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Factors Affecting the Non-Selection of Year Eleven Physical Education Studies by Female Students in a Rural Western Australian High School

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Factors affecting the non-selection of year eleven Physical Education Studies by female students in a rural Western Australian High School

by

F. Cameron B. Ed (Hons)

A Thesis Submitted in Partial Fulfilment of the Requirements for the Award of Bachelor of Education with Honours.

Edith Cowan University, South West Campus, Bunbury.

Date of submission: 17th January 2000
ABSTRACT

This study of year eleven female students at a rural Western Australian high school, focused firstly on why students were choosing not to enrol in Physical Education Studies (PES) and secondly what students believed would improve student enrolment. A two-stage qualitative research approach was utilised. The first stage involved creating a school profile and conducting a survey of 71 year eleven females. The second stage involved a three-step process of interviewing three year eleven females who were selected on the basis of not enrolling in PES and their responses on the survey slips.

Findings suggested that the major factors effecting PES non-selection were that students believed PES was irrelevant to their future career choices, did not provide a structure to their liking, had negative prior experiences with PE classes, felt participation in community sport made PES unnecessary, did not want coeducational PE classes and perceived PES as being too competitive/stressful.

Student-generated strategies for improving the PES unit were based on the premise that students should have more say over the structure of the subject and that changes should be made to the sports available, the theory studied, the coeducational and stressful/competitive nature of the classes, the promotion of the subject, students' confidence in their ability, the PES uniform, the teachers' authoritarian stance and that community involvement in classes should be encouraged.
DECLARATION

I certify that this thesis does not incorporate without acknowledgment any material previously submitted for a degree or diploma in any institution of higher education; and that to the best of my knowledge and belief it does not contain any material previously written by another person except where due reference is made in the text.

Signature

Date 17\textsuperscript{th} January 2000
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CHAPTER ONE: INTRODUCTION TO THE STUDY

Children can spend over half their waking lives in an educational institution. These places, and the people within them, can either inadvertently or purposefully affect the choices made by the attending students on issues that can be life altering. One such issue is the choice to pursue an active and healthy lifestyle.

A teacher, and the curricula from which they work, can have a huge effect on the way in which physical activity is viewed and the value a child places on its significance in their life. The American Surgeon General’s report on physical activity and health in 1996, suggested that due to their potential impact, “school based interventions are particularly promising” (p. 12). Educational organizations such as the Active Australia Schools Network are being created for the sole purpose of improving the rates of participation in physical activity. The premise behind the existence of this organization is the belief that skills and habits necessary for lifelong physical activity are best taught to school aged children (Active Australia, 1998).

Background

Involvement in physical activity has been seen as a masculine pursuit (Corbin & Nix, 1979; Thomas & Thomas, 1988; Ignico, 1990; Young, 1990, Carlisle-Duncan, 1997) for many years and participation by females has frequently been found to be less in number than that of their male counterparts (Women’s Sport Foundation, 1995). Overall, improvement in female participation rates has
occurred. However it has been found that there are certain times, labelled as "transition" periods, where it has dramatically decreased.

Two such transition periods occur during the change from year seven to year eight and from year ten to eleven (Taggart & Sharp, 1997; Junior Sport in South Australia, 1992). In 1992, the South Australian Sports Institute studied the participation of male and female primary and secondary students. In their study of both school and community organized sport, it was revealed that the greatest decrease in female participation occurred at the age of fifteen, or the equivalent of year ten. At that age, over 60% discontinued their involvement.

The following statement from the Commonwealth Schools Commission Report (1987), explains why researching female participation in school based physical activity is of value:

There is a need to ensure that all students are treated fairly while they are in school and that practices, which cause disadvantages on the basis of gender, are eliminated from schools and systems. It is the responsibility of all schools to contribute to eliminating educational inequalities arising from gender. (p. 7)

Statement of the problem

The Physical Education (PE) teachers at a South West rural high school were concerned with the lack of females in their year eleven Physical Education Studies (PES) unit. For ethical reasons, this school will be referred to by the pseudonym
of Campbell Senior High School (Campbell SHS) for the remainder of this thesis. From year eight to year ten, students attending Campbell SHS were involved in compulsory PE classes. Year eight PE classes were coeducational whilst the year nine and ten classes were single sex in composition.

Towards the end of year ten, students were invited to determine their course for year eleven by either enrolling in a Vocational Education Program or choosing six upper school subjects. The PES unit was one of the subjects available. Enrolment in this unit was voluntary and classes were coeducational.

Concern was generated by a continuing decrease in the enrolment figures of female students in the year eleven PES unit. The teachers at Campbell SHS knew of my interest in PE, and my desire to complete research in that field, so I was asked to investigate what was causing the lack of participation.

**Conceptual framework**

This section is devoted to clarifying some of the major theoretical explanations as to why females have a tendency to shun opportunities to be physically active.

Since the 1970’s, PE curriculum developers and other supporting bodies have tried to improve the rates of female participation in physical activity. More resources were made available to female students, such as specialist teachers or special programs like those cited in Tinning, Kirk, Evans and Glover (1994). This approach resulted in overall rates of participation improving, but the stagnation of
progress and the dramatic decreases in participation found during the transition stages of year seven to eight (Taggart & Sharp, 1997) and year ten to eleven, (Junior Sport in South Australia, 1992) suggest that there may be more to improving rates than providing equal opportunities.

Explanations for non-participation can be classified as activity or perception based. An example of an activity-based reason for non-participation is the value placed on non-PE classes, due to the belief that they will improve a student's opportunities for later employment (Browne, 1992; Taggart & Sharp, 1997). Also placed in this category are the competitive nature of physical activities (Faucett, Sallis, McKenzie, Alcaraz, Kolody, & Nugent, 1995; Sloper, 1996; Malaxos & Wedgewood, 1997; Taggart & Sharp, 1997) and the use of coeducational classes (Commonwealth Senate Committee Report, 1992; Malaxos & Wedgewood, 1997).

Perception-based reasons for non-participation relate to the gender appropriateness of the activity (Corbin & Nix, 1979; Thomas & Thomas, 1988; Ignico, 1990; Young, 1990, Carlisle-Duncan, 1997). Coinciding with a system that has made physical activity more available to males, social construction of gender has produced females who believe participation in physical activity goes against their perception of what is feminine. According to Carlisle-Duncan (1997) "Girls possess the physical ability to perform well in all kinds of movement activities. What they may lack is the social support to do so" (p. 3). Supporting these perceptions is the lack of recognition given to female sports in the media (AAF, 1991; AAF, 1994; Phillips, 1996).
Erikson’s (1968) theory of personality development details various crises that occur through a person’s life. The crisis of identity versus confusion occurs during adolescence, which is the time on which this research focuses. As described by Maltby, Gage & Berliner (1995, p. 130) “the central problem of this period is establishing a sense of identity. For adolescents this means a series of questions to clarify who they are and what their role in society should be.” These questions are currently answered by a society that, on average, bases their responses on a history of patriarchal beliefs. For all the reasons mentioned previously, a female student who asks herself whether physical activity is appropriate for a girl could quite easily come to the conclusion that it is not.

The liberal feminist beliefs that were prominent in the 1970’s, operated from the premise that by working with existing educational structures, simply giving females the same opportunities as males to engage in physical activity would improve participation rates. This follows Dawes’ (1992) claim (cited in Weiner, 1994, p.49) that “liberal feminism is in sympathy with ‘system maintaining curriculum theories’ in that its main orientation is increased access to existing structures and toleration of dominant social values.” If choices by females are indeed based on their socially determined development of sense of self, we must find ways to combat negative messages being sent to females, or offer them different answers to the questions they pose.

The arguments presented in this conceptual framework form the foundation for the reason and manner in which this study has been planned and undertaken. The subjects of this study participated during a time of questioning their beliefs
and asking questions about their place and role in society. This study aimed at uncovering the questions and answers that students were devising about the issue of participating in physical activity. This in turn led to an understanding of whether the presentation and constitution of PES should be altered, and in what manner the changes should occur.

Aims of the study

Chenail (1997) suggests that effective researchers utilize plans and guidelines in the same manner that a builder uses a plumb line to ensure their constructions are built accurately. I used the following research questions as both a guide and a set of boundaries. Many additional questions surfaced throughout my studies, which I have referred to in my recommendations for what could be investigated in future studies. The issue of student non-participation in physical activity is complex, so this approach of setting two guiding research questions did not restrict my studies, but rather allowed me to exhaustively study one aspect of the reasons behind non-participation and not create a rough but unfounded outline of many issues.

The PE department of Campbell SHS had assigned me the task of creating a list of reasons for the low enrolments in the PES unit. A second aim constituted divulging student-generated strategies for improving enrolment in the PES unit and participation in physical activity in general.

Research Question 1: What factors influence the non-selection of Physical Education Studies, by year eleven females, at Campbell SHS?
Research Question 2: What strategies could improve enrolment by female students in the Physical Education Studies course?

Definition of terms

The definitions below are included to assist the reader to understand terms used in this thesis.

Coeducational class - The education of students of both sexes in the same class.

Curriculum Framework - A document “identifying common learning outcomes” (Curriculum Council, 1998, p. 6) for students in Western Australian schools. These outcomes are grouped in eight learning areas such as Health and PE, English, Science and Maths.

Physical education - “Any process which increases an individual’s ability and desire to participate, in a socially responsible way, in the movement culture inside and outside schools. Games, sport, dance, outdoor adventure activities and other active recreational pursuits are all part of that culture” (Alexander, Taggart, Medland & Thorpe, 1995, p. 11).

Physical education studies - This is an optional, non-tertiary entrance PE subject for year eleven and twelve students. One quarter of the lessons are devoted to theoretical studies on the body and the other three quarters to practical studies on a variety of sports. For more information see Appendix A
South west rural high school - According to information from the Western Australian Government Website, (1999) the South West region of Western Australia reaches as far north as Harvey and east as Manjimup. The area is classified rural. Regional high schools cater for students from years 8 to 12.

TEE subject - To enter most university based degrees, students are required to pass at least four Tertiary Entrance Examination (TEE) subjects. For more information see Appendix B.

Summary

Female participation in physical activity decreases dramatically during two transition periods. Over a number of years the year ten to eleven transition period at Campbell SHS was represented by a continuing decrease in the rate of enrolment of female year eleven students in the PES unit. Since improving the rates of participation in physical activity can be successfully achieved through school-based interventions, this research was based on studying the questions of what factors influenced the non-selection of PES by female year eleven students and what strategies could improve enrolment at Campbell SHS.
CHAPTER TWO: LITERATURE REVIEW

The following review of literature explains the educational environment in which the issue of non-selection of the PES unit is situated. Literature is reviewed through the themes of enrolment trends in post-compulsory PE classes, the reasons for promoting PE and female-based justifications for PE non-selection. This is followed by revealing recommendations for further investigation made by researchers in fields related to this study. A short explanation of the PES unit is added to assist the reader in understanding the subject's place in the year eleven curricula. This is coupled with a description of the Education Department of Western Australia's view of PE in Western Australian schools. This was added to this literature review to show the intended purpose of Health and Physical Education classes like PES.

Introduction

In the 1970's, people became aware of the need to improve the practice of teaching PE. This resulted in numerous programs being implemented in the 1980's, as described here by Tinning, et al. (1994):

Things looked pretty good for physical education. There was an increasing number of primary schools electing to have a physical education specialist; some states had given priority to the concept of daily physical education... in our secondary school, physical education as a senior subject for years 11 and 12 was gaining considerable popularity. (p. 13)
Despite these initiatives, in the early 1990's, studies suggested that PE-based problems had not been solved. Research was set up to investigate concerns about a lack of development in children's fundamental movement skills and the rates of participation in physical activity. The Commonwealth Senate Inquiry (1992) found that a major area of concern was the participation rate of females.

**Enrolment trends in post-compulsory PE classes**

From the early 1970's Australian policy makers expressed concern over a realization that girls were not being sufficiently provided for in our schools. As Yates (1993) explains:

> Inequality of girls and boys in school has not been primarily a matter of differences in success and retention rates, but in the resources made available to each group and in the extent to which pedagogy and curriculum has been orientated towards boys rather than toward girls. (p. 23)

Though research has found that physical activity levels decrease in both males and females as they mature, the decline has been found to be greater for females (Ross, Dotson, Gilbirt & Katz, 1985; Eaton & Enns, 1986; Fuchs, Powell, Semmer, Dwyer, Lippert & Hoffmeister, 1988; Sallis, 1993). Robinson & Carron (1982) studied the participation rates of mature males and females. Their results suggested that female participation decreased at a rate that was six times greater than males.
In 1971, an American study found that only one in twenty seven girls participated in high school sports, yet at the same time, the statistics for boys were one in two (cited by Women's Sports Foundation, 1995). Follow up research in 1994 found that the figures had changed to one in three for females, while male participation remained constant at one in two. This demonstrates the great progress that has been made in improving female participation in sport, but disturbing participation trends are occurring within varying age levels.

It has been found that rates of involvement by females gradually decrease over time, with dramatic fall off occurring in two transition periods. According to Taggart & Sharp (1997), 42% of females dropped out of sport during the transition from year seven to year eight. In addition, the Commonwealth Senate Committee (1992) noted that the transition from year ten to eleven was a time where dramatic decreases occurred in participation rates. By the end of year ten, only 40% of females participated in school sports (Junior Sport in South Australia, 1992).

Baranowski (1992) came to the conclusion that once puberty is reached, research concurs that female participation in sport decreases dramatically. Pyke (1987) found that 61% of females aged 15, the equivalent of year ten, reported that they did not participate in enough physical activity. Walker's (1999) New Zealand based study found that physical activity declined with increasing age, with the most dramatic decrease in activity seen in the 16-17 year-old age group, the equivalent of year eleven.
Of particular interest to this study are the Secondary Education Authority Statistics cited in Browne (1992), which suggested that over the four year period of 1984 to 1988, female enrolment in PES in Western Australia declined from 44% to 37%. Sloper (1996) confirmed such figures by finding that female students' selection of optional PE subjects in years eleven and twelve was "low" (p. 39). As cited in Macdonald and Brooker's (1997, p.155) paper on the crisis in secondary physical education:

There is an unwritten assumption in our field that secondary physical education programs are not good and are endangered. The prevailing view is that most programs are not meeting students' needs and, in general, are an irrelevant, negative educational experience for many of the youth they serve (Rink, 1992, p.67).

**Reasons for the promotion of PE classes**

Having established the fact that enrolment in post compulsory PE is at lower than acceptable levels, the question of whether enrolment in such classes is necessary must be asked, as it provides a rationale for why this research took place. As cited by the Women's Sport Foundation (1995), the Miller Lite Report on Women in Sports in America (1985) found that 45% of respondents ranked a lack of involvement and training as children as the biggest barrier to increasing the participation of women in sports. It is widely known that encouraging participation in physical activity at a young age improves the possibility of remaining physically active in adult life.
Female students list their reasons for being physically active as enjoyment, fitness and health, skill development and social interaction (Australian Sports Commission, 1991; Taggart, & Sharp, 1997; Penney, 1998). Malaxos and Wedgwood (1997) completed a study that found that the reasons held specifically by teenage girls were “to keep slim and fit, socialize and have fun, belong to a team, feel good, relax and learn new skills” (p. 14). Another list from the same study suggested that the following benefits are derived from participation in physical activity:

Overall confidence and high self-esteem; enhanced body image; better health and well being through fitness; social and teamwork skills; improved academic performance; social status and acclaim; and exciting leisure activities which are social - and fun. (Malaxos & Wedgwood, 1997 p. 14)

Other reasons for the promotion of involvement in physical activity include:

1. Prevention of disease. Shilton (1997) summarized the many diseases or physical ailments that can be made less likely by regular physical activity. These included heart disease, cancer, arthritis and osteoporosis, diabetes, asthma, obesity, immunity, high blood pressure, blood cholesterol, mental health diseases.

2. Enjoyment. According to Malaxos and Wedgwood (1997), the fact that sport is “fun” (p. 14) is a major incentive for student participation. The intensive study of Malaxos and Wedgwood (1997) found that “fun” ranked most highly as the reason students chose to participate in PE lessons. I attended PES classes in year eleven.
and year twelve due to that very reason. While the rest of my classes were stressful TEE subjects, sport participation was a fun and enjoyable release.

3. Improved academic performance. High school girls who spend more time participating in sports also tend to have higher grades, according to the Study of Stanford and the Schools (1986) cited by the Women’s Sport Foundation (1995). The Centre for Research on Girls and Women in Sport, based in Minnesota (1997) reported that “research findings show that many high-school female athletes report higher grades and standardized test scores and lower dropout rates, and are more likely to go on to college than their non-athletic counterparts” (p. 10).

4. Enhanced self image. As cited by the Women’s Sport Foundation (1995) in 1975, Snyder and Kilven found that female athletes had a more positive body image than female non-athletes, and that body image was particularly important to self-image during the adolescent years. The Miller Lite Report (1985) affirmed that finding when it suggested that women who were physically active felt greater confidence, self esteem and pride than those who were not physically active. Colton and Gore (1991) found that half of all girls who participated in physical activity experienced higher than average levels of self-esteem and less depression.

5. Improved mental health. According to research conducted at the Centre for Research on Girls and Women in Sport (1997), “sport participation can be used as a therapeutic and preventative intervention for enhancing the physical and mental health of adolescent females” (p. 10). In addition, their research found that physical activity was an effective aid for preventing stress and depression.
Other general benefits of physical activity include fitness, development of teamwork skills, personal acclaim, a chance to socialize, social status and relaxation. Specifically related to this study, Browne's (1992) investigation of the reasons for selection of PES by year twelve girls in Western Australia, suggested that enjoyment, having a break from the classroom, keeping fit, learning new skills, the sports played, having ability in the learning area and the chance to work in a coeducational setting all influenced students to enrol in this subject.

