected girls to become more involved in the research process. They were able to collectively
share, evaluate and make sense of their varying experiences in physical education and sport through a process of critical self analysis, reflection, discussion and debate. Collective group interviews allowed for a deeper and more accurate analysis of the social processes and constraints, which have impacted on the girls' views and decisions about their participation in physical education, sport and informal physical activity.
Chapter 4
Results and Discussion

4.1 Introduction - Emergent groups

As a result of the first interviews three clearly different groups emerged based on one fundamental criterion: the nature of physical activity involvement (figure 4.1).

Figure 4.1
Physical activity groupings

<table>
<thead>
<tr>
<th>Group 1: Competitive</th>
<th>Group 2: Transition</th>
<th>Group 3: Social</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 girls</td>
<td>11 girls</td>
<td>9 girls</td>
</tr>
<tr>
<td>Those who had been and still are actively involved in competitive organised physical education and sport during adolescence.</td>
<td>Those who are decreasing their involvement in competitive organised physical education and sport and increasing their participation in informal physical activity during adolescence.</td>
<td>Those who had never been involved in formal competitive organised physical education and sport but who maintained their participation in informal physical activity into adolescence.</td>
</tr>
<tr>
<td>Involvement in at least one competitive sport, in &amp; outside of school.</td>
<td>Involvement in one or more informal physical activities outside school.</td>
<td>Involvement in no more than one informal activity outside school.</td>
</tr>
<tr>
<td>Training and/or playing at least three times per week for 60 minutes.</td>
<td>Participation at least twice per week for 30 minutes.</td>
<td>Participation once per week for 30 minutes.</td>
</tr>
<tr>
<td>Sports include Netball, Basketball &amp; Athletics.</td>
<td>Activities include jogging, lap swimming, aerobics and gym.</td>
<td>Activities include walking, aerobics &amp; roller blading.</td>
</tr>
<tr>
<td>Active involvement in physical education once per week for 100 minutes.</td>
<td>Some involvement in physical education once per week for 100 minutes.</td>
<td>Minimal involvement in physical education once per week for 100 minutes.</td>
</tr>
</tbody>
</table>
Overall results revealed three things. Firstly, there were some common experiences and views shared by almost all girls. Secondly, there were commonalities within each group which further strengthened the differences between the three groups. Thirdly, there were also differences between individuals within groups in perceptions and experiences. In some situations the experience was different; in others the experience was similar, but perceptions of it differed.

Material for the results has been drawn from the initial interviews with the thirty girls. However, most reliance has been placed on the nine girls who completed all three stages of interviews. Names appearing in the text are those who remained in the final group of nine. However, names do not appear at times when pertinent observations and comments were made by the remaining girls.

The focus in this chapter is girls’ experiences of and attitudes towards school physical education. Occasionally, however, relevant outside activities are referred to. Underpinning all the experiences spoken of by the girls is a fundamental issue of varying levels of physical competence. As might be expected, the competitive group was most competent and athletically skilled. The social group was the least competent and had limited skills. Established physical skill competence, or incompetence was brought to the project and reiterates the fact that physical skills are better learned at a young age.

The chapter begins with an outline of the five major significant issues evolving from the data. Each issue will be discussed in turn and will begin with any commonality of view between groups, which sometimes occurred. This is followed by a presentation of the different views of the three groups and a summary of the similarities and differences. Where possible, group perceptions will be outlined separately in the order of ‘social’, ‘transition’ and ‘competitive’ groupings. However, as the girls in the second group had reached the stage of transition where they were already more social than competitive, there will be times when both social and transition groups, expressing similar views, will simply be grouped together.
In order to draw the information together, an overview of the distinguishing characteristics of each group will highlight the differences between them with respect to the significant issues. The chapter concludes with a discussion of reasons why some girls pursue informal, physical activity during adolescence rather than more formal games and sport.

4.2 Significant issues for girls in physical education and school sport.
There were five issues which significantly impacted on girls' participation in physical education and school sport. These were, 1. class social structure; 2. curricula content; 3. parental influence; 4. body image factors and 5. teacher behaviour.

4.3 The impact of class social structure on participation in physical education.
In the literature there are two points of view about the best and most equitable environment for the participation of girls in physical education, either single sex or coeducation classes. Participants in this study experienced physical education as both a single sex group in Years 7 and 9 and a coeducational group in years 8 and 10. Twenty-four of the thirty girls across all three groups indicated a preference for single sex rather than coeducational physical education classes. Concerns were raised about aspects of the coeducational environment which affected participation levels for each group in some way. Common to all groups was the issue of boys' domination of games and physical space. Other issues relevant to the social and/or transition groups included; lack of confidence in physical skills, lack of support provided by boys and the social distraction of boys in the mixed setting. These issues will now be considered.

4.3.1 Domination by boys in competitive situations
As found in studies by James (1996) and Coakley and White (1992), the domination of boys in team games and of physical space was a key concern for all. Comments included,

It didn't matter what we were doing in the co-ed class, boys were always competitive and took over anyway; they just couldn't help themselves. I really wanted to get in and have a go in the games but we (as in girls) didn't stand a chance once the boys took over... they took up most of the gym even when we were split into separate groups.
Whilst all groups expressed concern about boys’ domination, the degree and extent of the effect on participation varied between groups. For instance, the social group felt more intimidated by the aggressiveness of boys which impacted on their participation levels. One girl commented, “some of them (boys) were really rough and it was easier just to stand back and let them go”. Others commented on their fears about boys’ aggressiveness,

when the guys took over you didn’t want to get in their way, I stayed right out of it because I knew I’d get knocked over.

It got to the point when it wasn’t even worth trying any more, the boys played like we (girls) weren’t even there, they’d just run all over us, and right through us.

Thus, the social group perceived boys as a physical threat and were reluctant to participate in the coeducational setting because of fears of getting hurt.

Similarly, those in the transition group felt inhibited in the coeducational setting, however they perceived boys’ dominance as natural and acceptable. For instance,

Boys are always so intense and serious when it comes to PE and sport, they love to compete, they love to win and hate to lose. So in games when they go psycho it’s better to just stay out of their way and let them take over.

The following comment aptly sums up,

Guys are naturally competitive and they turn everything into competition. They take over in PE, sport and at recess and lunchtime in the quadrangle and on the oval. So if you’re not that way inclined its easier just to stand back and let them go.

Perhaps the transition group was more accepting of boys dominance than those in the social group because they held the view that boys were “naturally” competitive and physical education provided an outlet for them to compete and release their built up aggression.

Also interesting to note was the reference to boys’ dominance of physical space in the playground. The girls from the social and transition groups were not overly concerned
about their limited access to space both during physical education and at lunchtimes. Consistent with findings by James (1996), these girls avoided school activity areas and perceived these areas to be for boys more so than girls. Additional analysis in this study of numerous comments such as “it’s just the way it was”, obviously implied that sport is still essentially considered a male domain. More importantly, however, is the attitude of compliance by some girls of the degree of power that boys had both in physical education and the school playground. Wright (1995) comments about attitudes of compliance as she notes that some girls and women support, accommodate or collude in existing patterns of discrimination in sport and physical education that are specific to male domination, while others oppose and struggle for change. Further, from a social cognitive perspective, the behaviour of the social and transition groups, to reduce and/or limit their participation in physical education and to avoid school activity areas at lunchtimes, was influenced by the social constraint of boys’ domination and intimidation.

The competitive group represents the “other” females to whom Wright (1995) referred, who were more concerned about their lack of access to quadrangle and oval space because boys’ sports had priority. One girl aptly described the view of the group with her comment,

We wanted to use the basketball courts at lunchtimes but the boys would just take over. Even in the gym during lunchtime competitions the guys would take over the two courts. The only time we got to have a real go was when the Phys. Ed. staff organised separate competitions for girls and guys, but this wasn’t that often.

The competitive group were more inclined than the other groups to participate in the mixed setting, but felt restricted and frustrated by boys’ deliberate attempts to exclude them from play. One girl commented,

I hated it when the boys took over in Year 8 and 10 because I knew I was just as good as most of them - especially in basketball and volleyball. Yeh, I’d get in there alright but they didn’t make it easy for us [girls].

Liz made this comment,
it really was annoying when the boys never passed the ball or included us in the play. We would have to work our butt off to get anywhere near the ball or just to have a decent go.

Interestingly, unlike the social and transition groups, the competitive group resisted boys’ attempts to take over. This involved proving to boys that they were capable of competing with them as by scoring a goal in basketball or holding their own in a one on one situation. In fact, girls revealed that they actually enjoyed participating with the boys once they had proved themselves. Cassie summed up her perceptions of this issue,

If we knew we had the ability and felt confident enough, we would get in and have a go. But we had to do something good to earn their (boys) respect I guess, so they would keep including us in the play...yeah, it frustrated the hell out of me having to prove myself, but it was worth it because I actually played better than I ever did with just girls and that felt good.

Cassie’s decisions and actions to resist attempts by boys to dominate and exclude her from play illustrates agentic behaviour. Applying McDermott’s (1996) concept of “physical agency” as discussed in chapter 2, Cassie displayed an ability to act independently of these social constraints by adopting strategies to reduce the dominating tendencies of boys. She emphasised the sense of accomplishment felt when she produced her best performances competing with boys and thus was able to actively create her own meaningful physical activity experiences.

In short, boys’ dominance and power in physical education was an issue for all girls; however, there were some obvious differences in perception. The social and transition groups were inhibited by boys, however the social group regarded their aggressiveness as intimidating and a threat whilst the transition group perceived their competitiveness and intensity as a natural and acceptable aspect of boys’ behaviour. Where boys could not dominate through physical intimidation (with the physically very competent girls) they did so through exclusion. The competitive girls were more inclined to resist boys’ domination because they possessed the ability and confidence to do so.
4.3.2 Confidence in physical skills

Individual and group discussions revealed that a lack of confidence in performing the skills required for competitive sports significantly influenced the participation levels of those in the social and transition groups, particularly in the coeducational setting. The social group carried some negative experiences from involvement in competitive games and situations at primary and secondary school. These experiences related to feelings of uselessness because they could not master certain skills or participate competently in game situations. Some girls were most conscious of their inadequacies when boys were present,

I was never any good at phys. ed. and sport but I can remember feeling even more useless in Year 8 when the guys were in the class. I used to sit out a lot because I just didn't want to look stupid stuffing everything up.