The main reason that subjects like the Campbell SHS PES unit should be reviewed is that there are so many benefits to be gained from being physically active. Therefore, if such subjects are not encouraging females to be physically active, what is their reason for existence?

**Reasons for female non-selection of PE subjects**

Reasons for non-participation in PE classes, in general, are many and varied and depend greatly on the circumstances surrounding the involvement. Some of the reasons given by high school girls were well summarised by Malaxos and Wedgwood (1997):

- Sport is a major "turn-off" when ...
  - It's repetitive and boring
  - It's too serious and competitive
  - Playing with boys
  - Boys watch girls play
  - Girls are being treated differently to boys
• Girls are made to feel inadequate due to lack of skills. (p. 14)

Interestingly, of the six statements mentioned above, three reasons for females shunning sport are gender-based. This reinforces the findings of other studies, which suggest a range of reasons for non-participation by females in physical activity. The most prevalent of these reasons are outlined below.

Specific reasons for non-selection of post-compulsory PE classes

Browne's (1992) study of the reasons for female's selection and non-selection of PES discovered the following major reasons for non-selection. The percentages represent the proportion of females that listed who particular rationalisation for their reason for non-selection of PES.

• Thought other subjects were more important to career plans (95%)
• Thought they could not fit Physical Education Studies into their timetable (57%)
• Thought they obtained enough exercise out of school (40%)
• Thought there was too much competition in physical education classes (29%)
• Did not like the theoretical component (26%)
• Thought taking PES would lower their TEE score (24%)
• Thought they were not good at PE (23%)
• Did not like physical activity (23%)
• Did not find PE interesting (23%)
• Were embarrassed by their lack of skills (22%)
Other reasons for the non-selection of post-compulsory PE classes include:

1. Coeducational classes. The coeducational nature of physical activities can lead to female non-participation according to the Commonwealth Senate Committee Report (1992). Reasons for this included embarrassment over body size and females' construction of their self-worth based on male-based ideas that they were weak, passive and lacking in skill.

2. Gender inappropriateness. Girls' and boys' physical activity choices are influenced by socio-cultural beliefs or expectations related to gender-appropriateness (Corbin & Nix, 1979; Thomas & Thomas, 1988; Ignico, 1990). As cited in Carlisle-Duncan (1997) "gender is a key theme in physicality because most girls learn and reproduce ‘appropriate’ female styles of movement. (Young, 1990)” (p. 1).

3. Importance of non-PE classes. The greater value placed on subjects other than PE can influence the subject selection of students. Taggart and Sharp (1997) found that the choice of tertiary entrance subjects over non-tertiary entrance subjects (PES is non-tertiary entrance) caused students to shun the opportunity of choosing PE options. Browne (1992) found that the main reason for the non-selection of PES was that other subjects were seen to be more important to the career plans of female participants in her study.

4. Competitive nature of physical activities. A number of studies support the belief that the competitive nature of sports, combined with the fear of failure due to the perceived importance of winning, causes many females to either stop or not begin
participation in physical activities (Faucett et al., 1995; Sloper, 1996; Malaxos & Wedgewood, 1997; Taggart & Sharp, 1997).

**Suggested methods for improving participation**

Malaxos and Wedgwood (1997) derived a list of suggestions for encouraging females to be involved in physical activity/sport. They included:

1. Give students more choice in PE classes
2. Extend the length of (some) PE classes
3. Improve skills development of girls
4. Change attitude and approach of some PE teachers
5. Improve the quality and quantity of media coverage of women’s sports
6. Let girls play football and other male-dominated sports
7. Change boys’ attitudes and behaviour
8. Provide more sports in the community for adolescent girls
9. Change PE to single sex classes. (p. 77)

**Research recommendations from related studies**

This section details suggestions for further investigation made by other studies. This was done to show the relevance of the research undertaken.

A recommendation of the Commonwealth Senate Committee Report (1992) suggested studying the needs of females in physical education and, “that all teachers complete courses which examine particular needs of girls in physical
education and sport” (p. 9). A second recommendation stated the need to “develop and implement physical education and sport policies which specifically address the needs of girls” (p. 6).

In their research into adolescents and sport, Taggart and Sharp (1997) recommended that investigation of the preferences and perceptions of current non-participants and the reasons for dropout were specific areas in need of further study. Sloper (1996, p. 41) suggested, “Surveys or focus group interviews with representative groups might help to encourage a greater insight into the needs of adolescent girls within school communities.”

Malaxos and Wedgwood (1997), investigated reasons for girls not participating in sport despite wanting to do so. One of their recommendations, as a result of their findings, was to revise girls’ physical education curricula in order to provide the sorts of physical activities in which teenage girls are interested in participating. They believed that this could be most easily done by talking to students to find out what their preferences were and by including students in the selection of activities.

Browne (1992) studied the reasons for the selection or non-selection of PES by administering a questionnaire to 103 female year 12 students who chose to enrol in PES and 103 that did not. My research has similarities with that of Browne. However this research is based on the responses of a smaller number of year 11 students, in a rural high school. In addition, the methodology used in this
study utilized a combination of case study and questionnaire techniques to gain a more personal insight into reasons for non-selection.

What is Physical Education Studies?

PES is a post-compulsory, group two (non TEE) PE subject for Western Australian year eleven and twelve students. In the Campbell SHS year eleven course, one quarter of the lessons are devoted to theoretical studies; Body Systems and Exercise, Fitness and Health and Community Sport and Recreation and the other three quarters are spent in practical studies of three sports; volleyball, squash and basketball.

Students enrolling in the subject at Campbell SHS are required to purchase and wear a PES uniform, must attend interhouse carnivals and must have passed the year ten PE class. The class is assessed through the combination of theoretically based tests, including two one and a half hour end of semester exams, (this is not required in most other group B subjects) and also through marks on the ability to perform techniques required to participate in the chosen sports.

Although most high school curricula currently give priority to assisting students maximise their possibilities of entering tertiary institutions, changes are occurring. Tertiary institutions are beginning to accept students on the basis of forms of entrance other than TEE scores, such as portfolios and interviews. These changes, coupled with the allure of TAFE courses and the general change to the post high school education/training environment, are forcing schools to look at
whether the courses they teach are relevant and in the best interest of their students.

The role of PE according to the Education Department

The Education Department of Western Australian have produced a curriculum framework that details the intended outcomes of every aspect of teaching in Western Australian schools. These intentions are labelled as outcomes. The curriculum framework states that these outcomes are “interrelated and all contribute to the development of healthy, active lifestyles for students” (Curriculum Council, 1998, p. 117).

The Curriculum Framework document details more specific outcomes for the different age groups of students. Specifically the guidelines for late adolescence/young adulthood (typically years 10 – 12) suggest that:

Young adults have the ability to act independently and take increasing responsibility for their own learning. Learning situations focus on reviewing and reflecting on decisions made and actions taken. They also critically analyse their own and others’ beliefs about health issues... Post-compulsory subjects and programs in this learning area focus on health and physical activity, personal development, beliefs and values systems, early childhood parenting skills, skills to assist movement into independent living situations and career pathways. (Curriculum Council, 1998, p. 130)
Summary

Since the 1970's, progress has occurred in improving the rates of female participation in physical activity. However, participation still decreases as children advance through adolescence, with a large fall off in involvement occurring at the transition from year ten to eleven. Studies related particularly to the enrolment in post-compulsory PE classes have shown enrolment declining and the levels to be “low” (Browne, 1992; Sloper, 1996).

This poses a problem, as participation in physical activity at a young age can lead to continued involvement in later life which can lead to the following benefits: prevention of disease, enjoyment, improved academic performance, enhanced self image, improved mental health and improvement of fitness and teamwork skills. Although there are many advantages to participation in physical activity, students present reasons such as the coeducational nature of classes, the importance of non-PE subjects, the gender inappropriateness and the competitive nature of the subject to justify non-participation.

Recommendations from related studies suggested investigations should be made into the structure of PE classes and policies, with particular reference to making such classes more relevant to the students being taught. Other suggestions included studying non-participant students’ views on PE classes and recommended the focus group interview methodology.
CHAPTER THREE: METHODOLOGY

This chapter describes the methods for gathering data that I chose to employ and accounts for their selection. It also explains the structure of my research design and how the chosen methods affected my results. Finally, this chapter includes a discussion of issues such as limitations, ethics and trustworthiness and an explanation of the way gathered data was analysed.

Methods of gathering data

An important prerequisite for valuable research is that the gathered data is valid. Recommendations or conclusions based on invalid data would be misleading to the reader and resulting actions would be without foundation. Ensuring my conclusions were based on reliable data required a well planned and well defined methodology. This section of my thesis explains how my aim to produce credible and thorough information lead to using triangulation in a methodology based on qualitative ideals.

Gathering data on the statistical facts and figures of non-participation in PES can be done by simply looking at enrolment numbers in any school’s administration database. The main focus of my research was to delve into the non-participation in PES by female students. In addition I wished to investigate students’ perceptions about how improvements to the PES unit and its presentation could be made. I chose to use a qualitative approach as methods based on this form of exploration “produce a coherent and illuminating description of a perspective on a situation” (Ward-Schofield, 1993, p. 202)
The qualitative methodology garners responses of a personal and honest nature, and as Levitt (1995) states, "fundamentally, qualitative researchers seek to preserve the form and content of human behaviour and to analyse its qualities... (Lindlof, 1995). Qualitative researchers attempt to capture what cannot be measured by statistical means" (p. 4). Once it became clear that my aims would be best achieved through a qualitative methodology, I analysed which qualitative-based forms of gathering data would serve to generate a valid and complete picture of what was happening. Relying on one method of collecting data can narrow a researcher's perspective, so I chose to use "triangulation".

Derived from a surveying concept, triangulation is based on the understanding that "a point can be located accurately only by reference to its relationship to at least two other points" (Bunning, 1995, p. 8). Through the use of multiple sources of data, the inadequacies of each individual method are minimized, while the strengths are maximized. The multiple sources of data for my study came from literature, informal discussions with teachers and administrators, surveys and case studies.

My rationale for using case studies was based on the method's qualities closely matching my purpose, in that they:

- Provide rich descriptions of participants' experiences,
- Are strong in reality,
- Provide a natural basis for generalisation,
• Contribute to the "democratisation" of decision making by allowing readers to generalise or make implications for themselves, and they
• Are a "step to action". Information may be directly interpreted and put to use. (Cohen & Manion, 1994, p. 12)

The form of case study employed (as that referred to in Tellis, 1997) was a mixture of:

• Explanatory – my research involved a causal investigation into non-selection of PES, and

• Instrumental – the purpose of the research was to assist Campbell SHS in understanding the lack of participation in PES and suggest ways to improve the situation.

Coupled with the use of triangulation, I used Chenail's (1997) "plumb line" approach in the design and implementation of my research. Similar to the plumb line used in building construction, I followed Chenail's suggestion that prior to beginning research, a researcher should state their beliefs, plans and expectations in a manner that defines the boundaries of their research. These boundaries were then referred to throughout the research process to assess whether I was achieving my intended purpose.
Research design

This section contains an explanation of how the chosen methods of gathering data interacted. As shown in Figure 1, and explained in greater detail in the following pages, the research design involved two stages.

![Diagram of research design](image)

**Figure 1.** Diagrammatic explanation of the methodology

Stage one: Gathering background information for case studies

The primary goal of this stage was to gain background information on the issues influencing non-selection of the PES unit. This information then assisted the choice of appropriate questions for the interview subjects during the second stage of data gathering.
Creating a school profile

Informally interviewing the Principal and the teachers in the PE department at Campbell SHS was done to generate an understanding of the background behind the issue of PES non-selection. Discussion points included the school’s priorities, policies and attitudes towards encouraging physical activity and the structure of the school’s various physical education classes. Gathering enrolment numbers for the PES unit from the school’s administration and reading the year eleven subject selection booklet, allowed me to place the data that I was to gather later into an informed context.

Survey

Of the 91 females enrolled in year eleven at Campbell SHS, 71 were gathered in the gymnasium during the early morning administration period called “form”. After a short introduction I handed each girl a slip of paper (See Appendix C) on which the following two questions were written:

1. Are you currently attending Physical Education Studies classes?
2. Please state any reasons for your choice.

During my introduction, I stressed the importance of complete honesty and encouraged this by asking students not to place their names on the survey slips. I also asked students to write down what went through their minds or what affected their decisions when they were making subject selections in year ten.
Stage two: Three case studies

Three students were interviewed in a three-step process. The interview sessions were structured in a semi-formal manner. The structure allowed me the freedom to pursue issues of interest to the study. Another factor in the decision to use a semi-formal interview structure was that the questioning took on a casual nature, which encouraged the students to feel at ease and participate in an open and honest manner. Such a method was an absolute necessity for the validity of my data. All interviews were tape-recorded for analysis at a later stage, and in some cases, students were given a chance to write down their views, thereby facilitating those that were less confident with the spoken word.

Step one – Individual discussion

The aim of the first individual discussion was to gain background information on each student, pertaining to their views on physical activity and the extent of their involvement. The main questions that I chose to ask at the interview are listed in the appendix (See Appendix D).

Step two – Focus group

Based on information from stage one and the individual discussion, this step represented a chance for the three girls to work together to generate information on why students were not enrolling and what could be done to counter reasons for non-participation, so as to increase enrolment numbers. Firstly, the girls were asked to write down every reason that they could think of that might cause students not to enrol.
The girls then took turns to read out two reasons at a time, until each reason was read. While doing this, they discussed the reasons in greater detail. Once each reason had been investigated exhaustively, the girls wrote down what, in their minds, were the three most influential reasons for female non-participation in PES. This was done individually and then the rankings were discussed later in a group setting.

Secondly, the girls were asked to counter each of the reasons they gave for non-participation with a strategy to make the PES unit more appealing to girls. Once these ideas had been written down by the students individually, discussion occurred as a group again, as the girls aimed to come to a consensus on what would be the best strategies to encourage female enrolment in the PES unit.

Step three – Second individual discussion

In this step, individual discussion with the three girls was used to revisit issues that became evident through previous data gathering. Questions were tailored for each individual (See Appendix E) and based mainly on the previous group discussion. This was done to compensate for any apprehension caused by talking in a group setting or to simply elucidate any points that they had previously made, to ensure I was clear about the meanings of their statements.

Pilot study

I performed a pilot study using three year twelve females from Campbell SHS who had initially enrolled in PES but had pulled out during the year. The rationale for the pilot study was to rehearse appropriate questioning techniques, determine
the level of language used by students of this age, become comfortable with the research procedures and trial the combination of written and verbal responses. I talked with two of the girls together in a group setting, and then the other female by herself. I asked two main questions and then others developed from the responses given.

1. Why do students not enrol in PES?
2. What could be done to encourage them to enrol in PES?

Sources of data

As previously mentioned, in aiming to ensure that my research was valid and comprehensive, I used triangulation. This meant data was gathered in a variety of ways and through various sources such as the ones listed below.

Stage one

- Informal interviews with the Principal and teachers in the PE department.
- Enrolment numbers from the school administration database.
- The subject selection booklet for students entering year eleven.
- Health and PE policies for Campbell SHS
- Relevant literature.
- Responses to the initial student survey (See samples in Appendix C).
Stage two

Written responses (See Appendix F):

- To the survey questions
- Detailing students' explanations for female non-selection of PES and the three most influential reasons from that list
- To what could be done to counter the reasons for non-selection

Transcripts:

- From the first interview with each of the three students (See Appendix G)
- Of the second half of the group discussion, as the first half was inaudible due to recording difficulties (See Appendix H)
- Of responses to individually tailored questions based on information revealed from the previous discussion (See Appendix I)

Subject selection

Campbell SHS volunteered to be involved in the study due to concerns based on the low numbers of females in their PES units. The concern had been discussed briefly in 1998 amongst PE staff and had then been placed at the top of a list of problems to be investigated this year. When I offered to research the phenomenon, they gave me complete cooperation and made many resources available. My familiarity with, and proximity to the research site, also helped determine the selection of the school.
The basis of the rationale for my subject selection criteria is that, as cited in Strikwerda-Brown (1999):

- There is much we can learn from studying student perceptions.
- Greater knowledge of individual interpretations of events can help create better understanding between students and teachers (Sanders, 1995), as well as assist in the development and delivery of appropriate curricula. (p. 3)

Due to this, the main focus of my study was on the students, and information from teachers was used only for putting any gathered data in context. I had two different subject selection criteria: one for the survey and one for the case studies.

**Survey subject selection criteria**

The survey took the form of stratified systematic sampling. Only year eleven females at Campbell SHS were surveyed. The responses of those who had enrolled in PES and in the Vocational Education Program were then excluded. Students participating in the Vocational Education Program were not given the choice of PES as an optional subject due to the predetermined structure of their course.

**Case study subject selection criteria**

I wanted, as my case study subjects, three female students who had not enrolled in PES. A hurdle came when I realized that I had asked students not to write their names on their survey response slips. As a result, I could not use the
slips as the basis for case study subject selection. Instead, I took year eleven enrolment details from the school’s administration and gradually ruled out unsuitable students. Reasons for non-selection as case study subjects included students being:

- Male
- Currently enrolled in PES
- Currently enrolled in the Vocational Education Program

I then randomly selected seven names from the resulting list and gave each of these students a new survey response slip that had to be completed and handed back, with their name attached. By this time, I had analysed the survey responses from the sample of 71 students. Three main reasons appeared to account for the non-selection of PES: the subject’s irrelevance to future career choices, the subject’s composition and the student’s previous experiences with sport. I chose to base my selection of the three case study subjects on these three reasons. Jane’s responses on her survey slip indicated that she felt PES was not relevant to her future career goals; Anne described concerns with previous PE experiences; and Trudy’s reasons were based on the structure of the PES unit.

**Timeline for data collection**

The time schedule, in Table 1, illustrates the order and time sequencing in which the gathering of data took place. The research was done during 1999 and most data was gathered during the third school term.
Table 1

<table>
<thead>
<tr>
<th>Date</th>
<th>Form of data collection</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 18th – 24th</td>
<td>Collection of information for School profile (Occurred on a continual basis throughout third term)</td>
</tr>
<tr>
<td>July 20th</td>
<td>Pilot study completed</td>
</tr>
<tr>
<td>July 29th</td>
<td>Survey completed</td>
</tr>
<tr>
<td>September 10th</td>
<td>Survey slips handed out to randomly selected students</td>
</tr>
<tr>
<td>September 13th</td>
<td>Slips collected</td>
</tr>
<tr>
<td>September 15th</td>
<td>Introduction session with three case study subjects plus the distribution of permission slips</td>
</tr>
<tr>
<td>16/9/99</td>
<td>First interview with Anne and Jane</td>
</tr>
<tr>
<td>17/9/99</td>
<td>First interview with Trudy</td>
</tr>
<tr>
<td>19/9/99</td>
<td>Group interview</td>
</tr>
<tr>
<td>23/9/99</td>
<td>Final interview with Anne and Trudy</td>
</tr>
<tr>
<td>14/10/99</td>
<td>Final interview with Jane (previously unavailable)</td>
</tr>
</tbody>
</table>

Researcher’s role

The extent of my impartiality, when it came to gathering data, varied according to the method of data collection. For the survey, I was detached and objective, as I did not ask for students’ names so that each survey could be taken completely at face value. For the gathering of data for the school synopsis, I worked in a casual and impartial manner, taking note of comments made in passing or from more direct questioning. This information was used only to place gathered data in context and was neither the backbone of the research nor did it
affect the results dramatically. When conducting the interviews with the three students, I was more involved as the discussions were often one to one. Here my role as researcher was primarily one of initiating and directing discussion. Close involvement with research subjects was necessary to gather valuable, honest student opinions.

Limitations

In the following pages I have listed several limitations that affected my research and have explained the steps I took to limit their effect on my finding's credibility.

Biased interpretation of events

Due to using a qualitative approach to research, my drive to produce in depth information was accompanied by bias. When interviewing, I tried to keep as objective as possible by waiting for long periods of time for responses rather than attempting to pre-empt the student. The use of written answers, for which I did not direct responses in any way other than giving the initial stimulus question, also assisted in keeping the data gathering as objective as possible. Using triangulation, or gathering data from various sources and in various manners, also gave me greater impartiality.

The use of only one observer

The findings in this thesis are my interpretations of the data. Another researcher may view the data in another fashion or draw different conclusions. The use of a second observer in interviews or when analysing survey results,
could have improved validity. Talking to the staff and principal of the school gave me some slightly removed observers and ensured I did not make any "left field" suggestions.

Effect of the tape recorder

Use of the tape recorder initially caused some distress. Jane often asked to stop the tape so she could rehearse what she was going to say. She felt bad about saying "um" or "er" and she had the tendency to become tongue-tied. In order to clarify student understanding of the questions, I showed the questions that I intended to cover and then asked if they understood their meaning. I also made it clear that questions would be added if I felt them necessary. This technique worked well as the students felt more prepared and less apprehensive about sounding confused on the tape.

A second limitation of the use of the tape recorder was the low quality of the audio playback. For the first section of the group interview, the majority of the spoken section was inaudible. However I also had the students write down some of their responses and was able to use that information as the basis of any conclusions from that section of the research.

Generalization and the small sample number

I researched the issue of non-selection of PES in detail with only three students. The value of such intense study of so few people is that it produces "a coherent and illuminating description of a perspective on a situation" (Ward
Schofield, 1993, p. 202). A larger sample of 71 females was used for the survey to give a different view of the issue at hand.

With the push for "devolution" in the Western Australian education system, each school is becoming more different from the other. Therefore the findings I made, and actions I suggest, are not necessarily transferable to other high school situations. It is intended that the findings from this research be used to add to the bank of knowledge on female participation in physical activity and specifically give the perspective of a rural school, which has not been done comprehensively before.

**Ethical issues**

To ensure my work was ethically correct and did not affect any person involved in a negative manner the following steps were taken.

- Permission for my chosen form of methodology was granted from the appropriate University Ethics Committee (See Appendix J)
- I asked for, and was given permission from the school, to be on the premises of the Campbell SHS grounds and to talk to students and teachers. (See Appendix K)
- Permission was asked for time to talk to the entire year eleven class of females and subsequently granted at the Campbell SHS Heads of Department meeting.
- Permission letters were handed to the prospective case study subjects and their parents. (See Appendix L) These letters detailed the extent of the research and stated possible effects of involvement, such as removal from
timetabled classes. The parents and students then gave written permission for me to proceed and I did not commence any interviews before I was presented with a signed permission slip.

- Permission was granted from each teacher to continue if interviews ran over time or if schedules meant extra class time was required.
- To prevent embarrassment or discomfort to any people and protect confidentiality, all those involved are referred to by pseudonyms in this thesis.

**Trustworthiness of data**

To ensure the data gathered was trustworthy, the principle of triangulation was employed. Different methods (surveys, interviews and focus groups) were combined with different sources of data (transcripts, enrolment numbers, written responses to questions, subject selection booklets, survey forms and readings) to ensure that the resulting data was credible.

Other ways that trustworthiness was maintained included:

- All information was documented and will continue to be stored for at least five years so that any questions based on reliability can be answered.
- The methodology was clearly set out before research began and any changes on the intended research design were documented. This was done to ensure that replication of this research will be possible, to prove its authenticity.
- A pilot study took place to develop appropriate methods of questioning.
• All discussions were audio-taped and transcribed so that all information was credible and not based on memory.

Data analysis

Each source of data was analysed in a slightly different manner but the uniform result was categories or themes of factors that emerged from the information gathered. The main method of analysis was the act of constantly checking of the "plumb line" of my research. As referred to previously, this is a method of checking that I am not straying off-course. In addition, continual reference was made to my initial research questions.

School profile data analysis

School policies were examined by firstly perusing them myself and then questioning members of the staff about their perceptions of what the documents encouraged. Due to the informal nature of the discussions with the PE teachers and the Principal, I wrote notes about the conversations in a diary and used them as the basis for my assumptions in the School profile. Information on the School’s purpose was divulged by examining their web site and discussing the matter with the Principal and PE teachers.

Survey data analysis

To analyse the data collected from the survey, I firstly discarded the irrelevant responses of those that did enrol in PES and those that were unable to do so, due to enrolment in the Vocational Education program. With the remaining slips each different comment was given a title or description. I then merged comments that
were similar in nature and read each slip again, tallying the types of comments according to my descriptors. The next step taken was to place the types of descriptors into six categories. Each category was totalled and tabulated.

**Case study information analysis**

Analysis of transcripts from discussions with Anne, Trudy and Jane were based on Wainwright’s (1997) methods.

Collect both Fieldnotes and Transcripts → Search for categories and patterns (themes) → Mark up or cut up the data → Construct outline (re-sequence) (p. 10).

I transcribed the conversations and then read through the information to find reoccurring themes. Quotes consistent with these themes were cut and pasted and accompanied by a contextualised commentary. These methods aimed to comply with Yin’s (1994) principles for high quality data analysis as cited by Tellis (1997).

1. Show that the analysis relied on all the relevant evidence
2. Include all major rival interpretations in the analysis
3. Address the most significant aspect of the case study
4. Use the researcher’s prior, expert knowledge to further the analysis. (p. 9)
Summary

The methodology used in this thesis consisted of two stages. The first stage had the purpose of informing the researcher of the context in which the low enrolment numbers were occurring. It included creating a school profile and conducting a survey of year eleven female students’ views. The second stage involved a three-step process of interviewing three year eleven females who chose to not enrol in PES. A pilot study was also undertaken to develop the researcher’s questioning techniques.

The methodology was qualitative in nature and utilised triangulation to enhance credibility. The method of research involved the collection of data from various sources through the form of triangulation. The subjects selected were year eleven female students. The survey involved 71 students and the case studies had a smaller sample of three. The three students had chosen to not enrol in PES or Vocational Education and were selected in a random manner.

Limitations included: my biased interpretation of events, the use of only one observer, the effects of using a taper recorder and the generalisation based on only a small sample number. Data was analysed by a thematic approach.
CHAPTER FOUR: DATA ANALYSIS – STAGE ONE

During the first stage of my methodology, I aimed to sketch out an outline of what was causing female students to shun the option of PES at Campbell SHS. The three steps of analysing readings, gaining information to assist the creation of a general school profile and conducting a survey, gave me background information from which I developed the questions asked in the second stage of this research. The main findings from stage one are presented below.

School profile

The school profile consisted of general information about the school's demographics, and the socio-economic standing of the students sent to Campbell SHS. A review of the health and PE policies was included along side PES enrolment and description details. The reasons the Principal and PE teachers gave for PES non-selection were also incorporated.

General school information

Campbell SHS is a rural Western Australian school catering for 1034 students from year eight to twelve. Students come from various forms of backgrounds but the main socio-economic base of the school, according to the PE teachers, is low to middle class. One of the school priorities for 1999 was to increase students’ engagement in learning.
Health and physical education policies

Campbell SHS Health and PE policies (See Appendix M) revealed that PE classes were compulsory up until year eleven. In year eight classes were co-educational and in year nine and ten they were single sex in composition. Each year students studied the development of hitting, throwing, catching and general body management. Sports studied included aquatics, basketball, touch rugby, hockey, volleyball, badminton, cricket and football. Elective units were available in year nine and ten and covered topics such as golf, racquet sports and boating.

Year eleven enrolment details

At Campbell SHS, 91 female students were enrolled in year eleven. Twelve of these students were enrolled in year eleven PES. Eight students were enrolled in Vocational Education, a course that had predetermined subjects, which did not include PES. The remaining 71 students were not enrolled in PES.

Subject selection booklet

The year eleven subject selection booklet is given to each year ten student at Campbell SHS towards the end of term two. Each subject on offer has a small description and the 1999 description for the PES subject included:

Physical Education is a challenging and interesting course... One quarter of the time [spent in class] will be devoted to theory, and the other three quarters to practical aspects of the subject... The Year 11 practical units are Volleyball, Squash and Basketball (p. 50-51).
The subject is a group B or non-tertiary entrance subject. Attendance at interhouse carnivals is compulsory for PES students and “assessment is based on a combination of marks gained in theory and practical units” (p.51). (A copy of the pages devoted to this subject in the selection booklet is found in Appendix A)

The views of the Principal and PE teachers

The staff and Principal were helpful at all times and had an honest desire to discover what was causing the decrease in enrolment of females in PES. When I asked for permission to undertake the research at Campbell SHS, I talked briefly with the Principal. His opinion on the matter was that students from rural towns such as Campbell, were often involved in community sport, due to its social nature. He believed students often saw this involvement as an adequate amount of physical activity, and therefore the PES unit was deemed unnecessary.

On several occasions, when setting up the survey and the interviews with students, I talked informally with the teachers of the PE department. There are six full time teachers in the PE department and two of those teachers are female. Several other members of the school’s staff are trained in PE teaching and take relief or part time roles. Most of my conversations involved the head of the PE department, but other staff also offered their opinions as to why students were not participating in PES. Reasons given included: the belief that timetabling restricted enrolment numbers and that many students were already heavily involved in community sport.
The PE teachers also suggested that the triathlon might have deterred female students from enrolling. In year 12, the students enrolled in PES have to participate in a triathlon and the gruelling training that leads up to that event. All of the staff members approached suggested that the competitive and intense nature of the sport turned off many females.

Survey

On the 29th July 1999, 71 year eleven females (20 students were absent) were congregated in the Campbell SHS gymnasium. I gave a brief introductory statement explaining that I intended to hand the students a slip of paper with two questions (See Appendix C) that they were to answer honestly. I explained that no names were to be placed on the slips, as I wanted them to feel free to write without fear of having someone recognize their comments and victimize them for their statements. The slip contained the following two questions:

1. Are you currently attending Physical Education Studies classes?
2. Please state any reasons for your choice.

Of the 71 female students, ten had chosen to enrol in PES. Of the remaining 61 students, eight were enrolled in the Vocational Education program. The students enrolled in Vocational Education stated that they could not enrol in PES due to the predetermined nature of their course. I extracted their slips from the sample number, as I was more interested in the anecdotal reasons of the students that had the option of PES but chose the route of non-selection. The responses of the remaining 53 students, were targeted for further investigation.
The students’ responses were many and varied and written in detail, creating a large amount of information with which to work. Appendix C has copies of student survey slip responses and shows the detail and manner in which they wrote. A large number of reasons were given for non-participation (163 responses were recorded, with each student giving an average of three reasons).

Each survey slip was analysed by assigning descriptions to the types of responses (See Appendix N). The entire collection of surveys was summarized in this manner until a list of 36 descriptions was finalized. These descriptions were then grouped with others of a similar nature resulting in six different categories. Table 2 shows the categories, the number of responses each category garnered, and the percentage of the total number of responses those categories represented. Samples of the survey slip responses can be found in Appendix C.

Table 2

<table>
<thead>
<tr>
<th>Categories of reasons</th>
<th>No. of responses</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject’s irrelevance to future career choices</td>
<td>48</td>
<td>30</td>
</tr>
<tr>
<td>Subject’s structure</td>
<td>43</td>
<td>26</td>
</tr>
<tr>
<td>Students’ previous experiences with PE classes</td>
<td>36</td>
<td>22</td>
</tr>
<tr>
<td>Students’ involvement in community sport</td>
<td>17</td>
<td>10</td>
</tr>
<tr>
<td>Students’ perception of their ability to participate</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>Teachers and the students’ perceptions of them</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Other reasons</td>
<td>6</td>
<td>4</td>
</tr>
</tbody>
</table>
The three most prevalent reasons for non-selection of PES dominated the survey. The subject’s irrelevance to future career choices, the disapproval of the subject’s structure and students’ previously negative experiences with PE classes represented 78%, or over three quarters of the total responses. In the following pages, each category is discussed in detail with quotes from relevant survey response slips clarifying the views of the students.

**Subject’s irrelevance to future career choices**

This category garnered 48 responses and represented the largest percentage of the total responses. The two types of responses falling into this category were that students placed greater importance on TEE subjects (27 responses) or believed that PES was not relevant to their future career (21 responses).

Since PES is not a TEE subject, students came up with statements such as, “I chose academic classes and I didn’t have enough classes (time) to choose Physed, it doesn’t get you into university etc” (Survey Slip Response 34). Many students also felt that the PES unit would not help them in the future, as they did “not see how Phys Ed will help in anything that I choose to do as a career” (Survey Slip Response 26).

**Subject’s structure**

With 43 responses, this category was the second most popular reason for the non-selection of PES. This category was based on the way the subject was structured or what students perceived would happen if they enrolled and covered a wide range of responses. Students stated that its similarity to the TEE subject
Human Biology, made it redundant, or that they felt the subject would be boring, stressful, exhausting, expensive and involve a lot of work. A large percentage of the reasons revolved around the belief that the sports offered, or the type of theory taught, was undesirable (33% of the total responses in this category). Another revealing figure was that eleven responses claimed that "other subjects would be more enjoyable". The following quotes are examples of the type of responses placed in this category:

"I heard it was very strenuous and I couldn't be bothered" (Survey Slip Response 37).

"P.E. studies is just like human biology. Don’t have enough room in my bag for shoes, sport uniform etc" (Survey Slip Response 21).

"Because it is boring, not very much to choose from... If you do sport you have to go to carnivals which are boring as well. TOO expensive. And I’d rather do better things with my time instead of killing myself" (Survey Slip Response 22).

Students’ previous experiences with PE classes

This category covered responses detailing students’ previously negative experience with PE classes. Comments referred to PE being compulsory or already studied enough, competitive and not enjoyable. Lack of enjoyment represented 39% of the responses in this category. “In lower school I didn’t really like sport. I hated getting changed and the sports we did I didn’t always enjoy”
(Survey Slip Response 46). Students also negatively reflected on the act of getting changed or not being able to participate in the same manner as male counterparts, such as having to abide by rules forbidding tackling. No claims were made about the negative aspects of sports played outside school grounds.

The word “stressful” accompanied descriptions of PE classes. “Phys Ed was always very stressful for me because it is based around winning and athletic ability” (Survey Slip Response 31). Boring was another phrase that described the class. “Sometimes it could be fun but mostly it was boring, because all we ever did was volleyball” (Survey Slip Response 32).

One survey response slip showed the huge effect that PE teachers, and the activities they choose to enforce, can have on students’ perception of physical activity.

Well last Yr when choosing my subjects for Yr 11 and my eyes scanned over PE studies, I thought about what always goes through my head. I was in Yr 5 and possibly the most unfit person out and was ‘volunteered’ to run in the cross country. I didn’t want to but my Nazi Yr 5 teacher made me. I was last and everyone wondered where I was. I turned up, rounded the corner and fainted over the finishing line. So blame my lack of sport on childhood trauma (Survey Slip Response 58).
Students' involvement in community sport

As the Principal suggested, many students argued that their involvement in community sport justified their non-selection of PES. Fourteen of the seventeen responses in this category mentioned this reason. “In year 10, I was deciding between Photography and Phys Ed, but decided on Photography as I play a fair bit of sport out of school (netball and basketball). I would like to be doing Phys Ed, but as I am already fairly active I chose photography” (Survey Slip Response 11). Community sport was also perceived as more enjoyable and gave participants more opportunity for choice.

Students' perceptions of their ability to participate

This category was based on seven responses indicating that students felt they had inadequate sporting skills. “I don’t have the confidence to play around my peers – I don’t feel adequate” (Survey slip response 55). One student felt that her physical disabilities prevented selection of PES.