...we (the social group) felt more intimidated in the co-ed. class because the boys were such sport heads... they didn't want girls in their team who couldn't throw properly or had poor skills...I'd forget my uniform so I didn't have to make a fool of myself all the time.

Thus, the social group adopted self exclusion strategies to avoid embarrassment associated with participating with and in front of boys.

The transition group believed that their ability levels in physical education tended to decrease when moving from the all girl setting to the coeducational environment. For example, Kellie explained that,

In Year 7 and 9 I knew I had better skills than many of the girls so I could have a real go. I was quite good at most of the sports we did. I actually got good marks for PE in Year 7 and 9. When the boys were there in Year 8 and 10, I guess I never felt as confident or as good - not compared to them anyway. This probably affected my participation levels to some extent, that and the fact that I didn't like it when it was too competitive.

Fiona added after Kellie,

I think you tend to compare yourself to others in your class a bit. If you were good at something compared to others you tend to get in and have a go. I'd do this with the girls but when the boys were around they were much better than us so I didn't get in there as much.
The notion of boys’ superior ability is a common perception amongst those in both the social and transition groups. It appears that as the boys were seen as better performers, moderately competent girls felt themselves pushed lower in the confidence hierarchy. From a social cognitive perspective, the perceptions and behaviours of those in the social and transition groups can be explained in terms of Bandura’s (1986) triadic reciprocity model, discussed in chapter 2 (p.35). According to this model, behaviour, environmental factors and personal factors interact as determinants of each other. Hence, girls’ limited participation in physical education and sport is influenced by a coeducational environment where boys often over power and dominate coupled with participants’ lack of physical confidence.

4.3.3 Boys less supportive than girls

A common belief amongst those in the social and transition groups was that the coeducational setting provided a less supportive and encouraging environment than an all female class because boys were more judgemental and less tolerant of differing ability levels. For example,

I wasn’t very good at PE but I never felt as hopeless with just the girls. The boys made me feel worse… probably because they were so good at sport. Some boys were always putting me and other girls down because we weren’t as good as them … they had no idea how we felt, all they cared about was winning the game.

It didn’t matter so much with just the girls, even though some were better at sport than others. But with the boys, they always wanted to win and do well and so more was expected of you.

A number of those in the social group commented on why they felt more supported in the all-female setting. For example,

I felt less intimidated with girls because no one took over and we all had a chance to get involved.

I was more inclined to have a go with just the girls even if I wasn’t that good…I didn’t feel as threatened because it wasn’t so fast and rough all the time.

The transition group also expressed a need to be on their own in Year 7 so that they could establish new friendships after coming from different primary schools as well as gain
confidence in participating in a more formal physical education program. These comments summed up the view of the group,

' I only knew a couple of girls in my Year 7 class. It was good to be on our own so we could get to know each other and make new friends.

We didn't know each other that well and it was all new. Everyone had a fair go. If boys were there, they would have put girls down and discouraged the less sporty ones from participating.

It is interesting to note that fear of what boys might do, not only what they did do, exerted control over girls' behaviours. Further, such comments reveal how students themselves reproduce attitudes about gender divisions that they come to school with, and, in turn how gender divisions in school physical education consolidate those in other social spheres. For example, boys are schooled into physical robustness and aggressive competition whilst girls are schooled into co-operation and submissiveness. Hargreaves (1994) notes that in mixed settings, boys set out to demonstrate their muscular strength and superior ability to their peers in order to prove their 'manliness', and are thus frequently provocatively sexist towards girls in the form of verbal and physical sexual harassment. Whilst Hargreaves' analysis attempts to explain the sexist behaviour of boys in physical education, it does little to justify, as revealed in this study, the power battle which occurs in the mixed setting and the degree to which some boys asserted their control over girls.

Johns (1998) cautions that it is unfair to assume that all boys are "rough, tough and confident." She reports on a different teaching mode trialled by a South Australian High School where the quieter, less aggressive and confident boys, were included in a physical education class with girls. The purpose of the program, known as Fit to Lead, was to provide those boys who had been intimidated by their male peers, as well as girls, with an opportunity to gain in confidence and self esteem. Johns' reports that whilst the girls dominated early on, all students were working cohesively and participated equally by the end of the semester. The confidence levels of both boys and girls also increased. Interestingly, a second Fit to Lead class was conducted with a mixed group where the boys were selected by the constraints of the timetable. The girls were reported to be more
inhibited and they took longer to reach the same confidence levels as the first group. Whilst the Fit to Lead program was designed to enhance the health, self esteem and leadership of adolescent girls through physical activity, the principles hold for both genders and hence, as illustrated by this case study, can be successfully applied to coeducational classes.

Six of the ten girls from the competitive group (all of whom were good performers) stated they would have preferred mixed physical education classes either in the first two years of secondary school or all the way through. Cassie’s comment in her second interview reflects this view,

I never found it as challenging in single sex classes because not many girls wanted to get in and have a go. I didn’t feel I got as much out of PE and sport sometimes - I prefer having boys to compete with because it brings the best out of me. I play a lot better.

Another competitive group member commented from an earlier interview,

I just wanted to run around and get into the games in Year 7 but most of the other girls weren’t as sporty or interested. I would have preferred to have boys because there would have been some competition.

The clear implication of views is that the competent girls were likely to feel under challenged and feared that their skills were less developed in an all-female environment. This supports recent research by Hastie (1998) who found that many girls preferred mixed sport teams because boys made them work harder. This is also consistent with earlier research by Browne (1992) and MacDonald (1989) who suggested that coeducation was of more benefit to the physically proficient girls because the better competition provided greater challenges and opportunities to improve their skill level.

4.3.4 Boys a social distraction
This was an issue about which there was no clear commonality of agreement across all groups but rather a common perception within the transition group. Eight of the eleven in the group believed boys to be more of a distraction in the coeducational environment.
Most commented about the effect this had on their participation,
I loved PE in year 7, I had a go at everything and enjoyed participating. Year 8 with the boys was a big mistake for me personally because I was more interested in mucking around with the guys than doing PE... the fact that my first boyfriend was in the same PE class didn't help either (giggles from the group)...I think if it was still single sex in Year 8, I would have participated more and got a better mark.

Although I wasn't into PE in a big way in year 8, I was less interested when guys were in the class; I'd spend more time socialising with them.

Interesting to note that the transition group generally demonstrated greater interest in boys and having boyfriends than the competitive and social groups, particularly after Year 8 when the school became fully coeducational. In fact, transition group members were more inclined than others to socialise with boys at recess and lunchtimes and outside of school in social situations. Thus, the presence of boys in physical education affected the concentration levels and thus subsequent participation for this group. Perhaps socialising with boys outside of school also interfered with (and became a greater priority than), fulfilling weekly competitive sport commitments and hence was a contributing factor to their phase of transition.

In summary, results support previous research by James (1995) and Coakley and White (1992) that boys' domination of team games and space in physical education and in the playground impacted on girls' participation. The current study further identified the main source of domination by boys in team games being through physical and verbal intimidation of the less competent and confident or exclusion of very competent girls. However, while the social group were more reluctant to participate because they felt intimidated by boys and embarrassed about their physical inadequacies, those in the transition group were affected by the intense competitiveness with which boys played and the social distraction of having them around. Conversely, whilst the competitive group were more inclined to get in and have a go, they were more frustrated because they were deliberately excluded by boys and hence could not always gain from the greater performance challenges offered. A few competitive group members were able to resist boys' domination by successfully demonstrating their physical competencies.
It is clear that for most, boys were the control agents who had an inhibiting effect on girls' participation. Moreover, the notion that gender relations in physical education are relations of power was particularly significant. Clearly evident was 1. the degree of power that boys got out of physical activity and 2. the apparent power of sexism which operated quite consciously in the "hidden curriculum", both in the mixed physical education class and in the playground. Reactions of compliance by some girls to boys domination suggest that such relations of power, which are produced and reinforced in other social practices, are hard to shift. However, actions of resistance by the competitive group demonstrate that power relations are not inviolable and that gender relations in physical education are part of a constant process of negotiation, struggle and change.

4.4 The influences of curricula content on participation in physical education and sport.

The literature suggests that many girls prefer to participate in physical activities with a social and recreational emphasis rather than competitive activities and team sports (James, 1993; Sparks & Webb, 1993; Clough et al., 1993). However, few studies have investigated the reasons for girls’ preferences. Those in this study were exposed to two types of physical education programs: a predominantly competitive team sport curricula from Years 7 to 9 and a less structured, recreational based program in Year 10. All students were also expected to participate in the major sports carnivals involving Athletics, Swimming and Cross Country competitions. Preferences for either competitive or recreational activities were investigated in terms of the impact of each on participation levels. A constant underlying theme was the level of performance competence brought to their physical education experience by the students, particularly in the coeducational setting.

4.4.1 Impact of competitive activity curricula

Perceived ability levels significantly influenced participation levels; however, there were differences in behaviour according to group. References to school sport and physical education by the social group were generally negative. Expressions such as, "I was never
good at it", "I was never really coordinated enough" and "I felt like such an unco", were common reasons for non participation, particularly in the ball sports. In comparison to their male and female peers they felt inadequate. Simone commented for example,

I hated competition, I was never good at sport and competition just made it worse... I knew the sporty girls used to hate having me on their team because I used to drop the ball all the time. I'd feel so useless and guilty, I'd just try and keep out of the way.

Appearing clumsy, awkward and uncoordinated in front of their peers, particularly male peers, made them uncomfortable and was therefore avoided as much as possible. Girls also commented about forms of embarrassment in relation to their inability to perform basic hand-eye coordination skills,

I hated those softball and rounders games because I could never hit the ball. The fact that everyone was looking at me only made it worse (Michelle).

Volleyball was the worst for me, I could never serve the ball and every time we rotated and it was my turn everyone would just keep on rotating because they knew I wouldn't get it over the net (Tracy).

I was hopeless at all the ball sports, netball, basketball, volleyball...I felt like such an unco whenever I got the ball...they never used to pass to me in the end: (Simone).

Others emphasised their dislike of the dominance of competitive activities,

Even the warm ups were competitive - games like 'murder ball', 'long ball' and 'octopus' all involved teams playing against one another.