Teachers and the students' perceptions of them

Consisting of five responses, this category was based on suggestions that the PE teachers were biased, or had not taught PE well previously. One student opted not to enrol in PES due to dislike of a teacher who she thought might be teaching the unit.

Other reasons

As found in many other studies, there were some reasons for non-selection of PES that did not fit into the other five categories. These included that:
• School activities should be academic and not sport related (2 responses)
• PES did not fit into the student's timetable (1 response)
• Participation in sport was hampered by them getting their period (1 response)
• The student's parents wanted them to do another subject (1 response)

Discussion

In accordance with their school’s aim to increase students’ engagement in learning, Campbell SHS asked me to study the reasons for year eleven female non-selection of PES. Conducting a survey gave me a list of such reasons and those reasons have been compared with findings from related studies in the ensuing pages.

Sale’s South Australian study (1992) found that by the end of year ten only 40% of females participated in school sports. The Campbell SHS staff were correct in their belief that participation rates at their school were dramatically low as only 13% of their year eleven female students were enrolled in PES, a school based sport or class similar to those studied by Sale (1992). The figure for those enrolling in the equivalent year twelve course was only 4%, showing a continued decline. Participation rates clearly suggested a transition period was present between year ten, when year eleven subjects were selected, and year eleven. The fact that enrolment in PE classes up until year eleven was compulsory meant that participation rates before that year could not be compared, leaving the transition period indefinitely defined but still visible.
The responses from the survey in the study of Campbell SHS students indicated that the PES unit was not seen as having the inherent benefits that students see as the motivation for participating in physical activity. An example of how PES was not seen to be gaining enrolment on the basis of the benefits of physical activity was the students’ perception that PE was not fun. Malaxos and Wedgwood (1997) found that “fun” ranked most highly as the reason students chose to participate in PE lessons, yet 22% of the responses made by students participating in this survey explained that negative prior experiences in PE classes were behind their non-selection of PES.

Development of teamwork skills, a chance for relaxation or having a break from academic classroom work were also mentioned in the Malaxos and Wedgwood study (1997) as reasons for participation in PES. In this study of Campbell SHS, survey responses indicated that some students believed neither development of teamwork skills nor the chance for relaxation were possible through PES. In fact some students believed the subject offered the opposite as PES was seen as both stressful and too competitive. The competitive nature of physical activities was also mentioned as a deterrent for student involvement in other studies (Faucett et al., 1995; Sloper, 1996; Taggart & Sharp, 1997).

The Campbell SHS survey produced similar responses to those seen in Browne’s study (1992) of year twelve female students’ reasons for selection and non-selection of PES. Browne analysed her questionnaire data using a different method, whereby percentages were generated by analysing each student’s response separately, and reviewing the frequency with which certain reasons were
used per student. The survey slip responses in this study were totalled according to number of times mentioned, without the per student analysis.

Browne's (1992) study found that 95% of those involved in her questionnaire thought other subjects were more important to their career plans than PES. This factor was the most influential reason for PES non-selection. The same reason was also the most influential in this study of year eleven females, labelled under the category of “the subject’s irrelevance to future career choices”. Taggart and Sharp (1997) had similar findings suggesting that the choice of tertiary subjects over non-tertiary entrance subjects caused students' non-selection of PE options.

This study found the subject's structure was the second most influential reason for non-selection of PES. Browne's study (1992) found the students' disapproval of the structure of the unit was less influential, as structural based justifications for non-selection were represented only in the form of respondents not liking the theoretical component, the fifth most influential reason (26%). No mention was made of the dislike of the sports studied. The Campbell SHS based survey categorised many different types of responses under the heading of "subject's structure" which could have lead to this having greater influence than it did in Browne's study.

The main reason for the less influential nature of this category over PES non-selection was the overwhelming response to the three preceding justifications for non-selection; irrelevance to the future, subject’s composition and student’s previous experience with PE. They comprised 78% of the total responses given.
and clearly had a greater impact than the following categories. Browne's study (1992) rated involvement in community sport as the third most used reason for non-selection of PES. Interestingly only 10% of the total responses in this study, related to the same reason for non-selection. This was surprising for I suspected, as did the Principal of Campbell SHS, that community involvement would have a greater effect due to the rural nature of the setting of this study.

Only one student in the survey mentioned the co-educational nature of PES as a deterrent from enrolment. This was surprising as the gender inappropriateness or coeducational nature of PE classes has been slated as a major reason for non-participation in physical activity (Corbin & Nix, 1979; Thomas & Thomas, 1988; Ignico, 1990; Young, 1990; Browne, 1992; Commonwealth Senate Committee Report, 1992; Sloper, 1992; Carlisle-Duncan, 1997; Malaxos & Wedgwood, 1997).

This study of Campbell SHS students' perceptions of PES revealed that 5% of the responses made by students used their perceived lack of ability as a justification for PES non-selection. Although this was not one of the top three reasons for non-selection, considering the small number of students surveyed in this study, perceived lack of ability can be stated as having a definite effect, as it was one of the main categories found in this study and not simply a descriptor. Students' embarrassed at their lack of skills was stated as a major reason for non-selection in Browne's (1992) study.
Summary

The first stage of data collection was based on information found by creating a school profile and conducting a survey. The school profile involved analysing data in the form of: health and PE policies, enrolment numbers, a subject selection booklet and discussions with the Principal and PE teachers. The survey involved asking 71 year eleven females if they had enrolled in PES and the reason for their decision.

The act of collecting and analysing the data in stage one can be likened to drawing the outline of a picture. Preparing the canvas had already been accomplished by designing a methodology, but the combination of reading related literature and gathering data about the context of the study painted the background colour. The outline of the picture became clear as the survey results were analysed.

The analysis of the first stage of data collection produced a rough outline of what caused year eleven female non-selection of the PES unit at Campbell SHS. Students felt that the greater importance of TEE subjects, the structure of PES and their previously negative experiences with PE classes resulted in the subject having little or no appeal for them. The ensuing chapter describes and discusses the second stage of data collection.
CHAPTER FIVE: DATA ANALYSIS – STAGE TWO

The second stage of data collection consisted of three steps. The steps included individual interviews with each student, followed by a group discussion and completed by another set of individual interviews. The interviews were semi-formal in nature and the subjects concerned were three year eleven female students that had not enrolled in PES; Anne, Trudy and Jane. The first section of this chapter briefly introduces the three girls and is ensued by an analysis of transcripts and written comments from the interviews and discussions. The analysis is broken into two sections: student-based views of PES and student suggested strategies for improving enrolment in PES.

The subjects

Anne, Trudy and Jane were three year eleven female students enrolled at Campbell SHS. They chose not to enrol in PES or the Vocational Education Program. Jane’s survey slip showed reasons for non-selection that fell under the description of “subject’s irrelevance to future career choices” while Trudy’s responses found fault with the “subject’s structure”. Anne’s survey slip response involved comments that were placed in the category of “students’ previous experiences with PE classes”. The information revealed in stage two was completely based on the interviews and discussions carried out with these girls. The ensuing pages detail the nature of the girls and the manner in which they participated.
Introducing Anne

Anne was a confident speaker who had definite aspirations of attending University. All actions she took needed to have a purpose and achieve a certain aim. She made it clear that students should have more control over their schooling and was an advocate of free choice. Anne recalled that she had positive experiences in PE classes until she entered high school, when PE classes were frequently described as “boring”. Her survey slip read:

I need more time to focus on my TEE subjects because I am doing 5 very hard ones and my other period I spend studying. I also didn’t have an interest in the sports that were involved. Phys Ed was boring in lower school and I didn’t enjoy it (See Appendix F).

Introducing Trudy

Trudy was very quietly spoken and portions of her interviews were not recorded properly due to this fact. During the group interview she was rarely heard. Her responses were generally short and to the point and she rarely felt the need to expand on her statements. Trudy was unsure of her aspirations, but felt a leaning towards childcare. The subjects she chose were TEE-based, as she chose to use an “open door” approach by keeping her options open for University entrance. She summarized her PE experiences in primary school as “pretty good” and “enjoyable”, but she did not enjoy high school PE classes. On her survey response slip, Trudy indicated that she did not choose PES:
Because it doesn't fit in with [what I] want to do. I put it as a reserve last year but I didn't get it. If I wanted to do Phys Ed I would have needed to drop one of my other subjects anyway out of the three sports covered I only enjoy playing one which is Volleyball. I really dislike squash and basketball. I would have done Phys Ed if they had more interesting sports like soccer and football. I already play a sport so I don't really need to play one at school (See Appendix F).

Introducing Jane

Jane had a very energetic personality. She stated that she found speaking into the recorder to be quite nerve-racking, but she still gave her opinions freely and eagerly. She was undecided about her future, but felt PES in its current form had no relevancy to the choices she had in mind. Jane did not enrol at Campbell SHS until year ten, but the structure of the PE classes she had attended had been similar, with the exception of all her classes being co-educational. Jane was a better than average student in PE classes and found sport to be "something easy to do". Her survey slip read:

I decided that the other subjects that I had chosen were more important for my future job and also Phys Ed did not fit into my timetable. I would have liked to have been able to do Phys Ed though (See Appendix F).
Student-based views of PES

When interviewing the three girls, a large percentage of the questions focused on their views of PES. Three particular issues arose from the discussions including what the students believed to be the aim of PE classes, what students knew about the structure of the PES unit and what students felt were the problems with PES that were leading to non-selection of the subject.

The purpose of PE classes

I asked each of the girls whether participation in PE classes was necessary. Initially Jane reasoned “Well keeping fit to me is just something that you do” (Jane’s first interview, 16/9/99). After further prompting, she was able to list the following benefits of choosing to enrol in PE classes:

Help you keep fit, help you keep strong, [PE class] keeps you motivated, takes up time and also it makes you feel better about yourself too. Like knowing that you’re keeping fit, knowing that you’re not just being slack and not doing anything (Jane’s first interview, 16/9/99).

Trudy felt that involvement in PE class or at least the continuation of having PES as an option was important because some students lived out of town “so they need it more… than those that can play community sports. Then they can be involved in sports still” (Trudy’s final interview, 23/9/99).
Anne believed there seemed to be no obvious logic behind the way PE was run in high school stating that “Oh that’s a hard one. I never really thought about what they were trying to do” (Anne’s first interview, 16/9/99). Her only suggestion was that the teachers might be trying to develop team relationships. Although initially reticent when questioned directly on the issue of the benefits of participation in PE, Anne gave reasons through statements made when answering other questions. “I suppose it makes you a bit fitter” (Anne’s first interview, 16/9/99) is an example of such an admission.

During the group interview, when questioned on whether the PES course was necessary, all three students responded with an adamant “yeah”. The issue of whether time should be spent improving the course received the same response. Jane felt PES should be improved, but even without improvement it was essential that the subject be kept as an option. Anne added that “if you live on a farm or something it might be hard for you to come in and do hockey training or something like that. If you can do it at school it would make it that much easier for them” (Group interview, 19/9/99).

**Students’ perceptions of the structure of PES**

I was interested in what students felt the PES unit consisted of, as many survey slip responses indicated a miscommunication about the unit’s structure. Jane believed the subject involved “the same sort of stuff as Human Bio. Sort of like learning about body parts, muscle parts, what they do, their functions rah rah rah” (Jane’s first interview, 16/9/99). She was unsure of what sports the students studied and felt “I would have enjoyed it, and I think I would have got into it a lot
and most probably would have been getting quite good marks for it" (Jane’s first interview, 16/9/99).

When first questioned, Trudy revealed that she had no knowledge of how PES operated, but on further prompting she exposed her views on the sports involved. “Volleyball would have been alright but the other two… Squash and basketball. I wouldn’t have enjoyed them. I don’t know [why]. I just don’t like playing them” (Trudy’s first interview, 17/9/99). On her perception of the theoretical aspect of the subject she stated, “they’re learning about parts of the body, that’s all I know” (Trudy’s first interview, 17/9/99).

Anne strongly suggested that she would not have enjoyed PES classes:

Well it’s both sex class so there would have been more boys than girls because girls don’t usually do it. Um… And it would have been more competitive now it’s year eleven because the people that were doing it would have been the people that are going to be teachers and stuff. Go and do their career as a sports person… So they would have been really good at it. It would have been just worse for the people that aren’t very good at it. Like it wouldn’t have been fun (Anne’s first interview, 16/9/99).

Later she revealed, “I probably would have dropped out” (Anne’s first interview, 16/9/99). Apart from the aforementioned reasons, Anne felt that PES “would have interrupted my subjects a bit, yeah” (Anne’s first interview, 16/9/99).
The composition of the PES unit was not clear to Anne, who was even unaware as to whether or not it was a TEE subject. "They probably like spend a few lessons learning about a sport so like learning the rules. I think they do a bit of like the muscles in your body and stuff. How to use them more effectively and things like that. Then they'd go and play that sport" (Anne's first interview, 16/9/99).

Student-based reasons for non-selection of PES

The reasons Anne, Trudy and Jane either used themselves, or felt other students would use as the basis of non-selection of PES, are detailed within themes that were compiled following the interview sessions.

Subject’s irrelevance to future career choices

"What I want to do doesn’t involve Phys Ed" (Jane’s first interview, 16/9/99). Not only was PES of no relevance to Jane’s future aspirations, she also believed that the subject would not help her peers either. "The Phys Ed course wouldn’t help them with their future careers" (Jane’s written comments, 19/9/99).

According to Trudy, the most significant cause of female non-selection of PES was the subject’s inability to cater for the future needs of the female year eleven students. "If I wanted to do Phys Ed I would have needed to drop one of my other subjects" (Trudy’s written comments, 19/9/99). Trudy was unsure of what she planned to do once she left school, and had chosen to employ an "open door approach" towards year eleven and twelve. She felt that her choice of subjects would give her greater flexibility and more options after school was
completed. PES was not considered a subject that matched the criteria of being useful for the future.

Anne wanted to pursue a career in optometry and stated, “I have five TEE subjects and one period where I study for them and stuff and I would have had to do Phys Ed in the period that I study. So I wouldn’t have had as much time to study” (Anne’s first interview, 16/9/99). She also believed that “Most uni courses, apart from teaching and that, don’t have that [PES] as a prerequisite or anything” (Anne’s first interview, 16/9/99). Anne rated PES’ irrelevance to students’ futures as the second most influential reason behind low enrolment numbers.

Subject’s structure

Jane rated the disinterest felt for the sports and theory included in the PES as the third most important reason for non-selection of the subject. “The things involved in the course outline didn’t interest them eg. Sports and theory” (Jane’s written comments, 19/9/99). Trudy concurred, saying “of the three sports covered I only enjoy playing one which is Volleyball. I really dislike squash and basketball. I would have done Phys Ed if they had more interesting sports like soccer and football” (Trudy’s written comments, 19/9/99). Anne shared the view of the other two girls for when she remembered thinking the following when reading the description in the subject selection booklet. “I don’t like any of the sports” (Anne’s first interview, 16/9/99).
Anne felt that the theory aspect of PES was too similar to human biology, resulting in students feeling the subject was redundant. Jane felt another fault in the composition of PES was the male orientation of the sports selected. "The sports that they are doing at the moment aren't actually very interesting. Like not very appealing to females because they are more like suited to guys" (Jane’s first interview, 16/9/99).

Students’ previous experiences with PE

As detailed in the Literature Review, two transition stages have been identified as times where female students decrease their involvement in physical activity. I questioned the three students’ opinions of primary school PE classes and all referred to the classes in positive terms such as "great, fun or enjoyable". I questioned this, as I was interested in whether the activities used in primary school could or should be emulated in high school classes. The sports activities the students remembered were: sprints, long distance running, tunnel ball, leader ball, follow the leader, pass ball, soccer, hoop ball, obstacle courses, tabloid sports, and swimming lessons.

The girls all stated similar reasons for primary school PE experiences being so fondly recalled. "We just used to play games... That was fun cause, you know, you were allowed to do what you liked and choose your own teams and everything" (Anne’s first interview, 16/9/99). The greater variety and relaxed nature of activities were reasons that all three students felt made primary school PE classes enjoyable.
When asked to describe their previous experiences and attitudes towards high school PE, the students were less positive in their responses. Jane’s replies were generally in favour of PE classes and detailed the fun she had in them. A negative comment was directed at how her enjoyment soured as high school continued, due to both the competitiveness in PE classes and the pressure caused by other subjects. “When I got older it sort of didn’t interest me as much. Like cause it was more pressure on and stuff like that. That’s what sort of was the main problem” (Jane’s first interview, 16/9/99). Anne had a similar justification for changing her stance from enjoyment to disdain. “In primary school we just ran around and had fun, but in high school it’s more competitive” (Anne’s first interview, 16/9/99). Trudy attributed her change in attitude to the change in the nature of the activities. “Cause in year seven I suppose we did fun sport. Like it was different. We made up games or stuff and in year eight there were set ones we had to play those sports” (Trudy’s first interview, 17/9/99).

Students’ involvement in community sport

Although the students did not state involvement in community sport as the major reason behind non-selection of PES, it was seen as a problem and Trudy admitted that, “I already play a sport so I don’t really need to play one at school” (Trudy’s written comments, 19/9/99). Since each student had described positive experiences with community sports I devoted a large percentage of the interview time to having the students divulge what they felt made such activities more enjoyable than PE classes. This was done to examine whether the PES course could be altered so as to appear as inviting as community sports.
The main reason that community sport was preferred over PE classes was the fact that it involved free choice. “It was our choice to do it. In Phys Ed they made us do it. You have to play this game. You have to play this position and everything, but in hockey you got to choose your own position and stuff” (Anne’s first interview, 16/9/99). Jane reiterated Anne’s views:

Out of school it’s like you choose to do that subject because you really love it and so you get into it more. You’re more inspired by what you’re doing and stuff, but whereas in school it’s more like you’re basically told you have to do (Jane’s first interview, 16/9/99).

Jane felt community sport was preferential to PE classes as it did not come packaged with the stress created by formal assessment. “In school it was more pressuring because you had to get your grades” (Jane’s first interview, 16/9/99). Trudy found the cooperative nature of community sport, coupled with the chance to interact with older people, made it enticing. “Sharing, not having to like do all the work and stuff, and volleyball. That’s good. Playing with the older people” (Trudy’s first interview, 17/9/99). Another advantage generated by involvement in community sport was the interaction with friends and family. “It was kind of like a social thing where you could go and see your friends and stuff” (Anne’s first interview, 16/9/99).
Gender based concerns or reasons

The coeducational nature of PES barely rated a mention in the survey conducted in the first stage of researching reasons for non-selection of the subject. In the interviews with the three students it was referred to often and seen as a real stumbling block to willing participation.

PE classes being co-educational “didn’t really bother me because I knew everyone anyway, cause I’d been living there for so long” (Jane’s first interview, 16/9/99). Jane lived 40 kilometres from Campbell SHS and did not enrol at the school where this research took place until half way through year ten. She had always attended coeducational classes and this did not cause her any discomfort. She did however state on several occasions that coeducational classes might make her peers feel uncomfortable.

Anne had strong views against coeducational classes and claimed that it was one of the reasons behind why she had changed her positive attitude towards PE classes once she entered high school. “I didn’t like year eight because we had mixed classes and the boys were always taking the piss out and stuff” (Anne’s first interview, 16/9/99). Anne commented about the boys behaviour “if it was a ball game they would hog the ball and stuff” (Anne’s first interview, 16/9/99). In year nine and ten, PE classes were single sex and Anne said “I think it was better... you know, feel more confident with other girls than with boys” (Anne’s first interview, 16/9/99).
Trudy’s concern over coeducational classes was based on the discomfort girls feel playing with males due to “just changing bodies and stuff” (Trudy’s final interview, 23/9/99). Another reason she touted for coeducational base impediment of PES selection was gender based inequality. “With football we weren’t allowed to play it like the boys were. So that wasn’t very good” (Trudy’s first interview, 17/9/99).

Too competitive or stressful

As previously mentioned, the competitive nature of PE classes was the basis of Jane changing her outlook on PE classes and was a factor in community sports being seen in a preferential light to PE. Anne described her belief that PE classes were too competitive in the following manner:

It’s very competitive as well, like people being competitive kind of takes the fun out of it. Um... O well like sometimes they do the stupid thing where they get two people to stand up and they choose their teams. You know you’re always being chosen last and everything (Anne’s first interview, 16/9/99).

In another quote from the same interview, Anne claimed that teachers gave preferential treatment to the more athletic students “teachers always you know “o they’re so good so they can be the captain” and go and do this and you can just sit there” (Anne’s first interview, 16/9/99). She compared this with primary school classes where, “we just ran around and had fun, but in high school its more competitive” (Anne’s first interview, 16/9/99). As a result she felt the competitive
nature of PES classes “probably would have stressed me out a bit” (Anne’s first interview, 16/9/99).

Peer influences

Anne suggested that if she had enrolled in PES, “none of my friends do it so I would have been no one that I could have hung around with” (Anne’s first interview, 16/9/99). Jane corroborated Anne’s opinion when she explained that:

When females usually do their selection forms they also ask their friends what they’re doing and it’s like “o what are you doing?” rah rah rah. If the group of friends they’re hanging around with aren’t doing Phys Ed then they’ll think, “o then I’ll be in a class with a bunch of guys or a bunch of people I just don’t want to be with so there’s no point me doing that” even though they might have been interested in it (Jane’s first interview, 16/9/99).

Perceptions of the teachers

Teachers were not overly beleaguered in this study other than in some survey slip responses detailing students that particularly disliked certain teachers. The teachers’ preferential treatment towards more athletic students, noted previously, was a comment made about teaching styles. One comment that indicated a particular facet of teaching that could effect PES non-selection was Trudy’s remark about inflexibility, stating that she didn’t like “playing by the rules and not having... Like being able to not like go out a little bit” (Trudy’s first interview, 17/9/99).
Boredom

Taggart and Sharp (1997) recommended a better understanding of the statement that sport is “boring” following their research on adolescents and sport. Anne referred to PE classes as boring on several occasions. She used it as a justification for non-selection of PES and based her reasoning on the following description. “Like you hit the ball and you run, then somebody else hits the ball and they run and then you stand out in the field and you just stand there and the ball doesn’t come to you so you stand there” (Anne’s first interview, 16/9/99).

Parents

Jane reasoned that parents might influence the decision not to enrol in PES. “Maybe their parents have something to do with it. Like the parents help them choose whatever the subjects they actually have to do” (Jane’s first interview, 16/9/99). She restated this in her written responses from the group discussion. “Their parents didn’t want them to participate, maybe because they thought it was a waste of time and it wouldn’t help them in their future careers” (Jane’s written comments, 19/9/99).

Timetabling problems

“It’s mainly because it doesn’t fit in with my timetable” (Jane’s first interview, 16/9/99). Jane ranked this reason as the most influential reason for non-selection as it was the cause of her inability to enrol in PES. “The course didn’t fit in properly with their selected timetable choices” (Jane’s written comments, 19/9/99). Apart from the actual physical timetabling of subjects, the amount of time that Anne perceived would be taken up by PES was another reason she felt
her peers may use for non-selection. "They probably just didn’t have time in their timetables to worry about sport" (Anne’s first interview, 16/9/99).

Dislike of sport

Dislike of sport was mentioned by both Trudy and Jane. “The student might just really dislike sport” (Jane’s written comments, 19/9/99). I asked both to explain their statement in their respective final interviews. Neither clarified further, instead reiterating the fact that “maybe they just don’t like being physically active or something” Trudy’s final interview, 23/9/99).

Compulsory nature of previous PE classes

The compulsory nature of previous PE classes may have caused Anne to refuse enrolment on the basis of free choice. “I don’t like it when people force me to do things” (Anne’s first interview, 16/9/99). Survey slip responses supported this stance, with some students saying they decided not to enrol in PES because at last they had a say in whether they should participate.

Discussion

The discussion of the data collected in stage two has been broken into two sections with this portion serving to discuss the data concerning the student-based views of PES. Under that theme, the following pages will explore what was said by Anne, Trudy and Jane and compare that information with relevant literature under the headings of: student-based perceptions of PE and PES and student-based reasons for non-selection of PES.
Student-based perceptions of PE and PES

The overall aim of Health and PE according to the Curriculum Framework is to “contribute to the development of healthy, active lifestyles for students” (Curriculum Council, 1998, p. 117). Specifically the intention for health and PE subjects catering for post-compulsory students is that the unit enables students to “act independently and take increasing responsibility for their own learning” (Curriculum Council, 1998, p. 130). Other outcomes for post-compulsory classes according to the curriculum framework include developing the skill of critically analysing beliefs on health and PE issues, meaning that learning situations should “focus on reviewing and reflecting on decisions made and actions taken” (Curriculum Council, 1998, p. 130). This should all be done with the purpose of “assist[ing] movement into independent living situations and career pathways” (Curriculum Council, 1998, p. 130).

The frequent reference, in this study, to students’ need for choice and a voice in what happened in both PE and PES classes suggested that the outcome of enabling students to act independently and take increasing responsibility for their own learning was not being achieved. The PES subject was often alluded to as being irrelevant to future career choices, meaning that the unit was not achieving the outcome of assisting movement into independent living situations and career pathways. No reference was made to the subject involving reflection on “decisions made or actions taken” (Curriculum Council, 1998, p. 130), suggesting that the subject was not encouraging the development of critical thinking.
Of great concern is the fact that Anne, Trudy and Jane understood physical activity to be only sport related. Once students had been questioned on the issue of community sport and involvement in PE classes, I asked if they participated in any other physical activity. The initial response was either confusion or “no”. After further prompting still produced no affirmative answers, I would suggest that maybe they went walking on the beach or ran with their dog. This would then cause the students to suggest many different physical activities such as riding their bikes. This type of response suggests that students have been conditioned into thinking that physical activity is sport related. This may have been caused by the structure of the PE units up until year eleven where the physical activities studied were often limited to competitive sports. This is of concern as it suggests that students are limited when it comes to experiencing a broad range of physical activities at Campbell SHS.

In addition, students had difficulty explaining the benefits of being involved in physical activity or PE classes. Jane suggested that it kept students fit, motivated students, and made students feel better about themselves. Trudy did not know of any benefits and Anne suggested that it might develop team relationships or make the participant fitter. With research into physical activity producing lists of so many benefits of participation, it is upsetting that students at Campbell SHS were not aware of these advantages. Not comprehending the advantages could be contributing to non-selection of PES.
The Campbell SHS subject selection booklet shed some light on why the students were not clear on the purpose of the PES subject. The only reference to any form of purpose was that “Physical Education Studies is a challenging and interesting course… [which] hopefully develops each students’ potential in Physical Education” (See Appendix A). The other reference was the listing of the three titles of the theoretical units. The rest of the guide explained the assessment method and the fact that PES students had to attend certain carnivals. There was very little positive promotion of the subject and the outcomes to be achieved were unclear. Due to the ambiguity of the PES section in the subject selection booklet, most students would have learnt what little they did know of the unit from their friends by word of mouth.

The underlying issue that caused non-selection of PES at Campbell SHS was generated from the students’ perceived problems with the structure of the PES, caused by the subject’s lack of a discernable purpose. This was made clear by Anne, Trudy and Jane’s conflicting comments on what they perceived to be involved in the PES unit. All three girls correctly acknowledged that PES had a theoretical component involving studying the muscular system, but had no knowledge of the two other, equally weighted components: studying community recreation and health and fitness. Trudy correctly named the three sports studied but Jane had no idea what practical study took place. Anne had no understanding of the practical composition of PES and even questioned whether the unit was a TEE subject. All three students felt the subject catered for students who intended to become PE teachers or sport professionals.
The addition of a one and a half hour examination at the conclusion of each semester, and the similarity between the body systems theoretical component and the Human Biology subject, indicated that the subject had developed a striking similarity towards group one or TEE subjects. Many students stated that they tended to choose a group B subject that would be enjoyable, relaxing and often assist them in their preparation for their future career. In its current form, PES was seen to be stressful, too competitive, boring and irrelevant. In an educational environment where outcomes based education is favoured, it is disturbing to notice that students believed the PES subject would produce negative outcomes, with Anne even stating that if she had enrolled in PES, she expected that she would have pulled out.

Student-based reasons for non-selection of PES

The findings on the issue of reasons for non-selection of PES were similar to those found in the survey. The subject's irrelevance to the students' future career remained the most influential reason and was followed in importance by the subject's structure, students' previous experiences with PE, the coeducational nature of PES, students' involvement in community sport and the compulsory, competitive and stressful nature of PES. A point of interest is that the coeducational nature of PES was mentioned by only one student in the survey but was a point of in depth discussion in the interviews with Anne, Trudy and Jane.

Other less influential reasons such as peer influence, teachers being authoritarian, PE classes being boring, parents effecting subject selection, PES not fitting into the timetable, students simply disliking sport and students feeling they
did not have the required ability to participate, were mentioned in the second stage of data collection. These reasons for non-selection were mentioned in the survey but were not seen as influential enough to be given their own category. Discussion of the reasons for non-selection has been covered in the discussion section of chapter four, but one area that was not mentioned in that chapter was the justification of non-selection on the basis of boredom.

Taggart and Sharp (1997) suggested that researchers should “inquire into (demystify) the construct of ‘sport being boring’ as related to by adolescents”. Several survey slip responses used the term ‘boring’ when describing PE classes and Anne also used it frequently, so I questioned her further on the matter. Her justification for the label of ‘boring’ was the lack of meaning or purpose behind the activities pursued. She felt the sports played were often repetitive and involved stagnation of movement. Student-based claims that PE is boring or irrelevant are supported by other studies as cited by Strikwerda-Brown (Locke, 1992; Tinning & Fitzclarence, 1995).

Anne, Trudy and Jane’s reoccurring comment was that the PES course was irrelevant. This referred to both the irrelevance towards the students’ futures and the irrelevance caused by not realising the importance of being physically active. This was all founded on the lack of comprehension of the purpose of the PES unit caused by an ambiguous subject selection booklet and negative word of mouth from peers. This supports Rink’s (1992) claim that post-compulsory PE classes can result in negative experiences for the students and that such subjects are not meeting students’ needs.
Student-generated strategies for improving enrolment in PES

The first half of the group interview involved developing a group-generated list of reasons for PES non-selection. The second half was devoted completely to developing strategies for improving the PES unit. Students were initially asked to individually write down a list of ideas that they felt could enhance the subject. This was followed by a group discussion of the suggestions. Any points I could not comprehend or on which I wanted more detail, were discussed further in the final individual interview. The basis of the students' strategies was, as explained here by Anne, the desire to make PES "more relevant to our lifestyle" (Group interview, 19/9/99).

More student involvement in the structure of the subject

A common theme threading through all three steps of the second stage of research, was the desire to have more student involvement in the design of the PES unit. "I'd want discussion and stuff about what we wanted to do... Less of the teacher forcing you to do things" (Anne's final interview, 23/9/99). Realising that organising student directed learning can be complicated, I constantly asked students to give examples or clarify how they envisioned this taking place.

Changes to the type of sports studied

The composition of PES, with particular reference to the sports studied, was shown to be an oft quoted reason for non-selection in the survey and by the three students interviewed. Anne, Trudy and Jane suggested that changing the types of sports available, the method of selecting sports, and the method in which they are studied, would improve the subject's appeal.
Nature of the sporting activities

Throughout the duration of the interviews many sports were offered as better options than the current volleyball, squash and basketball. They included: swimming, running and walking at the beach, canoeing, tennis, badminton, football, soccer, and that volleyball remain. Consensus was not found on the particular sports but during the group interview and final discussions, students began to suggest general changes to the nature of the activities rather than specific sports.

Another idea that emerged was the desire for activities based outdoors. “It would be better if they just had outdoor sports involved in Phys Ed as well cause that would get people doing it a lot more, I reckon” (Jane’s final interview, 14/10/99). When Jane was asked to expand on what she meant by that comment she said, “like swimming at the beach or... Yeah. Runs along the beach. Walking along the beach. Um... just um. O life saving skills. Rah rah rah” (Jane’s final interview, 14/10/99).

One idea that all agreed on, was the need for more variety in the activities offered. Comment was also made on how teamwork should be encouraged by using sports or activities that emphasised cooperation. Lastly, a suggestion to help female students feel more at ease in a coeducational setting was made by Jane. “They should work around doing things that both sexes would be interested in” (Jane’s first interview, 16/9/99).
Method of sport selection

Once the sports available to students were changed and following the theme of student choice, Anne suggested "You could have a democratic vote" (Group interview, 19/9/99). As Trudy suggested in her first interview, students interested in PES could confer on the sports they favoured. "If they had all the people that wanted to do Phys Ed and like they voted on what sports to play instead of just making us do it" (Trudy's first interview, 17/9/99).

Method of studying chosen sports

The three students also had suggestions for the way the sporting activities should be studied. "Change the sports all the time... like sort of alternate between different sports and stuff instead of spending a whole week on just like running around a little track or something" (Anne's first interview, 16/9/99). Trudy supported Anne's suggestion and added the need for more chances for feedback and discussion. "Like you play the game and maybe we could learn about the rules and then play it. And then come back and talk about how it felt and all that" (Trudy's final interview, 23/9/99).

Another suggestion involved encouragement of flexibility within lessons. "Like seeing what the rest of the class feel like doing that day. Like maybe if it was too cold outside to go out and do sport then they could stay inside and do theory or something" (Anne's final interview, 23/9/99).
Changes to the type of theory studied

The theory aspect of the PES unit was seen by all three girls as irrelevant and a repetition of the TEE Human Biology subject. As Jane explained, “cause they seem to be learning so much to do with Human Bio and they'll learn it in Phys Ed then walk into Human Bio and learn exactly the same thing” (Group interview, 19/9/99). Anne revealed that a student struggling to cope with the pressures of a TEE course may choose PES as an enjoyable but less stressful subject. The problem with the unit as it stands is, “like if you don’t want to do TEE then you don’t want to have to do all the work involved like some people might not actually get that” (Group interview 19/9/99).

A proposal for change was the replacement of the Human Biology aspects, such as the study of the skeletal structure, with a procedure where by students could “get certificates like of working their way up to achieving certain things like first aid for example. So then they could have a certificate to show for when they go for a job... put it in their resumes and stuff like that” (Jane’s first interview, 16/9/99). Anne agreed with Jane’s opinion, stating that earning certificates could replace much of the current theory because, “then it would tie in with the future thing like you could use it when you graduate” (Group interview, 19/9/99).

“Learning the side effects of not doing Phys Ed and stuff like that” (Jane’s first interview 16/9/99), was a method recommended to increase students’ awareness of the importance of being physically active. The students suggested side effects included diseases such as obesity and heart disease. Other suggested
topics to be studied in the theory portion of the subject included correct exercises to do when warming up and the functions of the body.

**Single sex classes**

Both Anne and Trudy promoted single sex classes as methods of improving rates of participation, wanting “two classes – girls and boys” (Trudy’s written comments, 19/9/99), and “separate sex classes” (Anne’s written comments, 19/9/99). Jane never disagreed with the option of single sex classes but chose to advocate learning sports that catered for males and females. Keeping in line with her view on students’ right to choose, Anne recommended, “well if you’re going to do the thing where you choose the sports beforehand you could find out if they want to actually have separate classes or maybe there’s not enough people or something” (Group interview, 19/9/99).