Everything in PE in years 7, 8 and 9 was competitive, the warm-ups, little competitions when learning the skills, like "see how many times you can 'dig' the ball to your partner" and then you have the big game at the end...too bad if you hated competitive activity!

Important to note is that their disinterest was long term. For example,

It just wasn’t for me. My friends would play netball and handball at primary school but I found them quite boring.
I could never see the fun in running around and throwing a ball, I had more fun going out with friends...like going to the beach, roller blading and doing aerobics.

Interestingly, every social group member commented that they especially disliked the fitness testing component which was compulsory for all students at the beginning and end of each year. Standard tests involved speed, aerobic endurance, flexibility, strength and power (see appendix 3) and were conducted publicly,

Fitness testing was by far the worst. All year levels would have to do them at the same time so you would have a lot of people sitting around watching you. I couldn’t do any of the tests and I’d score below average in everything.

I hated fitness testing the most. I wasn’t good at any of them and I hated others seeing how hopeless and unfit I was.

These comments suggest that they were well aware that fitness testing provided a setting for their physical inadequacies to be displayed to the rest of the school. From a social-cognitive perspective, the girls’ behaviour of non participation was directly influenced by cognitive factors such as perceived lack of competence as well as the environment whereby their peers were watching them perform.

Six of the eleven girls in the transition group emphasised lower ability levels in comparison to other team members and opponents as one significant factor for their reduced participation in sport. Most discussions concerned their sport participation outside school, which they indicated affected their participation in sport at school. In particular, they commented about their lack of skills when playing at higher levels of competition. For example, Jenny recalled her experiences of being put up to the 'A' team in her club basketball competition at the end of Year 9. She played one season and dropped back to B grade,

I wasn’t as good as the others in A grade. They were a lot better than me but I let this get to me. My confidence suffered and so did my ability level... I was more concerned about what I did when I got the ball; I let my mistakes and the pressure of it all get the better of me.... I’d rather be best of the worst than worst of the best so to speak so I dropped down.
Others alluded to the pressure of high level competition and the associated impact on ability levels. Fiona stated for example,

I started doubting myself when I could see others coming up and swimming faster than me... looking back it was probably mostly in my head and my times could have been okay if I didn't worry so much. But the pressure got to me, I wasn't swimming as fast and I just didn't enjoy it as much.

Whether this lack of ability was perceived or real, comments suggest that they felt defeated and were not motivated to improve their skill level in order to continue playing competitive sport. This adds further support to previous research by Joan Duda that girls are less likely than boys to persist in competitive sport because they are unable to meet their achievement needs (White & Duda, 1994; Duda, 1993). Much of Duda's research has focussed on gender differences in achievement motivation in sport. From a social cognitive perspective it is suggested that there are two major individual goal orientations, task involvement or ego involvement. Findings revealed that male athletes were significantly higher than females in ego orientation where superiority over others is the primary goal. Conversely, females tended to exhibit greater task involvement in which the focus is on learning, improvement and meeting the demands of an activity. (White & Duda, 1994; Duda, 1993).

The other five girls in the transition group believed that a second factor, decreasing interest more than ability, influenced their reduced participation levels in sport, in and outside of school. For example, Kate commented,

No, I think I still had the ability to keep playing basketball but I just wasn't as committed to playing anymore...there were too many other things to think about like school, my job and going out with my friends.

While this aspect will be covered in more detail in section 4.8, it is relevant to note that this is a further example of how different perceptions exist within the one group; in particular that some girls presented themselves as in charge of their decision, while others gave up in the face of difficulty. This further depicts different agentic qualities in girls.
The emphasis on competition rather than the skills of the game in physical education also detracted from the enjoyment for the transition group. Kellie commented on this aspect,

the game itself and winning became the focus and when this happened it sometimes became rough and messy, it wasn’t a very good standard.

Liz interjected,

especially when the teacher says ‘the next team to score a goal wins’, everyone would go psycho and the skill level really went down.

Thus, there was a particular dislike of intense competition by the transition group and a general perception that the competitive ethos negatively impacted on performance and participation in the physical education class.

As might be expected, the dominant competitive physical education curriculum significantly contributed to the enjoyment and high participation levels for the competitive group. In particular, the various ball sports such as netball, basketball, volleyball and softball were most popular both in and outside school. Aspects of competitive sports most enjoyed were as follows;

The competitive team sports were much more fun and exciting because they make the class work together and challenge everyone to play well (Sue).

The skill learning got pretty boring after a while but I loved the games because you were able to run around and put the skills together...ball sports were the best. I like competing in teams, its more fun (Liz).

I just love the adrenalin rush when I’m competing. It doesn’t matter if it’s Phys. Ed or sport, the pressure of a close game really brings out the best in me (Cassie).

The competitive group felt more comfortable about participating in the competitive coeducational setting than most other girls because they were "good at sport and could do a lot of the activities with the boys". Others shared the view that girls who had good sporting skills tended to be confident and comfortable with their bodies and how they looked. Conversely, a lack of confidence in athletic ability was associated with feelings of discomfort around boys. For example, Liz commented,
The girls who loved PE were those who were good at sport and always had a go whether just with the girls or with the boys as well...it was much harder for the girls who weren't as good at sport to really participate and enjoy phys. ed. when the boys were there.

Everyone in the competitive group was selected in the inter school team sport program and Athletics, Swimming or Cross Country squads. Involvement in the school sports program was taken far more seriously than participation in physical education and other school activities. Explanations as to why school sport was so important were;

It was a chance to represent the school in something you knew you were good at and that you enjoyed...it was a challenge but fun at the same time, I thrive on this type of competition.

I find it exhausting but challenging in the swimming squad, and enjoy training and competing at this fairly high level. It was something worth training hard for, just the satisfaction of doing well for yourself and the school.

It was a real buzz to receive medals and trophies in front of the school, I felt good about myself because there was something I was good at.

Thus, school sport was an opportunity for this group to hone their athletic talents and be recognised for their efforts with sporting achievements impacting on their self esteem.

In summary, the competitive physical education program negatively impacted on participation for social and transition group members. The social group disliked team sports and fitness testing because they were conscious of their obvious lack of skill and how this was viewed by their peers. Some transition group members doubted their ability to continue successfully competing and were unmotivated to improve their skills; others indicated that a decreased interest in competitive sport rather than ability was more significant. High perceived ability levels contributed to positive attitudes and experiences in physical education and sport for those in the competitive group.

4.4.2 Impact of recreational curriculum

The implementation of a recreational program in Year 10 was a deliberate attempt by the physical education department to encourage and improve the participation level of girls. Consistent with findings by Gray et al., (1993), the inclusion of a variety of gender
inclusive activities and sports fostered greater enjoyment and participation by girls in all three groups. Similarly, as discussed in chapter 2, findings support previous research that many girls prefer to participate in social recreational activities than competitive team sports (Sparks & Webb, 1993; James, 1993; Clough et al., 1997). However, this study goes further and reports on reasons for girls’ preferences for such activities.

The majority of the social group welcomed the opportunity to participate in activities which were non-competitive and less structured, offering reasons why they were more inclined to participate,

It was just great to do something different outside the school like golf and squash. You could play with friends of the same standard so it was more relaxed.

I enjoyed just playing the games rather than going through all of the skills and being tested on everything, it didn’t matter as much that you weren’t that good.

It just seemed more relaxed and friendly when we were away from the school and the gym.

References to the lack of emphasis on ability and performance perhaps suggests that girls enjoyed these activities because they were away from unwelcome eyes, that is, away from their more sporting peers and away from the male gaze.

However, it should also be noted that four of the eleven social group members had quite different perceptions. In particular, they had negative experiences with mastering the skills of some sports, as Michelle and Sarah commented respectively,

I still felt like an unco because I couldn’t serve in badminton and could hardly hit the ball in golf. It seemed like everyone else could do it except me.

I hated golf, no one was allowed to get their ball until everyone had their turn - guess who was last every time so I had everyone staring at me which made it worse.

Thus, it is clear that not all girls in the social group felt comfortable about the activities despite the recreational emphasis. Lack of ability was clearly a concern for them.
Those in the transition group were more inclined to participate in activities like golf, aerobics and badminton which lent themselves more readily to a recreational approach than did team games. The more relaxed and less formal atmosphere in Year 10 compared to previous years encouraged greater participation, as Fiona commented,

> It was like a completely different emphasis in Year 10 - it wasn't like PE in the other years where you had to do weeks of skill work before getting to play the game. We seemed to play the games right from the start and learn skills later.

Kellie interjected,

> Yeah, come to think of it, we didn’t seem to have the skill tests for each sport like the other years. It didn’t seem to matter if we mastered the skills or not. It wasn’t so competitive either... it was much more relaxed and fun so I actually enjoyed it more.

Thus, a de-emphasis on skill learning and competition contributed to greater participation by transition members.

Although the girls in the competitive group enjoyed the variety of the Year 10 program most admitted that they still enjoyed the competitive aspect of sports such as badminton, squash and golf, as Cassie explains,

> It was great learning some new skills and it was a challenge to actually master them. I still enjoyed playing competitively against someone no matter what the activity, I guess it’s something that will always be there in me.

Another girl commented,

> Year 10 was good because you could get what you wanted out of the activities. Those who liked the competitive side like us tended to stick together and those that enjoyed playing socially could do that as well.

Interestingly, the inclusion of a mixed gender team sport in the Year 10 program generally received negative feedback from all groups. Although the issue has been previously addressed, the girls' were annoyed by boys’ dominating tendencies and general inability to tone down their competitiveness in the Korfball unit. Korfball is a European mixed sex sport which promotes equal opportunity for males and females and encourages fair play. A mix between basketball and netball, Korfball involves eight players, four males and four
females, attempting to score more goals than the opposition. Although a competitive sport, Korfball was included in the Year 10 program because it was a mixed sport and was to be played with a recreational emphasis. Girls commented about their feelings of frustration,

Korfball was supposed to be a fun game where guys and girls could play together but the guys couldn’t help themselves, they hogged the ball all the time.

It made me so mad, I was often in a good position after losing my defender but the boys never seemed to notice me – I had to scream for the ball.

Whilst the intention of including Korfball in the Year 10 program was to foster greater participation and a sense of fair play, this was not necessarily achieved. This adds further support to the notion that equal access for girls through coeducation does not necessarily equate with equal opportunity (Evans, 1993; Lenskyj, 1993;Scraton, 1992).

Thus, while girls generally agreed that the Year 10 program was more enjoyable and fostered greater participation, they agreed for different reasons. The social group preferred the less traditional and more relaxed approach, the transition group enjoyed the non competitive emphasis while the competitive group enjoyed the variety of activities that could still be played at a competitive level. However, as with studies by Sparks and Webb (1993), it appears that a gap still exists between what is offered and available to girls at school and what they actually want. Tinning and Fitzclarence (1992) refer to the changing needs of adolescents in physical education as a “postmodern youth culture”. They argue that school physical education programs, which still predominantly consist of traditional competitive team sports, fail to attract and enthuse adolescents who value physical activity away from school. They call for a rethinking of the nature of school physical education by considering the possibilities for a postmodern curriculum in physical education which are in tune with the lifestyles of adolescents.

4.5. Parental influence

Parental influence had a significant impact on the nature of girls’ involvement in competitive sport. Five of the nine girls in the social group revealed that their parents
never actively encouraged them to participate in competitive sport or other physical activities when they were young;

   My family has never been into sport, mum and dad never really played sport so I guess they didn’t encourage us (brothers and sisters) to get involved.

   Yeh, I think if your parents are not into sport then they don’t necessarily think about getting their children involved...my parents weren’t into sport and so I never got involved either.

Another girl commented,

   Maybe I would have played Netball with my friends if mum and dad had have encouraged me more. They both worked a lot and often on weekends which meant I couldn’t be involved in a regular team.

Conversely, the remaining four social group members indicated that they had little or no interest in competitive sport despite family involvement. While their parents encouraged them to participate along side their brothers or sisters they were never ‘pushed’.

Therefore, although given the opportunity to participate in competitive sport at a young age they simply were not interested.

The transition group attributed their initial involvement in competitive sport to their parents encouragement and willingness to actively support their involvement. For example,

   Mum and dad used to take it in turns to drive me and my brothers and sisters to netball and basketball. They would stay and watch when they could and always helped out the club with canteen and raffles.

   It was great to have mum or dad watching because they would tell me how well I played each week, even if I didn’t have a good game.

Whilst the majority of the transition group believed that parents were supportive of their decision to discontinue participating in competitive sport, four girls’ parents expressed disappointment. One commented,

   Dad really wanted me to stay in A grade (basketball) and keep playing for the Rep. side but I just lost interest. We had a big falling out over it. I think he thought I had the ability to go on but I didn’t...I guess I couldn’t live up to his expectations.
Fiona told of the negative influence that her mother had on her participation,

I would say that my interest in sport has definitely decreased mainly because of mum who kept pushing me to do it. This made me hate it even more.

The competitive group recognised the positive influence of parents and family who, by their own active participation in sport or exercise, were responsible for their initial involvement in competitive sport. They initially participated in a range of sports such as netball, tennis, basketball, swimming and athletics but then tended to concentrate on one or two preferred sports from about the age of 10. While their parents were actively involved in competitive sport when they were young, some were still participating at the time of interviews in sports such as Tennis, Squash and Golf. This is consistent with previous findings by Taylor et al., (1994) and Anderssen and Wold (1992) who suggested that parental exercise was positively correlated to physical activity participation of children and adolescents. Applying social cognitive theory, it is clear that parents can provide a positive learning role model to their children which subsequently influences their children’s activity participation”.

Competitive group members also acknowledged that having active families who participated in sport and outdoor pursuits together, had a positive impact on their own skill development and thus confidence to participate in sport. For example, Tina, whose whole family was already playing basketball when she started at 5 years of age recalls,

I would not have been as ‘sporty’ because I started playing what they played. I started basketball because I used to watch my brother every week....my mum and sister played tennis, so I started playing.

Sue reflected on her exposure to sport and subsequent skill development,

I was very active...I loved sports and I became fairly skilled with ball sports because dad, my brothers and sister and I always used to muck around playing cricket and football...If my family were not as sporty then I wouldn’t have been as involved. (an example of a dad playing games and developing ball skills with his daughters as well as his sons).

Parents were also a significant influence on the continued involvement in sport by giving support and encouragement in a number of ways. Kerryn stated,
we (Kerryn's sister) wouldn't have got involved (in squash) at all if it hadn't been for mum.....she drove us to training and tournaments, coached and managed us since we started...mum was the one who taught me all I needed to know about squash, she's the reason I have come so far.

Liz commented,

my parents have been and are very much involved; they drive me everywhere, they watch, transport team members, manage and score. My dad was also president of my netball club for a while.

These results are consistent with Kirk et al., (1996) who found that families make a substantial contribution to supporting their children's involvement in junior sport financially and emotionally and through being transporters, coaches and administrators.

In summary, as with much previous research, parents significantly influenced the nature of physical activity involvement for most. Whilst the majority of the social group were not encouraged by their parents to become involved in competitive sport, others were simply not interested despite family involvement and encouragement. Transition and competitive group members generally felt that parents were very supportive of decisions to respectively discontinue or continue their involvement in competitive sport.

4.6 The impact of body image factors on participation

Much of the literature has reported that poor body image inhibits the participation of adolescent girls in physical education and sport. Whilst this study reports similar findings with regards to body consciousness, not all girls were inhibited from participating because of this. Issues to be discussed are as follows: physical education uniform, physical performance and body revealing activities.

4.6.1 Physical education and sport uniform

Previous Australian studies by James, (1996) and Malaxos and Wedgewood, (1996) reported that girls often felt self conscious wearing their school sports uniform and were inhibited to participate in physical education with boys. Coakley and White, (1992) made the same finding in their study of British adolescents who felt self conscious of their weight and embarrassed about participating in the compulsory uniform. This study
substantially confirmed these findings with all thirty students expressing dissatisfaction with the uniform requirements;

    I hated the tee shirts because they were too tight and I hated the skirts because they would fly up all the time.

    It revealed all lumps and bumps for everyone to see...I was much more self conscious with guys around.

    no wonder a lot of girls deliberately forgot their uniform or sat out. Those tight tee shirts and little skirts were disgusting. I’d try and wear my tracky daks and rugby top as much as I could.

    The girls generally felt uncomfortable and self conscious wearing a uniform that only accentuated the physical changes that they were experiencing and thus increased feelings of self consciousness for them during physical education classes. This is consistent with Kirk and Tinning (1994) who suggest that physical education reinforces dysfunctional associations between physical activity, body shape and self identity. Thus, for adolescent girls, where the body and self are focal areas of concern, strategies such as wearing tracksuits and baggy clothing are used to avoid exposure or embarrassment.

    Those in the social group were controlled by fear of ridicule by boys whilst wearing the “skimpy” physical education uniform. Only a few experienced ridicule and as revealed by the following comment, some girls could handle it,

    I know the boys used to make fun of me and my big boobs. I used to let it get to me but then I told them where to go one day and I never heard them again...they probably still made fun on their own but they wouldn’t dare near me.

    Another girl was intimidated by what she feared they said,

    I was conscious of my weight and it felt like all the guys were staring at me in Phys. Ed. I never heard them say anything but I still felt embarrassed.

    Those in the transition group also disliked wearing the physical education uniform in front of boys, but for different reasons. Because they were becoming more interested in boys and having boyfriends, these girls were particularly concerned about how they appeared to boys. They commented about the importance of their appearance,
I really liked this guy in my Year 8 class. I wanted to look okay so I didn’t want him to see me in my PE uniform... because my legs were too fat and I didn’t want to wear the skirt.

Kellie elaborated on this aspect during the collective interview,

when boys were around you wanted to look your best. There was nothing worse than breaking out or having hairy legs in phys. ed.

Thus, Lenskyj’s (1993) notion of ‘compulsory heterosexuality’ whereby girls feel compelled to conform to a female physicality, particularly in the coeducational environment, is illustrated by the transition group. Further, the above comments suggest that girls were well aware of the socially constructed “trim, taut and terrific” body which, as Kirk (1993) suggests, is regarded as the ‘ideal’ in contemporary Australian culture and is reinforced and reproduced in school physical education and sport.

Transition group members also voiced their dissatisfaction about having to wear "tight fitting gold singlets" and "small black briefs" whilst competing in the school Athletics and Cross Country carnivals. One girl remarked,

we use to wear bike pants and tee shirts...if teachers made us change some girls just refused to compete.

Jenny reiterated,

I can honestly say that one of the reasons why I didn’t compete in the Year 9 cross country squad was because of that disgusting outfit.

Similarly, those in the competitive group reported that they felt uncomfortable and self conscious when competing in both the Athletics and Cross Country carnivals. Whilst they still participated, they tried to avoid having to wear the uniform correctly in order to disguise the effects of the skimpy outfits. Cassie described this matter of factly,

I hated it...the yellow singlets were all so small, it was always a fight to get the biggest. Then in Year 10, when you bought the new big ones, we were more conscious because they (the singlets) gaped...we would wear our yellow PE tee shirts underneath, so it wasn’t so embarrassing.
In contrast to others, the compulsory uniform did not affect the willingness and enthusiasm for the girls in the competitive group who were not as self-conscious as others in an activity setting. One girl commented,

Yeah, I hated the uniform just as much as anyone else but it never stopped me from participating. I guess I wasn’t as self conscious as others, I don’t know why but I was probably more concerned about trying to get in and have a go at whatever sport we were doing at the time.

Cassie explained in her individual interview,

I would say that I have a pretty good body image, particularly when it comes to sport and phys. ed...I guess I felt ok. about participating because I could do most of the sports in phys. ed...yeah, I’d say that I felt more confident than most when it came to phys. ed and sport.

Thus, whilst all girls were disgruntled about having to wear the compulsory uniform, not everyone’s participation was affected. Once again, boys are seen to be powerful control agents over girls’ attitudes and behaviour, and where girls felt confident about their performance, body confidence was higher and they were able to ignore their unflattering uniforms.

4.6.2 Body revealing activities

Swimming and gymnastics were two activities most disliked by many girls because they required substantial exposure of the body. As discussed in chapter 2, previous studies have found that girls were less likely to participate in activities such as swimming and gymnastics where their bodies were on display (Malaxos & Wedgwood, 1996; Coakley & White, 1992). This is partly consistent with results from this study which revealed various strategies used by some girls to avoid exposure. However, in contrast to this previous research, several girls were not reluctant to participate in swimming and gymnastics despite feelings of self-consciousness.