**Transforming to a “de-stress” class**

Trudy and Anne both emphasised the importance of making PES less stressful and competitive. Anne believed that “less strenuous is more fun” (Anne’s first interview, 16/9/99), while Trudy wanted to make PES “more fun - not so strict – flexible” (Trudy’s written comments, 19/9/99). As hinted earlier, Anne found the TEE to be very stressful and felt her choice of group B subject needed to be enjoyable and ease the tension built up through other classes. “Um they could put it as a de-stress thing... Like if it was just going out there and having a good time I might have done it cause it would have been a good way to get rid of all the stress and stuff” (Anne’s first interview, 16/9/99).
Involving the community

Due to the fact that the survey and the chats with the three girls suggested that involvement in community sport was widely seen as an enjoyable experience, the girls tried to develop ways that the ethos behind such activities could be infused into the PES course. Trudy suggested that Campbell SHS “play against different schools” (Trudy’s written comments, 19/9/99). When I asked for more suggestions prompted by this comment, Jane stated “just get schools to come together and… rather than interschool and that, just have them combine and work together anyway. Like once a week or something” (Jane’s final interview, 14/10/99).

Anne proposed that excursions be encouraged. The actual types of excursions were detailed in her final interview. She wanted “ones relative to the sport you were doing. Like if you were doing hockey you could go out and watch a hockey game out at the hockey stadium, so you get an idea of how professional people and stuff do it” (Anne’s final interview, 23/9/99). Trudy made several comments on the issue of community involvement firstly suggesting, “getting some adults involved in sport and stuff. Or learning to coach” (Trudy’s final interview, 23/9/99). This comment compliments the belief that the students knew little of the structure of the PES unit, as coaching of students from surrounding primary schools had been part of the course for the past three years.

Additional student-based comments

The effect of girls’ confidence when choosing whether to participate in sport, teachers’ influence on enrolment based decision making, alterations to the PES
uniform and discussion of whether PES should be made compulsory were also revealed through the interview process involving Anne, Jane and Trudy.

Concerning the issue of improving students' confidence, Jane stated that "Girls need higher self esteem levels to want to be involved in sport" (Jane’s written comments 19/9/99). Anne and Trudy shared Jane's opinion that:

If females were more, [if] their confidence level was higher then they would most probably get into it more cause they seem to be to worried about, "O I don't want to wear this" and like "O all the guys man" and there's also all the "O we'll be too sweaty" and all that sort of stuff (Group interview, 19/9/99).

Teachers were offered advice on teaching, although the influence of teachers on non-selection of PES was not intensely investigated. Comments that came from the group interview (19/9/99) included that the girls did not like it when teachers put pressure on them and were overly strict or authoritarian. An issue that could be pursued further is the relevance of the gender of the teaching staff on the decision of whether to enrol in PES.

All three girls made choking or gagging sounds when the PES uniform was discussed. Although improvement of the uniform was only briefly talked about, the following conversation suggested the need for change.
Anne: Well you could always change the uniform like you can choose what you want or you don’t have to wear those little short shorts that they give you.

Jane: And those bright yellow, and blue tops. How disgusting!

(Group interview, 19/9/99).

In the group interview (19/9/99) Trudy suggested making PES compulsory as PE classes had been in the past. Anne strongly disagreed stating “but then I’d hate it more because there’s no choice” (Group interview, 19/9/99). Jane agreed with Anne saying “and also students would wag a lot if that was the case” (Group interview, 19/9/99).

Improvement of the promotion of PES

Taking into consideration the misconceptions about the PES course, such as Anne and Jane not knowing what sports were to be played, and Anne being unsure whether it was a TEE subject, the students suggested ways that PES could be promoted in a more informative and appealing manner. “They probably could have told us a bit more about it. What kind of sports we’d be doing and stt. T” (Anne’s first interview, 16/9/99).

Verbal communication was referred to when Trudy suggested “more interesting talks to the year tens” (Trudy’s final interview, 23/9/99). Alterations to the subject’s presentation in the student subject selection booklet were also mentioned. “They could stick photos of the sort of stuff that’s going on. Like the
different sports” (Jane's final interview, 14/10/99). Other suggestions included rewards for choosing PES and promotion through advertising around the school grounds that explained:

Jane: All the different things that it would do for them. What it does, how it…

Anne: And promote it so we see the good side of things and…

Jane: Rather than the negative or “this is just going to be something which we have to put in too much effort towards and there’s no point doing it”.

(Group interview 19/9/99)

Discussion

Anne, Trudy and Jane offered many suggestions for improving the PES unit, with most revolving around the concept of students being more involved in the structure of the subject. The girls suggested that changes should be made to the types of sports studied, the way in which they were chosen and the method of studying the sports. Other structural changes included making the theoretical aspect of the unit more relevant to students' careers. Single sex classes were strongly promoted by Anne and Trudy and Jane felt having the option of coeducation of single sex would continue the theme of student free choice.

Other proposals for productive change included; removing the competitive/stressful aspects of PES, involving the community, improving students' confidence, changing the uniform and suggesting that teachers take a
less authoritarian stance were also proposals for productive change. Another overarching suggestion was that the promotion of PES should be improved as the students realised that they had many misconceptions about the class and suggested that this may have lead to their non-selection of PES.

Little other research has been undertaken in the area of student-generated suggestions for improving the PES unit. Comparing findings is restricted to Malaxos and Wedgwood's (1997) study. That study listed student-generated suggestions for encouraging females to be involved in physical activity/sport in general. The three students in this study strongly agreed with the first suggestion that students should be given more choice and generally agreed that PES should be changed to a single sex unit. Their comments also supported Malaxos and Wedgwood's (1997) suggestions that teachers' attitudes should change and suggested an area of concern to be the authoritarian nature of the teachers. It should be noted that comments about teaching techniques were only a minor concern in this study. Extending the length of classes, improving the quality and quantity of media coverage, and improving the skill development of girls were never mentioned during this study. Other suggestions from the list such as letting girls play male dominated sports, and changing boys' attitudes were mentioned briefly.

**Summary**

If stage one of the data analysis was likened to creating an outline, the second stage served as adding the colour and detail to the picture. This detail was added by gathering data from interviews with three year eleven female students at
Campbell SHS; Anne, Trudy and Jane. These girls were interviewed in a three step process that involved individual interviews followed by group discussion and completed by a final set of individual interviews. The information produced took the form of written comments and transcripts.

Data was analysed under two separate sections; student-based views of PES and student suggested strategies for improving enrolment in PES. Student-based views of PES suggested that students were not aware of the content of the PES unit and that in its current form, PES is irrelevant to the many year eleven female students at Campbell SHS. Data analysis revealed that student-generated suggestions for improving PES will require dramatic changes to the basic structure of the unit. The main emphasis of the suggested improvements concerned students’ desires to have greater control over the structure of PES.
CHAPTER SIX: CONCLUSIONS AND RECOMMENDATIONS

Campbell SHS’s enrolment figures for females in the year eleven PES unit encapsulate the trend occurring within female students of the age of fifteen to seventeen. Enrolment in post-compulsory PE classes and participation in physical activity in general, have been found to decrease dramatically at this age or transition period. The staff of Campbell SHS asked if I could research why enrolment in their year eleven PES unit was decreasing at alarming levels. The following two questions were formulated to guide my investigation:

Research Question 1: What factors influence the non-selection of Physical Education Studies, by year eleven females, at Campbell SHS?

Research Question 2: What strategies could improve enrolment by female students in the Physical Education Studies course?

To answer these questions a two-stage, qualitative research process was utilised. The first stage involved setting the scene through developing a school profile and surveying the year eleven female students. The second stage was comprised of individual and group interviews with three students who did not enrol in PES: Anne, Trudy and Jane. The following pages outline the answers found through using such a methodology.
What factors influence non-selection of PES?

The findings of this study supported the statements made in the conceptual framework. The female students at Campbell SHS were given equal opportunity to participate in PES as males of the same age. Perception and activity based reasons were given for non-selection of the subject. The student-generated reasons for PES non-selection mentioned below were developed through the gathering of data from a survey of 71 year eleven female students and individual and group discussions with Anne, Trudy and Jane. The first six reasons are listed according to the influence they had over the subject selection decision-making process, with the first being the most influential. The bulleted reasons had less influence over students’ decision making but were still significant. Year eleven female students at Campbell SHS:

1. Thought PES was irrelevant to their future career choices
2. Did not find the structure of PES (both theoretical and practical) appealing
3. Had negative prior experiences with PE classes
4. Felt participation in community sport made PES unnecessary
5. Did not want coeducational PE classes
6. Perceived PES as being too competitive and stressful

Less influential but significant reasons for non-selection were that students:

- Felt they did not have the required skills or ability to participate
- Were less likely to enrol if their peers were not enrolling
- Felt some teachers were too authoritarian
• Perceived PE classes and the activities within as being boring
• Had parents that suggested that students chose another subject
• Were unable to fit the subject into their class timetable
• Had a strong dislike of sport in general
• Were deterred by the compulsory nature of PE classes until year eleven

The lack of clarity in purpose or distinct outcomes underpinned the students' negative perception of PES. Students were unsure of whether PES was a TEE subject, did not know what types of sports were studied and were unsure of what the theoretical component entailed.

**What do students suggest will improve the PES unit?**

The suggestion that permeated every strategy for improvement of the PES unit was that students wanted to have a say. Their opinions on the matter of improving the PES subject included that:

• Changes should be made to the type of sporting activities studied and the method of choosing and studying those activities
• Changes should be made to the type of theory studied
• Classes should be single sex in nature
• PES should be less stressful and possibly be transformed into a subject that diffuses stress from other studies.
• Community involvement in classes should be encouraged
• Promotion of the subject should be improved in both quantity and quality
• Development of females' confidence in ability must be fostered
• The PES uniform should be altered
• Teachers should take a less authoritarian stance

It was also suggested that PES should be made compulsory, although during the group interview with Anne, Trudy and Jane, this suggestion was quashed, as two of the students felt making the subject compulsory would foster negative attitudes toward physical activity that may lead to truancy. It was also suggested that such a change would counter the idea of greater student choice and input into the structure of the subject.

Recommendations stemming from the study

The recommendations that emanated from this study have been organised to counter each of the reasons the students used to justify PES non-selection. These suggestions apply specifically to the context of the study of Campbell SHS, but suggestions may also be applicable in other schools.

Recommendation 1 – Devise clear intended outcomes and purpose

Based on the findings from this study, it is suggested that the staff and administration of Campbell SHS look at altering the PES unit so that a clear aim and set of desired outcomes are developed. Currently students have misconceptions about the unit that could be causing unfounded negative attitudes towards the subject, which could in turn cause non-selection. In keeping with the ideas suggested in the conceptual framework, I believe working within the system
that is already in place is a move that can cause the least disruption and most
benefit.

The Curriculum Framework (Curriculum Council, 1998) could be used as the
basis of developing a purpose and set of outcomes. An example of the direction
that could be taken is for the subject to become more student-centred so that the
unit enables students to "act independently and take increasing responsibility for
their own learning" (Curriculum Council, 1998, p. 130). Another suggested
direction could include using learning activities that cause students to critically
analyse the impact of physical activity and inactivity. Classes could also include
greater emphasis on the discussion of health and PE related issues. The
Curriculum Framework suggests that learning situations should "focus on
reviewing and reflecting on decisions made and actions taken" (Curriculum

The overarching aim of PES should be to reveal the importance of physical
activity's place in students' future independent living situations and career
pathways. If students learn the importance of being physically active before and
after they leave school, and have the opportunity to participate in activities that
they find enjoyable, they will be more likely to be physically active once they are
older (Miller Lite Report, 1985). Whilst developing skills in physical activity is
important, the Curriculum Framework (Curriculum Council, 1998) also suggests
that Health and PE classes for students of the age range focussed on in this study,
should develop skills related to knowledge and understandings, self management
and interpersonal skills.
Recommendation 2 – Make PES more relevant to students’ future careers

The irrelevance of PES to the students' careers was seen as the most influential reason for non-selection of PES in the survey and in the discussions with Anne, Trudy and Jane. This was also found to be the most influential reason in Browne's (1992) study. The irrelevance relates to the subject being perceived as being of little use to students who knew gaining a high TEE score as the major priority of their secondary education. As the educational environment changes with the introduction of a variety of methods of tertiary entrance, PES could take the path of becoming less scientifically based and more practically oriented.

As suggested by Jane, some of the time devoted to theoretical studies could be utilised for the achievement of certificates that could be used in resumes to improve students' chances of employment. Examples of such certificates are Austswim and First Aid.

Recommendation 3 – Alter the activities studied

Currently the practical aspect of the PES unit is based entirely on three competitive sports: volleyball, basketball and squash. The competitive nature of the sporting activities available is one of the reasons behind student non-selection of PES. The negative effect of competition has also been found in other studies (Faucett, et al. 1995; Sloper, 1996; Malaxos & Wedgewood, 1997; Taggart & Sharp, 1997).
Since the aim of PES should be to encourage continued student participation in physical activity during and following secondary education, the activities to be studied could take on a more relaxed and inviting nature. Activities could be ones that could easily be participated in once students leave school, and should utilise the benefits of the rural setting of Campbell SHS. Outdoor activities like walking, running or swimming at the nearby beach or hiking could be trialed. The class could also join a local gymnasium and work together to develop fitness circuits.

Primarily the students interested in the subject should make the choice of activities to be studied. Although price and availability will restrict some options, once a list of possible activities had been created, congregating students either before selection of year eleven subjects or once students had enrolled in PES should be done with the purpose of allowing students to choose the activities. As suggested by all three girls who participated in the discussions, this will generate student ownership and interest in the subject.

Recommendation 4 – Alter the format of the theoretical component

As mentioned by many students in the survey and then again in the discussions with Anne, Trudy and Jane, the theoretical aspect of PES is seen in a very negative light. The theory is predominantly scientifically based, with one third of the theoretical content based on a study of the human body. This part of the theoretical content is very similar in nature to the TEE subject, Human Biology. The theoretical aspect is also reviewed through two end of semester exams. Many year eleven female students do not like examinations.
PES is a group B subject and because the majority of the year eleven students choose five TEE and one group B subject, PES must compete against other group B subjects to gain enrolment. The similarity of PES to other TEE subjects causes it to be seen in a negative light, as group B subjects are seen by many as "slack" subjects in which students enrol for the purpose of relaxation.

Suggestions for improvement include the cancellation of the examinations and the removal of the Human Biology repetition. As mentioned previously, certificates could also be worked towards. Finally, the theoretical aspect could be more obviously correlated with improving student participation in physical activity. That could be done, for example, by researching the effects of physical activity and inactivity.

**Recommendation 5 – Include more community involvement in the PES unit**

Students used their involvement in community sports as a justification for non-selection of PES. This was the fourth most influential reason found by this study and the importance of this factor was also mentioned by Browne (1992). Anne, Trudy and Jane all had very positive experiences with community sport, so a large portion of the discussions with these girls was devoted to analysing why students would participate in community sport yet found school-based physical activity less enjoyable.

The findings suggested that participation in community sport was preferred over school based sport due to students' ability to exercise free choice, the enjoyment students experienced when playing in teams and the social nature of
community sport. Some of the ideas inherent in community sport were used in the recommendations mentioned in this chapter, but specifically, students suggested that greater involvement of the community would make the PES unit more inviting. One method of involving the community was suggested in the form of inviting adults to participate in classes. Trudy suggested the replication of the social aspect by cooperatively working with nearby high schools or primary schools. The ideas surfacing from the discussions suggest that cooperative work rather than competitive work would be more beneficial, as the competitive nature of activities contributed to student non-selection of PES.

The PES at Campbell SHS involved coaching students at a nearby primary school. According to the PE teachers, this is a popular activity but it was not mentioned in the subject selection booklet and was not mentioned in either the discussions or the survey. Promotion of this aspect of the course may entice students to enrol.

**Recommendation 6 – Offer PES as a less stressful subject than other classes**

Although Jane felt PES would not have caused any stress apart from taking time from her other studies, both Anne and Trudy and many of the students in the survey suggested that the perceived stressful nature of PES had a causal effect on their non-selection of the subject. Many students implied that they chose their group B subject with the criteria of being easy, requiring little effort and being relaxing. Anne stated that if the unit fit those criteria, many more students would select PES.
The attractiveness of PES could be enhanced by presenting the subject as a relaxing subject and as Anne suggested, even possibly as a method of defusing stress from TEE based subjects. This could be done by:

- Promoting the subject so that people knew exactly how the subject was structured
- Removing the examination aspect
- Including a choice of competitive and non-competitive physical activities. (Examples of non-competitive activities could include yoga, massage and walking for leisure).

**Recommendation 7 – Give students the option of single sex or coeducational classes**

On the basis of the findings in this study, it would be unwise to suggest that PES should become single sex in nature, as only one student mentioned the coeducational nature of PES as the reason for their non-selection of the subject. Jane felt the coeducational nature of PES did not effect her choice, but this issue is raised here because Anne, and Trudy strongly suggested that single sex classes be adopted.

Allowing students the option of single sex or coeducational would keep in line with the students’ wish for greater say in the structure of the unit. This would also not cause students who had few gender-based concerns about the class to be denied the possibility of working in a coeducational setting. This is supported by Browne (1992) and Sloper’s (1992) studies which both found that the coeducational nature of activities caused friction and that gender can be the basis
of non-participation in physical activity in general (Corbin & Nix, 1979; Thomas & Thomas, 1988; Ignico, 1990; Young, 1990; Browne, 1992; Commonwealth Senate Committee Report, 1992; Sloper, 1992; Carlisle-Duncan, 1997; Malaxos & Wedgwood, 1997).

Recommendation 8 – Change the PES uniform

A simple change to the uniform that is compulsory to wear but vehemently disliked by the female students such as Anne, Trudy and Jane, could have a proactive effect on enrolment.

Recommendation 9 – Improve the promotion of PES

As previously mentioned, PES had been ambiguously defined and poorly promoted at Campbell SHS. Improving the promotion of PES could start with the development of a clear purpose and set of outcomes, which could be supported by the following strategies:

- Make PES a priority subject - The students visit their year co-ordinator or other student advisors when they are considering their subject options. Once PES has been altered, the people involved in subject promotion should be made aware of the benefits of the subject and could even prioritise it over other subjects if that is deemed necessary.

- Improve the PES section of the subject selection book – The section of the subject selection book containing information on PES is rather ambiguous and based on the explanations of rules and regulations. More emphasis could be placed on the benefits of enrolment and as Jane suggested, pictures of the proposed activities could be included.
Conclusion

As suggested in the introduction to this study, a teacher, and the curricula from which they work, can have a huge effect on the way in which physical activity is viewed and the value a child places on its significance in their life. At Campbell SHS, the low participation in the year eleven PES unit by female students, caused teachers at the school to question whether they were having a negative effect on the way physical activity was being viewed. Through researching students’ perceptions of the teachers and the curricula, it was possible to create a list of reasons for non-participation in PES and devise strategies for improving the relevance and therefore appeal of the unit.

The direction of the study was determined by using two research questions, which followed Chenail’s (1997) suggestion of developing boundary defining questions and referring to them as a plumb-line. The research questions related to discovering the factors effecting student non-selection of PES and investigating strategies for improving enrolment in the subject. Data collection was achieved through employing a qualitative methodology involving a school profile, a survey and interviews with three students.

The major factors effecting PES non-selection included the greater importance of career oriented subjects, the unfavourable structure of the unit, students’ negative prior experiences with PE classes, students participation in community sport, the coeducational nature of PES and the perception that PES was too competitive and stressful. Underpinning these factors was the subjects
lack of a clear purpose or set of outcomes to be achieved. This caused students to have misconceptions about the structure of the unit.

Suggestions for improving the subject were based on the students' desire to have more say in the structure and teaching of the unit. Findings also suggested that changes might be made to ensure PES had a clear purpose and set of desired outcomes. Other suggestions for improvement included, making PES more relevant to student's future careers, altering the activities studied, altering the format of the theoretical component, including more community involvement, offering PES as a less stressful subject than other classes, giving students the option of single sex or coeducational classes, changing the PES uniform and improving the promotion of the unit.

Due to the limitations of this research, the effects of negative prior experiences and the compulsory nature of PE classes prior to year eleven were not sufficiently investigated. Further study in this area could be beneficial. Further study into student-generated strategies for improving post-compulsory PE subjects would also be beneficial for, as cited by Strikwerda-Brown (1999) and confirmed by this study:

There is much we can learn from studying student perceptions.
Greater knowledge of individual interpretations of events can help create better understanding between students and teachers (Sanders, 1995), as well as assist in the development and delivery of appropriate curricula. (p. 3)
Although there are still many questions to be asked about student non-participation in post-compulsory PE classes, it is hoped that this study shed some light on the issue of female non-participation. This information was found through research of only one school, but the rich nature of the information gathered painted a finely detailed picture representing the problem at Campbell SHS. It is hoped that implementing the recommendations of this study, will improve participation in the PES unit in the areas of both quantity and quality.
REFERENCES


*Physical and sport education.* Canberra: AGPS.


## APPENDICES

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Appendix A  Campbell SHS subject selection booklet excerpt
PHYSICAL EDUCATION STUDIES

GROUP B, YEAR 11, CODE D600  GROUP B, YEAR 12, CODE E600

SUGGESTED PRE-REQUISITES: Students should have a pass grade in Year 10 Physical Education, with a positive attitude to sport.

Physical Education Studies is a challenging and interesting course which can be taken by all students. This subject will be the only Physical Education offered to Year 11 and Year 12 students. One quarter of the time will be devoted to theory, and the other three quarters to practical aspects of the subject.

Course Content:

THEORY UNITS:

<table>
<thead>
<tr>
<th>Year 11 Semester 1</th>
<th>Body Systems and Exercise</th>
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<tr>
<td></td>
<td>Fitness and Health</td>
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<table>
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<tr>
<th>Year 11 Semester 2</th>
<th>Fitness and Health</th>
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<td>Community Sport and Recreation</td>
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<table>
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<tr>
<th>Year 12 Semester 1</th>
<th>Skilled Movement</th>
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<td></td>
<td>Sports Coaching</td>
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<table>
<thead>
<tr>
<th>Year 12 Semester 2</th>
<th>Sports Coaching (sports injuries)</th>
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<tbody>
<tr>
<td></td>
<td>Sociological Issues in Australian Sport</td>
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</table>

PRACTICAL UNITS:

One practical unit is taken to coincide with each theory unit. Thus, three practical units are taken per year.

The Year 11 practical units are Volleyball, Squash and Basketball.

The Year 12 practical units are Badminton, Volleyball and one unit to be decided. However, the Year 11 and Year 12 units may be altered when facilities and teacher expertise are taken into consideration.

Students selecting Physical Education Studies are required to purchase the upper school physical education sports uniform.

Assessment is based on a combination of marks gained in theory and practical units.

Interhouse Carnivals (ie Swimming and Athletics): Attendance at both Interhouse Swimming and Interhouse Athletics Carnivals is compulsory for all Physical Education Studies students. Failure to attend (apart from medical reasons), will result in students being penalised severely in their attitude grade for the unit.

Competence, academic understanding and excellence are worthy goals for all students, irrespective of ability. This subject not only caters for the broad range of ability, but hopefully develops each student's potential in Physical Education, with a proven positive result in the academic areas.
Appendix B  The Western Australian tertiary entrance procedure
Most high schools in Western Australia use the eleventh and twelfth years of education as a time of preparation for entrance into tertiary institutions. Entrance into such organizations has been based on the Tertiary Entrance Examination (TEE) score of prospective students. This score is derived from averaging the four highest grades a student receives for TEE labelled subjects (group one subjects). This average mark is then multiplied by five and an intelligence based test provides the final ten possible marks. This means a student has the possibility of earning a score of 510 or less.

At most Western Australian high schools, students enrol in six subjects. These subjects can be group one (TEE) or group two (of which PES is an example). Many choose five group one subjects, allowing themselves the safety net of receiving a bad grade for one subject without affecting their TEE score adversely. The final subject is then a selection of a group two unit.
1. Are you currently attending Physical Education Studies classes?  
   _NO._

2. Please state any reasons for your choice

   * Do not see how Phys Ed will help in anything that I choose to do as a career.
   * Did not enjoy Phys Ed in lower school because I was forced to participate in things that I didn't want to do.
   * Had already chosen what I wanted to do.
   * Pretty much I hated Phys Ed and did not want to do it anymore.
1. Are you currently attending Physical Education Studies classes?  

   No.

2. Please state any reasons for your choice.

   My TEC choices meant that I didn’t have an opportunity to do a sport. I heard it was very strenuous and I couldn’t be bothered. It was a real pain having to get changed all the time and I go to the gym anyway.
1. Are you currently attending Physical Education Studies classes?  NO

2. Please state any reasons for your choice

Because it's doing not very much to choose from. Done it before. I'm unfit. If you do sport you have to go to carnivals which are boring as well. Too expensive. And I'd rather do better things with my time instead of hating myself. & I

In lower school, I didn't really like sport, I hated getting changed and the sports we did I didn't always enjoy. This is not to say that I am a lazy person because I enjoy being active and do other sports out of school like walking, swimming and netball.
1. Are you currently attending Physical Education Studies classes?  

   No

2. Please state any reasons for your choice

   I didn't choose PE as I felt I needed to focus on my TAE subjects. I could have done PE as an extra curricular activity, but I didn't think it would help me in my studies or do anything to alleviate stress. PE was always very stressful for me because it is based around winning and athletic ability, which I don't have much of. Also the teachers often favoured the more athletic people.
1. Are you currently attending Physical Education Studies classes?  
   No

2. Please state any reasons for your choice
   Well last yr when choosing my subjects
   for yr1 & yr 2 my eyes scanned over 'P.E
   studies'; I thought about what always
   goes thru my head, I was in yr 5
   & possibly the most unfit person out
   & was 'volunteered' to run in the
   Cross country I didn't want to but
   my N.G.I's teacher made me. A
   day 'past' everyone wondered whe
   I was. A turned up, rounded the
   corner & painted over the finishing
   line. So blame my lack of sport on
   'childhood trauma'.

1. Are you currently attending Physical Education Studies classes?  
   No

2. Please state any reasons for your choice
   In yr 10, I was deciding between
   Photography and Phys Ed, but decided on
   Photography as I a play a fair bit of
   sport out of school (Netball & Basketball).
   I would like to be doing Phys Ed,
   but as I am already fairly active I
   choose photography.
1. Are you currently attending Physical Education Studies classes?  NO

2. Please state any reasons for your choice
   * because I get my period.
   * I don't like getting worn out.
   * I don't feel comfortable playing with boys.
   * I don't have the confidence to play around peers - I don't feel adequate.
   * I should be doing academic subjects so I won't turn out a 'loser'.
   * I need to spend more time on subjects that enable me to get smarter so I can achieve better than what people think.
   * I don't like sport.
Appendix D  Prompting questions used in the first interview
First Interview Prompt Questions

Describe where you want to be in five years time – what are your aspirations?

Describe your experiences in PE classes during
lower primary
upper primary
lower high
now

(encouraged or not, coed or not, important stages or experiences, teachers)

Describe the amount and nature of community sport you have participated in
during
lower primary
upper primary
lower high
now

Have you been involved in any other physical activity that you have not
mentioned yet?

How would you describe your opinion of physical activity?

How would you describe your ability to participate in physical activity?

What do you do during lunch time and recess?

You did not enrol in PES – what do you think would have happened if you had?

What do you think happens in PES?

Show response slip – Please explain what you have written on your survey
response sheet.

Are there any other reasons that you didn’t think of before that could have
effected your choice not to participate?

For what reasons do you think your peers have not enrolled?

What would make physical activity more appealing to you?

What would make you enrol in the PES unit?
Appendix E  Prompting questions used in the final interview
Questions for Anne

You stated that you were not interested in the sports offered. What sports would you like to be offered?

You suggested separate sex classes – what if there were not many females that enrolled? Would you prefer a smaller class if it meant you could have a single sex one?

You suggested the class could be less strict. Please explain. You also mentioned excursions. Of what nature would they be?

You suggested that the class could be less structure so that students could choose to sit around or play sport. How would that work?

You suggested tying the subject in with the community. How do you suggest that could take place?

What suggestions do you have for how the PE department could promote this class in a more positive manner?

Summarize how you have felt about the interviews I have had with you.
Questions for Jane

You thought that the student would be too slack to participate – why do you think that occurs?

You said a student could really dislike sport – why would they feel that way or what would lead them to feeling that way?

What type of sports could be added to make the subject more appealing?

If a student can be involved in sport outside school – is the PES unit necessary?

You stated that confidence could be a factor in why the girls were not participating – how could their confidence be improved?

It was suggested that tying the subject in with the community may make it more useful or appealing. How do you suggest that could take place?

What suggestions do you have for how the PE department could promote this class in a more positive manner?

Summarize how you have felt about the interviews I have had with you.
Questions for Trudy

You stated that some students simply didn’t like sport at all and that such feelings could mean that they would not enrol. Why or how do you think they came to this conclusion?

You also suggested that possibly PES could be made compulsory. What do you think would be the effect of such a change?

You suggested that the fact that PE was compulsory before year eleven could have been a factor that led to students not enrolling in PES. Should PE be made optional and what would be you reasons for the decision to keep it compulsory or make it optional?

You stated that you were not interested in the sports offered. What sports would you like to be offered?

You suggested separate sex classes – what if there were not many females that enrolled? Would you prefer a smaller class if it meant you could have a single sex one?

You suggested the class could be less strict. Please explain.

If a student can be involved in sport outside school – is the PES unit necessary?

It was suggested that tying the subject in with the community may make it more useful or appealing. How do you suggest that could take place?

What suggestions do you have for how the PE department could promote this class in a more positive manner?

Summarize how you have felt about the interviews I have had with you.
Appendix F  Written responses by Anne, Jane and Trudy
Anne's written responses

Responses On Slip
No

I need more time to focus on my TEE subjects because I am doing 5 very hard ones and my other period I spend studying. I also didn’t have an interest in the sports which were involved. Phys Ed was boring in lower school and I didn’t enjoy it.

Reasons for non selection of PES
Subjects
Teachers
Boys
Physicality
Interests – like and dislikes
Previous experiences
Time eg. Studying
Disability
Sports involved
Friends involvement
Timetable

Top three =
1. Previous experience
2. Not fitting the future
3. Not liking the sport/s

Strategies to improve participation
Separate sex classes
More interesting sports
More fun – casual, less strict, excursions. Involvement with other schools.
Not as competitive
Tie in with community
Optional – sport or just sitting around

Summary of feelings towards interviews
Very interesting. Mad me realize some of the reasons that I didn’t do sport. Also why other people weren’t doing it and made me think about how they could improve it – lots of thinking.

The structure of interviews was very easy and relaxed and I felt I could open up more than in a different situation. You were very easy to talk to!

Jane’s written responses

Responses On Slip
No
I decided that the other subjects that I had chosen were more important for my future job and also Phys Ed did not fit into my timetable. I would have liked to have been able to do Phys Ed though.

**Reasons for non selection of PES**
They were too slack to want to even bother participating last year so they thought that it would be a waste of time even considering doing it this year.
The course didn’t fit in properly with their selected timetable choices
Their parents didn’t want them to participate, maybe because they thought it was a waste of time and it wouldn’t help them in their future careers.
The student might just really dislike sport.
The Phys Ed course wouldn’t help them with their future careers.
The things involved in the course outline didn’t interest them eg. Sports and theory
Teachers (didn’t like)
Friends weren’t in the class
Already doing something active

**Top three =**
1. The course didn’t fit in properly with their selected timetable choices
2. The Phys Ed course wouldn’t help them with their future careers.
3. The things involved in the course outline didn’t interest them eg. Sports and theory

**Strategies to improve participation**
Certificate courses such as first aid
Weight courses – leads to gym instructor
Swimming certificate
Both male and female sports – variation
Better theory work eg. Certificate courses focusing on how certain sports help different parts of the body
Exercises to do before warming up
Side effects of not being physically active -- diseases
What are our body parts (functions)
Less Human Bio info (learning too much on it)
Confidence – girls need higher self esteem levels to want to be involved in sport.
They need to change sports – more outdoor sport – beach involved

**Summary of feelings towards interviews**
The interviews that were held with Fiona Cameron went quite well. I found that the first interview was quite nerve racking but that was due to not having much knowledge about the whole Phys Ed program. Fiona didn’t make me feel the least bit under pressure in fact she did quite the opposite by telling me not to stress too much, as she put it.

I have found that over the three interviews that I have learnt more about Physical Education such as “How many people aren’t interested in sport and how it does need to be exposed a lot more.” Ways of trying to convince people to become
more involved in sport and also How little amount of effort has been put into the Physical Education programs (and the money – need funding more)

The interviews have been really god and I have learnt a lot from them.

Trudy’s written responses

Responses On Slip
No

I don’t do Phys Ed because it doesn’t fit in with [what I] want to do. I put it as a reserve last year but I didn’t get it. If I wanted to do Phys Ed I would have needed to drop one of my other subjects anyway out of the three sports covered I only enjoy playing one which is Volleyball. I really dislike squash and basketball. I would have done Phys Ed if they had more interesting sports like soccer and football. I already play a sport so I don’t really need to play one at school.

Reasons for non selection of PES
Future – what they want to be
Experiences – bad
Not liking Phys Ed at all
Teachers
Because it was compulsory in lower school – they were made to do Phys Ed
Not being able to play the sports – teasing
Peer pressure – friends not doing it

Top three =
1. subjects – not fitting future
2. peers influence
3. not liking sports

Strategies to improve participation
Students get to choose course outline depending on class members
Two classes – girls and boys
Make it compulsory
More fun - not so strict – flexible
Play against different schools – eg. [name of school down the road]

Summary of feelings towards interviews
The interviews have been pretty good but we could have had them in one class instead of walking around to find one. I feel the interviews hopefully will benefit future upper school students. I missed out on class time which is good but they could have been more organized by getting us to do them on the same day, making sure we were all here. The interviews were pretty straight forward. Nothing too difficult and I didn’t feel pressured into saying something that I didn’t believe in.
Appendix G  Sample transcripts from the first interview
First Interview – Anne

Interviewer: Um what about lower high school?

Anne: Um... I didn’t like year eight because we had mixed classes and the boys were always taking the piss out and stuff.

Interviewer: So what were the guys like?

Anne: Um... well they always... if it was a ball game they would hog the ball and stuff.

Interviewer: So year eight you didn’t like and the only reason was the guys?

Anne: No I just didn’t like Phys Ed.

Interviewer: Well I understand that you didn’t like Phys Ed, but can you give me more reasons for why?

Anne: Um... it’s boring.

Interviewer: So what do you mean by the word boring?

Anne: Like you hit the ball and you run, then somebody else hits the ball and they run and then you stand out in the field and you just stand there and the ball doesn’t come to you so you stand there... It just kind of goes round and round. It’s very competitive as well, like people being competitive kind of takes the fun out of it. Um... O well like sometimes they do the stupid thing where they get two people to stand up and they choose their teams. You know you’re always being chosen last and everything.

First Interview – Trudy

Interviewer: Ok... So what about community sport? By that I mean sport that you have played in organizations out side of the school. Explain the various sports that you have been involved in and tell me what they were like.