Swimming was commonly isolated as the activity with which girls felt most uncomfortable. Comments emphasised specific body parts that they wanted to conceal.
For example,

I looked awful in bathers and was really self conscious of the fact that I wasn't as developed as other girls (social group member).

I put on a bit of weight in Year 9 and 10...mainly in the legs...so I was conscious of how I looked in bathers. I actually liked swimming but just couldn't bring myself to wear bathers in front of everyone (transition group member).

I was O.K at swimming but I didn't like how I looked in bathers and was conscious of my big bottom (*some laugh to show they disagree with Sue's assessment of her large bottom*) ...I didn't mind it so much once I got in the water but I hated getting out of the pool and in the change rooms at the end (competitive group member).

This adds further support to the idea that girls are conscious of their bodies as objects and the need to conform to an 'ideal' slender body shape. Further, the isolation of one particular body part, which was considered imperfect, implies overall imperfection and failure.

Social group members were more inhibited about participation in swimming and gymnastics than other girls. They essentially lacked physical confidence both in their ability to swim and tumble but also in their appearance and how awkward their bodies moved. Whilst perceived competence in skills has been previously discussed, the following comments were particularly relevant,

I hated everything about swimming - wearing next to nothing, having boys around and swimming in the deep end. I never really learned to swim properly so I looked like a spastic doing freestyle and breast stroke...I dreaded diving in the most, especially when you had to go two at a time and everyone else watched.

I actually hated my body most when doing gymnastics. I didn't like others to see how awkward and uncoordinated I was doing forward and backward rolls and handstands. I reckon I only participated in two (out of six) classes.

Comments about strategies adopted by the social group for heading off embarrassment associated with body exposure in swimming and gymnastics included;

I'd try and stay home on swimming days but when I couldn't I refused to swim without wearing a tee shirt over my bathers.
There was no way I was going to swim. I'd bring sick notes or deliberately forget my bathers so that I wouldn't have to swim. This meant I had to do theory but anything was better than swimming.

I felt embarrassed doing gymnastics in my netball skirt when boys were around. I'd either wear tracky daks or just sit out.

In contrast to the social group, most transition and competitive group members enjoyed participating in the swimming and gymnastics programs. As previously discussed, confidence in physical ability was the underlying influence on participation.

I actually loved swimming. I spend every summer in the water at our family beach house, that's where I learned to swim...yeah, being a confident swimmer makes all the difference (transition group member).

I was still self conscious in bathers but not as much as others. I had swimming lessons as a kid and have loved it ever since so it (body consciousness) didn't seem to matter once the class got started (competitive group member).

It felt great to do all those rolls and turns in gymnastics, especially to the music... We were allowed to wear our tracky daks so you didn't have to worry about having your bottom on show to everyone (transition group member).

In summary, it is clearly evident that physical education, by nature of the skimpy uniform requirements and body revealing activities, enforces consciousness of the notion of the socially constructed slender body. Those who lacked confidence in their physical ability, particularly in swimming and gymnastics, were reluctant to participate and therefore adopted strategies to avoid any body exposure. However, where girls felt confident about their physical abilities and body image, they were able to ignore their unflattering uniforms and thus participation was unaffected.

4.7 The impact of teacher behaviour on participation

Much of the previous research and literature in the area of physical education and sport has concentrated on the behaviours of students rather than those of teachers. This relates to a common criticism in behavioural science in that people tend to be more interested in the powerless than the powerful. Luke and Sinclair (1991) briefly reported that autocratic teaching styles and methods of evaluation negatively influenced girls’
participation in physical education. However, this study found that specific teacher
behaviours had a significant impact on girls' participation in both physical education and
school sport. These were: lack of attention to girls in coeducational classes, allocating
groups on the basis of sex, and pressure tactics used to coerce girls to participate in school
sport. They will now be considered.

4.7.1 Lack of attention to girls in coeducational classes
This was an issue about which there was general agreement. All girls believed that
teacher behaviour in mixed classes was geared towards teaching and disciplining of the
boys, with concurrent lack of attention to girls. Michelle stated for example,

I remember Ms R in Year 8 who had a hard time controlling the boys. They would
always run amok and she spent more time trying to keep them in line than teaching
the rest of the class.

Liz offered this comment,

it was just as bad in our Year 10 class, Mr K would try and spend time with the
girls but he had to spend a lot of time trying to keep the boys in control. They
would always muck around and be stupid...we had all the roughies in our class.

Because teachers spent more time controlling boys, idleness was enforced on girls. Liz
concludes,

We would stand around a lot more in the co-ed. class because we had to wait for
the boys to shut up or stop running around. This never happened with just the girls
so teachers had more time to spend on us...we had more of a go when the boys
weren't around.

One particular teaching practice commonly used by male and female teachers but which
was negatively received by girls was that of separating boys and girls during skill
development activities and team games in coeducational classes. Reasons for this were
given during a collective group discussion. Sue, from the competitive group commented,

I didn't like my PE teacher in Year 10. He wasn't really interested in the girls and
spent more time with the boys, especially in the games where he would split the
girls and the guys up.
Kellie, a transition group member, interjected,

Yeah B.B always used to split us up—girls in one group, guys in the other...he didn't think we (girls) could do any of the skills.

Finally, Simone from the social group expressed her dissatisfaction about being divided into gendered groups during mixed sex classes,

It made me feel as if we (meaning girls) were the vegies that needed extra help...We knew half the time that it was because the teachers thought the boys knew how to do whatever it was we were doing - like footy and stuff like that. They'd go off and do drills and stuff while we would have to get taught how to do it.

Strategies of separation used in coeducational classes sent a message to all girls that they weren’t competent, strong or important enough to compete with males for attention. Wright (1995, 1996) explains this issue in terms of the ways in which male and female students are positioned differently by teachers in the physical education setting. The dominance of masculine discourses of sport whereby competitive achievement, strength and technical knowledge are valued, means that female students are “likely to be positioned as marginal and inadequate” (1995, p.18). Thus, girls are expected to be unenthusiastic and are constantly under instruction on how to perform each task. On the other hand, boys are often given minimal instructions but are directed to undertake more advanced drills or games. They also receive greater feedback and coaching during team games and match play. Thus, findings suggest that there is a responsibility on teachers to question the stereotypes and their teaching practices such as allocating groups according to gender, which limit girls behaviour and achievements.

4.7.2 Pressure to participate in school sport

This was an issue which affected girls from the transition and competitive groups, but not the social group for whom it was irrelevant because of low skill levels. Whilst teacher pressure was seen as a negative influence by those in the transition group, it was seen more positively by the competitive group.
The transition group was particularly concerned about the continual pressure received from teachers to compete in intra and inter school sport. Jenny commented for example,

I just didn't want to compete any more...my friends weren't involved and I wanted to muck around with them...I got sick of the hassling and the pressure from teachers to compete, it wasn't really fair and I just rebelled against it all.

Jenny was good at middle and long distance running events which she demonstrated by her exceptional performances in both the school and inter school competitions at Years 7 and 8. However, she competed reluctantly at Year 9, became disinterested and had less enthusiasm about competing at the same level thereafter, much to the disappointment of the physical education staff. Jenny admitted that the more pressure Mr M put on her, the more determined she became to avoid participating.

Fiona also spoke of the pressure exerted on her to continue her involvement in the school swim squad,

I guess I had already made up my mind not to be in the school swim squad but the phys. ed staff kept hassling me too. Like Jenny, it probably made me more determined not to participate.

Interestingly, transition girls noted that male teachers were more ‘bullying’ in attempts to pressure them to participate. Whilst female teachers tended to encourage participation by emphasising the importance of utilising natural ability, male teachers were reported to use negative pressure tactics by focusing on the consequences of girls’ non participation. For example, one girl stated,

Mr K and the other male teachers were always on at me about the EIS Aths. I was always called up to Mr K’s office and either he or Mr M would lecture me about my ability and me wasting it because I wouldn’t train and didn’t want to compete...they didn’t care about me they just wanted to win the EIS.

Thus, it would seem that the aims of the physical education staff and these girls were at odds and that student interests were seen as subservient to those of male teachers and to the school in general. As Wright (1996) suggests, perhaps teachers take for granted that it
is the girls who are the problem rather than the curriculum and the pedagogical context in
which they find themselves.

In contrast, the competitive group enjoyed the challenges of competitive sport and
regarded ‘pressure’ from teachers as a positive influence on their participation. For
example,

No, I wouldn’t call it pressure, more encouragement to train hard and compete to
the best of our ability.

It was good to have them encourage us in this way because it showed that they
were aware of what we were doing and how we were going with our training.

Cassie made this comment in the collective group interview,

I wouldn’t have trained as hard or competed as well if it hadn’t have been
for you (researcher) and Mr M. You guys made me feel good about myself and
my ability because you showed some faith in me.

Thus, while the manner of encouragement by staff to participate in competition was a
factor in the students’ response, more over riding was the impression that minds were
already made up, and that is what girls acted upon.

4.8 Distinguishing characteristics of each group

In summary, the following descriptions have been constructed from the results of all three
stages of interviewing and represent a composite of the distinguishing characteristics of
each type.

4.8.1 The social group

The social group was never interested or involved in organised competitive sport, in or
outside of school. They lacked encouragement to become involved at a young age, had
low confidence levels and demonstrated low ability to adequately grasp the hand-eye
coordination skills involved in most sports. Thus, their experiences in physical education
and school sport were generally negative given the predominant nature of competitive
team sports in the curriculum. They felt particularly inadequate in the ball sports and
fitness testing because their deficiencies were plainly visible to all around them. Any form
of competition only served to show case their incompetence and inadequacies in front of their peers. They coped by avoiding these situations whenever possible, adopting strategies such as forgetting their physical education uniform, bringing notes from home or being absent from school. The presence of boys heightened feelings of awkwardness and lack of ability, and body image issues were particularly significant. They not only feared ridicule by boys wearing the ‘skimpy’ physical education uniform, but were also conscious of how uncoordinated they appeared whilst performing coordination activities.

The social group preferred informal recreational activity to competitive sport because there were fewer expectations of them to perform to a high standard. Hence, it seems it was not physical activity they disliked but aspects of competition, and being visibly incompetent.

Physical education teachers were seen as viewing and treating them less favourably than other students because of their disinterest, limited athletic ability and lack of participation in physical education.

4.8.2 The transition group
Those in the transition group were formerly involved in competitive sport both inside and outside of school, but the emphasis on competition and winning, pressure from parents, coaches and teachers to perform well and the fear of failure contributed to their loss of enjoyment of sport. Lack of skill improvement relative to those of ‘better performers’ affected their interest and confidence levels. In coeducation classes they were inhibited by the competitive nature of the activities and boys’ tendency to dominate the play and physical space. Also, at a time when they were becoming more interested in the opposite sex, boys were seen as a social distraction leading to decreased concentration and participation levels. They were further inhibited by having to wear a uniform which maximised body exposure.

Physical Education teachers were a further negative influence on participation levels. In particular, attempts by male teachers to coerce girls into competing in the inter school
sports program when they had lost enthusiasm for it were detrimental to the overall participation.

The transition group welcomed the opportunity to participate in the Year 10 physical education program because of the recreational nature of activities and the deliberate de-emphasis on competition, demonstrating that girls can be interested in participating in physical activity which they enjoy and are motivated to do.

4.8.3 The competitive group
The competitive group was involved in organised, competitive sport in and outside of school from a very young age, and enjoyment of the competitive aspects of sport developed as they became increasingly aware of their improved skill level and potential to play. The interschool sports program was allocated prime importance and commitment to training both before and after school was accepted without question as a necessary component of sporting success. High perceived ability was associated with good body image and self esteem. This was demonstrated by willingness and confidence to participate in the coeducational setting and in body revealing activities such as swimming and gymnastics.

Parents were a significant influence on initial and continued involvement in sport for these girls as coaches, managers and drivers and indirectly by offering financial and emotional support. Physical education teachers were seen as good role models who encouraged and supported them to participate and successfully compete at inter school sports carnivals and competitions.

Whilst this group preferred competitive team sports to informal social activities, they enjoyed the variety of program content in Year 10 recreational physical education. However, they enjoyed the competitive aspects of activities such as golf and squash that were delivered with a recreational emphasis.
4.9 Reasons why some girls pursue non-competitive, informal physical activity during adolescence rather than more formal games and sports.

It should be clear that girls in the transition and social groups were disenchanted with competitive sport for reasons of the seriousness involved in competing and winning, the pressure to perform to a high standard, the high skill level required and the emphasis on hand-eye coordination skills in most team sports. It should also be clear that girls who drop out of sport do not necessarily see physical activity as unimportant. The issue of why the girls in the transition group turned to non-competitive activities will be briefly examined.

4.9.1 Lack of pressure to perform

The lack of pressure to perform and win was generally the first and main reason given by girls in the transition group in pursuing non-competitive activities. They decreased involvement in organised competitive sport either by dropping into a lower level of competition or dropping out of sport altogether. They also became interested in pursuing a variety of informal activities that had no competitive element and thus no pressure to excel. The girls explained why they enjoyed activities that involved "no pressure" on themselves and no fear of letting others down.

I loved my weights program because I didn't have to worry about letting anyone else down or feeling stressed about not performing well. It's just great to do something without all that pressure.

I started power walking with a friend after I stopped athletics. It was a great way to catch up and I didn't have to worry about my times or how fast I walked.

Five girls revealed that they still enjoyed the 'competitive' activity in which they participated but preferred an informal, social involvement without the added pressure of competing. Speaking about their decreased involvement in competitive swimming and running, Fiona and Jenny spoke about their loss of interest in the competitive aspects rather than the activity itself. Fiona made this comment,

I like swimming but I hate racing. I like to go down to the pool and swim a few laps on my own, without the noise, the gun and pressure to win.
Thus, it was not physical activity that they disliked but aspects of competition.

4.9.2 Flexibility of time commitment
Eight of the eleven girls in the transition group indicated that flexibility of time commitment was important to their continued participation in forms of physical activity. One girl commented,

I started to hate having to get up early every Saturday to play netball, particularly if I had a late night and wanted to sleep in...I'd rather go for a walk and run later in the day or when I felt like it.

Jenny particularly emphasised the flexibility of time commitment as one reason that she preferred to jog for fitness rather than running competitively;

I ran competitively since I was 10 years old, which took up most of my Saturdays and one or two nights a week training depending on the time of year and events coming up. It was great not to have this commitment when I gave up competitive running...I actually enjoy going for a run on my own now and then because I can do it whenever I want and don't have to worry about racing against anyone.

Everyone in the transition group partially attributed their decreasing involvement in competitive sport to a "lack of time". Elaborating on this however, they revealed that exercise and activity had to slot in around their expanding interests and changing priorities. For example,

it really came down to a matter of priorities - with a bigger social life, my part time job and a lot more school work, it seemed that sport was the one to give.

Thus, changing priorities meant that regular weekly sport commitments were no longer viable; instead physical activity had to fit in around various social and study commitments.

4.9.3 Individual orientation
A preference for individually based activities after discontinuing their involvement in sport was also a factor. One girl commented,

When I stopped playing netball and basketball I just wanted to do things on my own...I joined the gym in Ringwood and I liked going on my own. I did aerobics
and body titan and I really worked up a sweat. I feel much fitter now than when I played sport.

Kellie revealed why she preferred to maintain fitness through individual activities rather than team sports,

I prefer to go to the gym and work-out on my own, same too with Karate...I don't have to rely on anyone else and they don't have to rely on me...it's much easier now that I have so much more to fit in.

Others emphasised the need to have a break from day to day routine and found exercising on their own to be a good stress release. For example, whilst Fiona preferred to swim laps of the pool, Jenny enjoyed going for a jog around her neighbourhood on her own. Fiona stated,

jogging's a great way to exercise and get away from everything and everyone. It's a great way to get your frustrations out.

Interestingly, Fiona, Jenny and others revealed that they enjoyed competing against themselves by improving on their times or distances that they ran, swam or cycled.

I still like to time myself in the pool and try to beat my previous time, so I guess I still have a competitive side to me.

I cycle to school everyday and time myself to see if I can beat my record.

Thus, these girls have discovered the benefits of individual improvement by competing against themselves. The notion that competition has to be against other people is limiting because it negates the possibility that we can improve by competing against ourselves, by improving times or distances, by doing better than we did ourselves the last time.

These results add further support to the fact that girls are not all the same and past research which suggests that they drop out of all physical activity after discontinuing their involvement in sport may be incorrect. Girls make deliberate choices about the activities in which they participate and such decisions are made with foresight and judgement. From a social cognitive perspective, individuals make conscious decisions about their activity involvement through an evaluation of costs and benefits analysis. Such an
evaluation is influenced by support from significant others and various environmental influences. In the case of these girls, decisions to discontinue their competitive sport involvement were influenced by coaches, parents and peers as well as environmental factors such as the competitive nature of activity involvement. Further, physical activity choices were based around expanding interests and changing priorities during adolescence such as socialising with friends as well as study and part-time work commitments. Thus, girls simply chose activities that were informal, recreational and largely individual and which suited their changing lifestyles.
Chapter 5  
Summary, Conclusions and Recommendations

The aims of this empirical study were:

1. To determine the issues which impact significantly on the participation of adolescent girls in physical education and sport.

2. To investigate whether girls who drop out of competitive sport necessarily become physically inactive.

Qualitative individual and collective interview methods were primarily utilised and involved three interview stages. Thirty Year 10 girls from a Catholic secondary school participated in individual first interviews. Nine selected girls took part in the subsequent longer in-depth individual and collective interviews and were representative of varying activity interests and participation levels within the group.

5.1 Major findings

- The most powerful and pervasive theme throughout this study was that boys were control agents over girls' behaviour and their subsequent participation in coeducational physical education and playground activities. Clearly apparent was the ability of boys to gain power over girls in the physical activity environment. The main source of boys' domination was through verbal and physical intimidation of the less competent and confident girls and exclusion of very competent girls. Social and transition group members demonstrated compliance with boys' power by hanging back and sitting out of competitive activities. Conversely, the competitive group resisted boy's attempts to dominate but had to work hard to demonstrate their athletic capabilities in order to do so.

- The dominant competitive curricula and sports program negatively impacted on participation levels for many girls. A lack of physical competence and confidence along with a general disregard for aspects of competitive sport were significant. Girls were
motivated to participate in a physical education program that reflected a recreational, non-traditional and less formalised approach, despite the fact that the three emergent groups had varying physical activity capacities and interests.

- The skimpy physical education and sport uniform along with body revealing activities such as swimming and gymnastics increased feelings of self-consciousness and embarrassment for most. Some girls were also conscious of their lack of coordination and physical skill, particularly in the mixed, competitive sport setting. When strategies were adopted by some to avoid any body exposure or physical humiliation, participation levels were subsequently affected. However, where girls felt confident about their physical abilities and body image, they were able to ignore their unflattering uniforms and thus participation was unaffected.

- Specific behaviours and teaching practices of physical education teachers such as giving more attention to boys and segregating the sexes in mixed classes, contributed to the construction of gender and to the inequities for girls in physical education. Most significant was the perception that boys' activity needs had priority and that girls were unable to participate with boys without special assistance.

- Girls who disengaged from competitive sport made conscious decisions to take other forms of physical activity that suited their changing lifestyles. These activity choices reflected their social and emotional needs at a time when expanding interests and changing priorities occurred. For example, informal, recreational and largely individual activities such as aerobics, jogging and swimming were undertaken as these could be fitted in around school, work and various social commitments.

- The emergence of three different groups emphasised that girls are not all the same. The varying physical activity interests and behaviours of each group clearly demonstrates both the awareness girls have of their social situations and their ability to make rational choices about their activity participation. Particularly significant were the ways in which girls responded differently by either resisting or accommodating the various
social constraints, such as those created by coeducational classes and a predominant competitive curricula.

5.2 Implications

- The pervasiveness of boys’ active and sometimes aggressive intimidation and domination of girls in physical education and in the playground and the subsequent effect on girls’ participation, strongly supports the argument for sex-segregated classes and activity areas. Moreover, greater and equal access to activity areas for girls is a further issue. This is supported by the findings which revealed that girls felt more comfortable and supported in the all female environment and were thus more inclined to participate.

- Girls who do not have a high level of physical skill by the time they commence their secondary schooling are going to experience difficulties grasping complex, hand-eye coordination skills involved in many competitive team sports. Thus, the predominant nature of the competitive physical education curricula in most Australian secondary schools will limit the opportunities of many adolescent girls to successfully participate.

- The adoption of a common, competitive physical education curriculum for girls and boys in 1992, when the school became fully coeducational, did little to diminish the power of traditional ideas about gender or to change the expectations and experiences of students. A critical appraisal of a predominant competitive curricula, which largely accommodates boys interests in the coeducational setting and tolerates or even encourages their dominating behaviour, is required. There is an obvious need to provide activity in a way that fits with girls’ lifestyles rather than expecting them to adjust to a male mode of competitive sport. Deem and Gilroy (1998) state that school physical education, with its emphasis on competition, masculinities and compulsion, does not necessarily encourage girls to regard team, organised and competitive sport as something which they are motivated to do as adults. That is not to say there is no place in the curricula for competitive sport. In *rethinking* the nature of the curricula to reflect adolescents changing needs, as Tinning and Fitzclarence (1995) and Wright (1996)
propose, consideration should be given to the possibility of electives within the physical education program so that both competitive and non competitive activity options are made available. Obviously timetabling and activity feasibility issues would need due consideration. However, the school and physical education staff have a responsibility to review and change the nature of the curricula so that activities reflect the interests and lifestyles of adolescent male and female students. The first and obvious way to identify girls’ activity interests is to ask them. Involving them in negotiation of their program content would be a useful strategy in helping to motivate girls and therefore increase participation levels.

- Physical education teachers have a responsibility to address the ways in which their pedagogical practices reinforce and reproduce social inequalities that limit girls’ physical activity participation. They need to question the ideologies and practices which can be regarded as anti-educational such as a predominant male oriented, competitive curricula and to challenge whenever necessary, instances of sexism such as verbal and physical harassment by boys of girls. Further, strong resentment of the pressure exerted on girls to participate in the school sports program calls for greater teacher awareness of and sensitivity to girls changing activity interests.

- The problem of poor body image among adolescent girls needs to be taken into account when considering uniform policies. The common dissatisfaction about the physical education and sport uniform (which for many Australian schools consists of tight fitting shirts and netball skirts for physical education and sports briefs and singlets for sport) clearly indicates the need for change. The school in this study reviewed their uniform policy when the girls were in Year 9, after the first year of coeducational physical education. Girls were more inclined to participate when wearing black shorts “like the boys” and “baggier tee shirts”. However, the policy regarding the compulsory wearing of athletic singlets and sports briefs for Athletics and Cross Country remains. Giving girls the option to wear clothes in which they feel comfortable may improve participation levels. For example, perhaps girls might feel less self conscious if they were given the
option of wearing bike pants or shorts instead of sports briefs and baggier tee shirts instead of singlets.

5.3 Possibilities for future research

This study reported on five major issues that significantly influenced adolescent girls’ participation in physical education and sport. However, each of these issues is worthy of independent study so that they can be more thoroughly investigated and understood. In particular, there is much potential for research in the area of teacher-student relations and the impact of teacher behaviours on girls’ participation in physical education and sport. Greater understanding and appreciation of the ways in which specific teaching practices and existing gender relations combine to restrict girls’ participation will assist physical educators in enhancing their physical activity opportunities and experiences.

It is imperative that our understanding of girls’ physical activity interests and needs is built on their actual experiences, hence the need for more qualitative research in this area. Longitudinal studies of girls’ physical activity experiences in schools as well as post school involvement will provide a greater awareness and understanding of the meanings that physical activity has for them. Further, there is a need to expand on research about the types of activities that could be offered at school that would lead to life-long involvement. Increasing research in this area should be used to encourage more Australian secondary schools to critically evaluate existing traditional physical education and sporting programs so that girls’ interests are adequately reflected.

I would like to conclude with a quote from Robert Fulghum (1990) which aptly highlights the importance of qualitative research for understanding how children learn, and which is essential for understanding the physically active realities of adolescent girls’.

Appendix 1  Nature and structure of physical education

Physical education was compulsory for all students up to and including Year 10. Students in Years 7 to 10 participated in a double period (2 x 50 minutes) of physical education per week. These periods were entirely practical in nature with students required to wear a compulsory physical education uniform. [Prior to 1993 the physical education and sport uniform requirements consisted of a tee shirt and skirt for girls and shorts and tee shirt for boys. In 1993, girls were given the option of wearing shorts or skirt for physical education and sport].

Prior to 1992, the physical education curricula for boys and girls differed in that some sports were exclusive to girls and others exclusive to boys. In 1992, when the school became fully coeducational, a common physical education curriculum was adopted so that all boys and girls participated in the same sports/activities (see appendix 2 for an outline of the units taught prior to and after 1992). The physical education curriculum from Years 7 to 9 (post 1992) offered a broad range of competitive sports that were sequentially taught (in terms of increasing skill level) over the three Years.

In 1992, the Year 10 coeducational physical education course was given a deliberate recreational emphasis with units such as Golf, Squash, Aerobics and Weights being included. The nature of the physical education class and delivery of instruction was less formal than in Years 7 to 9. While skill learning was covered for each unit, the emphasis was primarily on fun and participation rather than skill acquisition, competition and assessment. For most students, Year 10 physical education was the last opportunity to participate in any formal physical activity lessons. This course exposed students to the types of recreational activities that could be taken on as recreational pursuits later in life.
Appendix 2  Physical Education Syllabus: Years 7 to 10 (Compulsory)

The physical education program followed a multi activity format comprising a series of four to six week activity blocks. Fitness testing was allocated two weeks at the beginning and end of each year.

For the girls involved in this study, classes were single sex in Years 7 and 9 and coeducational in Years 8 and 10.

Pre 1992

GIRLS

<table>
<thead>
<tr>
<th>Year 7 Units</th>
<th>Year 8 Units</th>
<th>Year 9 Units</th>
<th>Year 10 Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Athletics</td>
<td>Athletics</td>
<td>Athletics</td>
<td>Athletics</td>
</tr>
<tr>
<td>Swimming</td>
<td>Swimming</td>
<td>Swimming</td>
<td>Swimming</td>
</tr>
<tr>
<td>Gymnastics</td>
<td>Gymnastics</td>
<td>Gymnastics</td>
<td>Gymnastics</td>
</tr>
<tr>
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<td>Netball</td>
<td>Netball</td>
<td>Netball</td>
</tr>
<tr>
<td>Basketball</td>
<td>Basketball</td>
<td>Hockey</td>
<td>Badminton</td>
</tr>
<tr>
<td>Volleyball</td>
<td>Volleyball</td>
<td>Volleyball</td>
<td>Volleyball</td>
</tr>
<tr>
<td>Softball</td>
<td>Softball</td>
<td>Softball</td>
<td>Squash</td>
</tr>
<tr>
<td>Ball Handling</td>
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</table>

BOYS

<table>
<thead>
<tr>
<th>Year 7 Units</th>
<th>Year 8 Units</th>
<th>Year 9 Units</th>
<th>Year 10 Units</th>
</tr>
</thead>
<tbody>
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<td>Athletics</td>
<td>Athletics</td>
<td>Athletics</td>
<td>Athletics</td>
</tr>
<tr>
<td>Swimming</td>
<td>Swimming</td>
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</tr>
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<td>Cricket</td>
<td>Cricket</td>
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</tr>
<tr>
<td>Soccer</td>
<td>Soccer</td>
<td>Soccer</td>
<td>Soccer</td>
</tr>
<tr>
<td>Football</td>
<td>Football</td>
<td>Hockey</td>
<td>Badminton</td>
</tr>
<tr>
<td>Table tennis</td>
<td>Table tennis</td>
<td>Gymnastics</td>
<td>Squash</td>
</tr>
<tr>
<td>Volleyball</td>
<td>Volleyball</td>
<td>Volleyball</td>
<td>Volleyball</td>
</tr>
</tbody>
</table>
Appendix 2 cont.  Physical Education Syllabus: Years 7 to 10
(Compulsory)

Post 1992 (Common for boys and girls)

<table>
<thead>
<tr>
<th>Year 7 Units</th>
<th>Year 8 Units</th>
<th>Year 9 Units</th>
<th>Year 10 Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fitness Testing</td>
<td>Fitness Testing</td>
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</tr>
<tr>
<td>Athletics</td>
<td>Athletics</td>
<td>Basketball</td>
<td>Aerobics/Swimming</td>
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<tr>
<td>Ball Handling/Netball</td>
<td>Basketball</td>
<td>Cricket</td>
<td>Badminton</td>
</tr>
<tr>
<td>Gymnastics</td>
<td>Gymnastics</td>
<td>Football</td>
<td>Golf</td>
</tr>
<tr>
<td>Softball</td>
<td>Hockey/Soccer</td>
<td>Self Defence</td>
<td>Squash</td>
</tr>
<tr>
<td>Swimming</td>
<td>Swimming</td>
<td>Softball</td>
<td>Touch/Gridiron</td>
</tr>
<tr>
<td>Volleyball</td>
<td>Table Tennis</td>
<td>Swimming</td>
<td>Volleyball</td>
</tr>
</tbody>
</table>
Appendix 3  Fitness testing program - Years 7-10 - Pre and post 1992

All classes from Year 7 to 10 will undertake a fitness test at the beginning and end of the year. The test used is the standard school-age fitness test as recommended by the Australian Council for Health, Physical Education and Recreation (ACHPER). It is known as the ACHPER FITNESS TEST AWARD SCHEME.

The Award scheme involves a series of activities which test the various fitness components. The following tests are conducted:

1. Age – in years as of date of test
2. Height – tested in centimetres without shoes
3. Weight – tested in kilograms without shoes
4. Sit-ups (Abdominal Endurance) – maximum number of sit-ups in 5 minutes maintaining correct technique while keeping in time with a metronome, Arms are straight with hands on thighs, knees bent and hold position of fingers at top of knees for one second. i.e. ‘up-hold-down’ – 3 seconds for each.
5. Push-ups (Upper Body Strength) – maximum number of push-ups in 30 seconds. Students assume push-up position on angle with hands on front of bench/chair. Correct technique must be maintained with chest touching edge of bench on down phase.
6. Standing Broad Jump (Leg Strength and Power) – tested in cms. by way of a two feet together jump, starting with toes behind the line and measured from the back of the heels.
7. Sit and Reach (Hamstring Flexibility) – tested in cms. + or – according to the distance reached along the testing box, with legs straight and hands together.
8. 50M. Sprint (Speed) – tested in seconds from a standing start.
9. 1.6 km Run (Aerobic Endurance) – tested

Scores for each student for each test are fed into the Fitest Computer Program. Each test score is ranked according to percentile tables for that age group and an overall fitness test score is thus obtained.
Each student is allocated one of the following awards:

1. **GOLD**
2. **SILVER**
3. **BRONZE**
4. **ENCOURAGEMENT**

Students receive a print out of their results and award grade in their reports at the end of each semester. The print out shows their scores, percentile ranking, overall award and suggestions for improvements in the areas of weakness.

Results of previous tests are also printed for comparison from year to year.
Appendix 4  Nature and structure of Intra and Inter school sport

Commencing in 1992, all students in Years 7 and 8 had a double period per fortnight of Sport. Inter class and inter school competitions were conducted. The sports undertaken were based on the skills learnt in physical education classes for these Years (see appendix 3 Post 1992). All students were given the opportunity to participate in the inter-school sports program, however a selection process applied for each sport. Students who did not make any of the teams remained at school and participated in minor games and activities each week.

The school was affiliated with the Eastern Independent Schools (EIS) sports association which involved participation in inter school sport for Year 9 and Years 11/12. EIS sport was therefore offered as an elective for students in these Years. Although an elective, it was an expectation and school policy that students in these Years who had ability in any of the sports offered would participate in the EIS sport program.

The EIS sports program also consisted of three major sports carnivals in which affiliated schools annually competed. These three major intra and inter school sports carnivals were:

1. Swimming
2. Athletics - track and field
3. Cross country - 3km distance for girls and 5km distance for boys.

Each intra-school carnival was held on three separate days and involved student participation and staff involvement from all year levels. Carnivals involved students competing in both individual and team events. All students in Years 7 to 10 were expected to participate in the three intra school carnivals, as were those students in Years 11 and 12 who demonstrated particular expertise in these sports. A school squad for each of the major carnivals was selected from the results of the intra school competition. Those students who performed well at intra school level and who had particular abilities in any these fields were expected to train and compete for the school at the inter school EIS competitions.
Appendix 4 cont. Intra and Inter school sport program:

**Years 7 and 8**  
(Compulsory)

**Years 9 and 11/12**  
(Elective)

<table>
<thead>
<tr>
<th>Summer competition</th>
<th>Winter competition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mid February – End April</strong></td>
<td><strong>May - July</strong></td>
</tr>
<tr>
<td><strong>Girls</strong></td>
<td><strong>Boys</strong></td>
</tr>
<tr>
<td>Tennis</td>
<td>Tennis</td>
</tr>
<tr>
<td>Volleyball</td>
<td>Volleyball</td>
</tr>
<tr>
<td>Table tennis</td>
<td>Table tennis</td>
</tr>
<tr>
<td>Softball</td>
<td>Cricket</td>
</tr>
</tbody>
</table>
Appendix 5 Structure for individual first interviews

1. Tell me about the various sports and other physical activities that you have participated in during your life.
   - Outside of and at school, both primary & secondary?
   - How did you become involved in each of these?
   - What did you enjoy about being involved in these sports/activities?
   - Is there anything that you didn't really enjoy about these activities?
   - Why did you stop/continue playing these sports/activities?
   - Preference for participation in organised sports or less formal physical activity? Why?
   - Reasons for little or no participation in organised sport? (if applicable)

2. Tell me about physical education at secondary school starting from Year 7.
   - General likes/dislikes.
   - Sports/Units covered- likes/dislikes.
   - Views about, experiences in and preferences for single sex and co-educational PE.
   - Did your attitude/views about PE change at all over the years?

3. Did you participate in any inter-school sport at secondary school?
   - If so, which Years and what sports?
   - Why did you participate?
   - If not, why not?
   - Did your attitude/views about Sport change at all over the six Years?
Appendix 6  Structure for individual second interviews

1. Level of participation in...
   a] Physical education:
      program (sports/activities taught)
      class structure - single sex and coeducation
   b] Outside school sport
   c] School (intra and inter school sport)
   d] Recreational activities and pursuits
   e] Changing participation patterns over time

2. Major social influences on activity interest and participation/non participation
   a] Parents and siblings
   b] Teachers and Coaches
   c] Peers and relationships
   d] Part time jobs and other responsibilities (eg domestic duties)
   e] Homework and study
   f] Nature of activity ie: competitive versus recreational

3. Other significant influences on participation/non participation
   a] body image factors - physical education uniform
      - puberty
   b] perceived ability and confidence levels
   c] changing priorities, attitudes and behaviours over time
Appendix 7 Structure for collective third interviews

My role in these sessions was to initiate the discussion by asking the girls to share their experiences, thoughts, memories and attitudes about the three areas of focus. While the girls had been briefed on the nature of these sessions beforehand, each session began with a disclaimer that set the scene for the collective sharing of experiences by girls with varying activity interests and participation levels. The following is an extract taken from the first session on 'single sex and coeducational physical education' used to commence the session:

As I have explained previously about these interviews, the questions discussed will be about your experiences, thoughts, memories and attitudes of PE, Sport and other physical activity over the last four and a half years, both in and out of school - so we are really focusing on your secondary Years. They will be similar questions to the individual interviews that you have had but we will discussing various aspects as a group. Remember that your own memories and experiences as well as your activity interests may be different to others in the group but I would like all of you to feel free to express your differences and respect each other's opinions. The whole idea of these group sessions is to discuss the various themes, issues and questions that arise so that each of you feels comfortable about contributing to the discussion and voicing your own opinions and thoughts, even if they do differ from those of another member or the group.

Session 1. Single sex and coeducational physical education classes

Memories of, attitudes about and preferences for:

- Single sex physical education at Years 7 and 9.
- Coeducational physical education at Years 8 and 10.
- Differences between single sex and coeducation classes - positive and negative.
- Various sports/activities covered in these Years and the impact of social class structure on participation.
- Impact of perceived ability on participation in single sex and mixed settings.
- Participation versus sitting out during physical education - when? who? why?
- Reflections on what girls would change and keep the same if they could choose the curricula and class structure.
Appendix 7 cont.

Session 2. Competitive and recreational activity interests
- Preference for participation in organised, competitive sport or informal, recreational activities.
- Motivation for participation in organised sport involvement in and out of school.
- Motivation for participation in recreational, informal activities.
- Influences on involvement or non involvement in competitive sport ie: people.
- Reasons for involvement / non involvement in inter school sport including the major sporting carnivals ie: Swimming, Athletics and Cross Country.
- Other factors affecting participation in sport in and outside of school.

Session 3. Body image factors
Memories of how the following factors may have impacted girls’ participation in physical education and sport.

- Physical changes of adolescence (which Years?).
- Physical education uniform.
- Single sex and coeducational classes.
- Specific sports such as Swimming, Athletics and Fitness Testing.
- Gender issues - male and female stereotypes; female physicality.
Appendix 8  Student consent form

DEAKIN UNIVERSITY
ETHICS COMMITTEE
CONSENT ON BEHALF OF A MINOR

I, ________________________________, a parent

of _____________________________, a Year 10 student of Aquinas College,

Thomas St, Ringwood, Victoria,

HEREBY GIVE CONSENT for my daughter ________________________________
to be a subject of a human research study to be undertaken

by Julia Whitty who is a Physical Education teacher at the school.

I understand that the purpose of the research is to examine the influences on
participation in physical education and sport for adolescent girls. I am aware that my
daughter will be involved in a series of individual and possibly group interviews and
that these will be conducted at recess, lunchtime, and (with prior notice) after school.

I ACKNOWLEDGE

1. That the aims, methods and anticipated benefits, and possible hazards of the research
   study, have been explained to me.

2. That I voluntarily and freely give my consent to my child’s participation in such
   research study.
Appendix 8 cont.

3. I understand that aggregated results of the whole study only will be used for research purposes and may be reported in scientific journals.

4. Individual results will not be released to any person including medical practitioners except at my request and on my authorisation.

5. That I am free to withdraw my consent at any time, in which event my child’s participation in the research study will immediately cease and any information obtained will be destroyed, if requested by me.

Parent signature/s: ........................................ Date: .......................

........................................

Student signature: ........................................ Date: .......................

Note: Probably both parents should consent if both parents are living together. If divorced or separated, certainly the parent who has legal custody of the child should consent, and it would be prudent to obtain the consent of both even in this event. If such consent of the other parent is not readily obtainable the consent of the custodial parent would be or should be sufficient.
Appendix 9  School Principal consent form

DEAKIN UNIVERSITY
ETHICS COMMITTEE
SCHOOL PRINCIPAL CONSENT FORM

I, ________________________________, the Principal

of Aquinas College, Thomas St, Ringwood, Victoria

HEREBY GIVE CONSENT for thirty Year 10 girls at the school to be a subject of a human research study to be undertaken

by Julia Whitty, Physical Education Coordinator/teacher at the school.

I understand that the purpose of the research is to examine the influences on participation in physical education and sport for adolescent girls. I am aware that all or some of the nominated students will be involved in a series of individual and possibly group interviews and that these will be conducted at recess, lunchtime, and (with prior notice given to parents) after school. Should more time be required for group interviews, I give my consent for up to three pastoral lessons to be used on the provision that permission is granted from the appropriate class room teacher and Year level Coordinator.

I ACKNOWLEDGE

1. That the aims, methods and anticipated benefits, and possible hazards of the research study, have been explained to me.

2. That I voluntarily and freely give my consent to the students’ participation in such research study on the provision that their parent/s have consented.
Appendix 9 cont.

3. I understand that aggregated results of the **whole study only** will be used for research purposes and may be reported in scientific journals.

4. Individual results **will not** be released to any person including medical practitioners except at the request of and authorised by the parent/s concerned.

5. That, upon the request of a parent, I am free to withdraw my consent at any time, in which event the student’s participation in the research study will immediately cease and any information obtained will be destroyed.

Principal name: .................................................................

Principal signature: ...............................................................

Date: ..........................................................
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