Trudy: Um netball from, I think year 4 till last year. It was pretty good. We had the same teams so I knew all of them, and like being a team sport

Interviewer: So what made a team sport enjoyable?

Trudy: I dunno, sharing, not having to like do all the work and stuff, and volleyball. That’s good. Playing with the older people.
Interviewer: So anything else about volleyball that makes it enjoyable?

Trudy: Just having fun like laughing.

Interviewer: Yeah ok. So you enjoy community sport. What makes that more enjoyable than Phys Ed classes here?

Trudy: Um... people that ruin it for you. Like people who don’t want to do it and stuff.

Interviewer: Yep yep.

Trudy: And the teacher just yelling at you all the time.

Interviewer: Yep. So about those people that don’t want to do it, how does that make it difficult?

Trudy: Well they just stand there or muck around so the teacher gets real grumpy.

First Interview – Jane

Interviewer: So what makes them [community sports] different to the way sport’s played here?

Jane: What makes them different? Well in school... Like out of school its like you choose to do that subject because you really love it and so you get into it more. You’re more inspired by what you’re doing and stuff, but whereas in school its more like you’re basically told you have to do these so its sort of different... You like... O... are a bit edgy to whatever it is you’re doing and yeah... Also in school it was more pressuring because you had to get your grades... Yeah and all your grades and that. It was like you’re being assessed on it and so that’s also something that you’re a bit oooo.

Interviewer: And you don’t get that in the other sports?

Jane: Yeah when you’re out of school it’s just something you’re doing because you love it and you know that you’re not getting assessed on it so you can just try as hard as you want and that... But you do still try hard, really hard in school but its sort of a bit of pressure on you so you, so you seem to not... Well you get into it still but sometimes if you don’t... It depends on if you enjoy the subject - whatever it is you’re doing to whether or not you get into it, yep.
Appendix H  Sample transcript from the group interview
Anne: You could have a democratic vote.

Interviewer: Ok democratic. Gotcha. Ok so getting the girls to actually be able to choose the sports, cause that's a big point.

Trudy: Yeah

Interviewer: Great, another one?

Trudy: Separate classes.

Interviewer: Yep, so actually having a ...?

Trudy: Girls class and a boys classes.

Interviewer: Yep.

Anne: Well if you're going to do the thing where you choose the sports before hand you could find out if they want to actually have separate classes or maybe there's not enough people or something.

Jane: Hmm that's a very true point.

Interviewer: Cool. Have a go Anne. Let's see one of yours.

Anne: I had the separate sex thingey and choosing your own sports. They could make it more fun like a less casual kind of thing, I mean not less casual, more casual, less strict.

Interviewer: Ok so how would you do that?

Anne: Like um... The thing about choosing what you want to do. The teachers don't say you can go out there and run around and stuff.

Jane: Not so much pressure.

Anne: Yeah the pressure. And like you could choose whether you wanted to do sport that day or just sit around and talk about sport or something.

Interviewer: Ok. So even like the actual lessons, sort of thing. You want to give more input into actually how it is structured?

Anne: Yeah how they have everything done and stuff.
Appendix I  Sample transcripts from the final interview
Final Interview - Anne

Interviewer: You suggested separate sex classes. What if there weren't many female's involved?

Anne: Well if there were only like two females then it wouldn't work.

Interviewer: Aha. And how small do you reckon the classes could be to keep them viable?

Anne: Like at least 10 students.

Interviewer: You reckon the classes should be a little less strict. How do... What do you mean by that?

Anne: Um... Not so much the teacher telling you what to do like they just tell you what to do and you go and do it. I'd want discussion and stuff about what we wanted to do. Um... Less of the teacher forcing you to do things.

Interviewer: Um you mentioned excursions. Of what nature would they be?

Anne: Um... Just ones relative to the sport you were doing. Like if you were doing hockey you could go out and watch a hockey game out at the hockey stadium, so you get an idea of how professional people and stuff do it.

Interviewer: Um, and you suggested tying the subject in with the community. How would you do that?

Anne: Um... I'm not sure about that one.

Interviewer: Not sure?

Anne: No.

Interviewer: Ok. The class could be... with less structure you said, so... That the students could sit around or play sport. How would that work?

Anne: Um... Well just like seeing what the rest of the class feel like doing that day. Like maybe if it was too cold outside to go out and do sport then they could stay inside and do theory or something.
Final Interview - Trudy

Interviewer: Cool. You also suggested that possibly PES could be made compulsory. What do you think would be the effect of such a change?

Trudy: O. Maybe people would end up having to play so they would come to it, probably not enjoy it but they'd still do it.

Interviewer: Yep, yep. You suggested that the fact that PE was compulsory before year eleven could have been a factor that led to students not enrolling in PES. Should PE be made optional and what would be your reasons for the decision to keep it compulsory or make it optional?

Trudy: Um. It should be compulsory still cause it's a nice break from school work.

Interviewer: Um. You said you weren't interested in the sports that were offered. What sports would you like to be offered?

Trudy: Football, soccer, volleyball.

Interviewer: Yep. So why ball games and not racquet sports?

Trudy: I don't know.

Interviewer: Um, you suggested separate sex classes. What if there were not many females that enrolled? What would be your cut off for how many girls you can have in one class by themselves?

Trudy: Ten.

Interviewer: Ten. Ok. You suggested the class could be less strict. What did you mean by that?

Trudy: O like you could actually chose to have sport one day but not the next.

Interviewer: What do you mean by having sport one day and not the next?

Trudy: Like you play the game and maybe we could learn about the rules and then play it. And then come back and talk about how it felt and all that.

Interviewer: A little bit more feedback?

Trudy: Yeah.
Final interview – Jane

Interviewer: You thought that the student would be too slack to participate. What do you... Or why do you think that occurs?

Jane: Um... Well some people they just don't want to participate because they can't be bothered. Like with physical activity and so they just don't really... What I meant by too slack is um, just like they couldn't be bothered with doing anything about being physically fit.

Interviewer: Why, do you reckon?

Jane: Why. Just because they're not very motivated people. Or just cause they'd rather be doing other stuff.

Interviewer: Ok. Um, you said that a student could really dislike sport as a reason. Why do you think they feel that way and what do you think leads them to feeling that way?

Jane: Well, some people just don't like sport. They just really don't like what's involved in it and... What could lead up to it? Just their previous experience in other years um...

Interviewer: What kind of experiences?

Jane: Just what... The sport they're doing. Um... What's involved. Like the theory work involved. They might not have liked it like in the past. Mmm. What else? Can you just go over the question again?
Appendix J  University ethics clearance
Student: Fiona Cameron

Course Level: [tick one] Honours ☑ Masters by research and c/work □

Full Name of Course: BEd (Hons)

Title of thesis/project: Reasons for non-selection of upper school PES by female students

The research proposal was:
approved ☑

or

approved subject to the following conditions ________________________________

OR

rejected □

The application for ethics clearance was:
approved ☑

or

approved subject to the following conditions ________________________________

OR

rejected □

approved □

Chair R&HD Committee: [Signature] Date: 28/7/98
Appendix K  Permission note sent to Campbell SHS Principal
Dear Mr. [Principal],

I have recently been in conversation with Mr. [PE teacher], the Head of your school's Physical Education Department. We have discussed the idea of my involvement in research into the reason that female participation in the Physical Education Studies (PES) unit in year 11 and 12 has been decreasing.

I am currently completing my fourth year of a Bachelor of Education degree with the Bunbury Edith Cowan University. I have taken electives in the area of Physical Education and am completing an Honours course requiring a thesis to be written on an area of my choice. I feel investigating the reasons for non-participation of females in a unit such as PES will give your Physical Education Department useful information that could assist them when making curriculum choices. Another advantage will be the empowerment of the study subjects by giving them a voice to affect change. Through the discussion groups I plan to hold, students will be able to voice their opinion but also listen to others. In doing so they may come to understand the real reasons behind their avoidance of PES and whether such avoidance is beneficial or not.

I graduated from [Campbell SHS] in 1995 and know many of the Physical Education Staff. I attended PES classes in both year 11 and 12 and am saddened to hear that females are not participating in a subject from which I gained so many benefits.

I have attached a copy of my research proposal that was recently approved. If you have any questions please contact me.

Yours faithfully

Fiona Cameron

Education student
Edith Cowan University
Bunbury Campus
Appendix L  Permission note sent to case study subjects and their guardians
To Parent/Guardian

I am currently completing the fourth year of a Bachelor of Education degree and as part of my course I will be undertaking research at [Campbell] Senior High School in term three of this year, 1999. The research will be on the reasons that females are not enrolling in the Physical Education Studies (PES) unit offered in year 11 and 12.

Your child has been invited to participate in this research. I will interview your child about factors that have lead to them not enrolling in the PES unit. Two other girls will participate in similar individual discussions. After the initial interview the three girls will talk with me as a group about the reasons that PES does not appeal to them. Finally I will conduct a second individual interview with your daughter to clarify her position on issues that arise from the previous discussions.

To ensure your daughter's privacy, her name will not be used in the written presentation of my research but will be replaced by a pseudonym.

If your daughter is not involved in this research her studies will be in no way disadvantaged, yet the benefits of involvement are the following

- A chance to effect change in the school curriculum. Your child's opinions will be used to make decisions on how to make the Physical Education Studies unit a course that will be more inviting and beneficial for female students.
- A chance to have a voice on an issue of importance. Student opinions are often not heard. This research represents a chance for your daughter to voice her views and in doing so be empowered.

If you have any queries, please do not hesitate to contact me.

Yours Sincerely

Fiona Cameron

Education student
Edith Cowan University
Bunbury Campus
I, __________________________, give permission for my child, __________________________, to participate in interviews with Fiona Cameron on the subject of non-selection of the Physical Education Studies unit.

I am aware that the results of the research may be published, providing interviewees and family names are not disclosed.

Participant Signature: __________________________   Date: __________________________
Parent/Guardian Signature: __________________________   Date: __________________________
Appendix M  Campbell SHS Health and PE policies
The following units of Physical Education and Health Education are compulsory for all students in Years 9 and 10.

**YEAR 9**
- General Physical Education 3.1
- General Physical Education 4.1
- Personal Health and Lifestyle in a Modern Society 3.1

**YEAR 10**
- General Physical Education 5.1
- General Physical Education 6.1
- Foundations and Responsibility for a Healthy Future 5.1

**PHYSICAL EDUCATION ELECTIVES**

<table>
<thead>
<tr>
<th>Boating</th>
<th>6131</th>
<th>Basic Dinghy</th>
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</thead>
<tbody>
<tr>
<td>Boating</td>
<td>6141</td>
<td>Basic Sailing</td>
</tr>
<tr>
<td>Physical Recreation</td>
<td>6234</td>
<td>Triathlon Fitness</td>
</tr>
<tr>
<td>Physical Recreation</td>
<td>6244</td>
<td>Advanced Racquet Sports</td>
</tr>
<tr>
<td>Physical Recreation</td>
<td>6254</td>
<td>Squash / Golf</td>
</tr>
<tr>
<td>Physical Recreation</td>
<td>6264</td>
<td>Self Defence / Fitness</td>
</tr>
<tr>
<td>Dance</td>
<td>6243</td>
<td>Primitive and Contemporary Dance</td>
</tr>
<tr>
<td>Dance</td>
<td>6253</td>
<td>Modern and National Dance</td>
</tr>
<tr>
<td>Outdoor Education</td>
<td>6232</td>
<td>Rope Work / Abseiling</td>
</tr>
<tr>
<td>Outdoor Education</td>
<td>6242</td>
<td>Surf Survival / Snorkelling</td>
</tr>
<tr>
<td>Outdoor Education</td>
<td>6252</td>
<td>Bush Navigation / Camp Craft</td>
</tr>
<tr>
<td>Outdoor Education</td>
<td>6262</td>
<td>Canoeing</td>
</tr>
</tbody>
</table>

**GUIDELINES FOR SELECTION OF UNITS**

1. Students may select other units from the Physical Education component. A maximum of four units total may be chosen in one year.
2. Any combination of units is possible.
3. Students electing to choose units other than the compulsory General Physical Education and Health Education units may be charged supplementary fees to the stated cost of the unit for specialised instruction or hire of facilities. For example, squash court hire charge in Physical Recreation 5.4.
4. A swimming prerequisite is placed on Boating 3.1, Boating 4.1 and Physical Recreation 5.4. Students electing to do these units will need to display competent swimming and survival techniques.
5. The order of sports listed under each unit in Years 9 and 10 may alter from year to year due to pressure and availability of facilities and class numbers. However, as much as possible, the order of sports will be sequential and developmental.
BICYCLE USE FOR MOVING TO AND FROM VENUES FOR PHYSICAL EDUCATION ELECTIVES

Many of the Physical Education electives require students to use bicycles to get to and from venues, eg squash and golf. Where this is the case and students are required to use bicycles, the following restrictions apply:-

(a) All bikes will be tested by police for roadworthiness. ie brakes, reflectors etc.
(b) Helmets must be worn at all times.
(c) Students will undergo a "road rules" practical bike lesson with police.
(d) Students may not borrow or use bikes that have not been police tested in the previous session.
(e) Students must use traffic lights to cross Bussell Highway and cycleways hereafter. Main roads may not be used.
(f) Students may not "borrow" a bike from anywhere in the school without the owner's permission.

COMPULSORY UNIT DESCRIPTIONS

YEAR 9

GENERAL PHYSICAL EDUCATION 3.1 (6231) Compulsory

This unit is designed to provide students with the opportunity to develop an understanding of water safety and life saving, and to develop further their skills of hitting, throwing, catching and general body management through areas of aquatics, basketball and touch rugby.

GENERAL PHYSICAL EDUCATION 4.1 (6241) Compulsory

This unit is designed to provide students with the opportunity to develop further their skills of throwing, catching, striking and body management through the areas of hockey, badminton and volleyball.

YEAR 10

GENERAL PHYSICAL EDUCATION 5.1 (6251) Compulsory

This unit is designed to provide students with the opportunity to develop further their endurance and water survival techniques and their skills of throwing, catching and body management through areas of aquatics, volleyball and basketball. Some elective units may be offered.

GENERAL PHYSICAL EDUCATION 6.1 (6261) Compulsory

This unit is designed to provide students with the opportunity to develop further their skills of throwing, catching and body management through the areas of cricket, football and badminton. Some elective units may be offered.

ELECTIVE UNIT DESCRIPTIONS

PHYSICAL RECREATION 3.4 (6234) Cost $7.50

This unit provides students with the opportunity to acquire skills in the recreational pursuits of triathlon and fitness.
This unit is designed to provide students with the opportunity to acquire advanced skills in the recreational pursuits of racquet sports. (Badminton, squash, tennis, as facilities allow.) Cost includes 20 sessions of squash and 10 sessions of tennis.

This unit is designed to provide students with the opportunity to acquire skills in the recreational pursuit of squash and golf. Cost includes 20 sessions of squash and 12 sessions at the par 3 golf course.

This unit is designed to provide students with the opportunity to acquire skills in recreational pursuits of self-defence and fitness.

This unit is designed to provide students with the opportunity to acquire skills in dinghy GP14 sailing and catamaran sailing.

This unit is designed to provide students with the opportunity to acquire skills in the basics of sailboarding.

This unit provides students with a background in the fundamental skills of movement. It includes creative dance, dance drama, primitive dance and dancing styles derived from the cultural patterns of the past and present.

RECOMMENDED STUDENT BACKGROUND: Completion of Dance 4.3

This unit extends the students' repertoire of dance styles. Focus is on application of movement skills and dance elements to the techniques of jazz and national dance and the sequencing of these skills and elements into routines.

This unit is designed to develop a growing sense of competence in dealing with the environment with an emphasis on safety. With the use of ropes and associated equipment, the student will gain an understanding of emergency response through the emphasis on survival techniques. The unit will culminate with the students negotiating a recognised ropes course.

This unit is designed to develop a sense of responsibility in preparing for unpredictable conditions which may be encountered in the marine environment. The course encourages the development of skills which will be of value in taking care of the individual self and of the group. An understanding of the fundamental principles of first aid and of the minimum standards of fitness required for survival in marine areas will be gained. The course will culminate in an expedition to a local marine environment.
OUTDOOR EDUCATION 5.2 (6252) Bush Navigation / Camp Craft  [Cost $8.50]

This unit is designed to give the student the ability to plan a personal outdoor challenge in a forest environment. With the use of a map, compass and associated equipment the students will develop skills in bush craft and planning. The unit culminates in a bushwalking and caving expedition in the local environment.
Camp cost approximately $40.00

OUTDOOR EDUCATION 6.2 (6252) Canoeing [Cost $20.00]

RECOMMENDED STUDENT BACKGROUND: Completion of one other Outdoor Education unit is desirable.

This unit is designed to give the student the ability to prepare for a personal outdoor challenge in an inland aquatic environment. Using the expedition process (canoeing) the students will use expedition skills and determine the choice of clothing, equipment, food and minimum impact techniques. The unit culminates in a canoeing expedition on a river in the local environment.
Camp cost approximately $40.00
UNIT MAP

<table>
<thead>
<tr>
<th>STAGE 1</th>
<th>STAGE 2</th>
<th>STAGE 3</th>
<th>STAGE 4</th>
<th>STAGE 5</th>
<th>STAGE 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choosing Good Health and Personal Development 5211</td>
<td>Personal Health and Lifestyle in a Modern Society 5231</td>
<td></td>
<td>Foundations and Responsibility for a Healthy Future 5251</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

UNIT DESCRIPTIONS

YEAR 8

All students do unit 5211.

YEAR 9

PERSONAL HEALTH & LIFESTYLE IN A MODERN SOCIETY 3:1 (5231) Compulsory

This unit improves students' knowledge, attitude and skills in aspects of personal and social health. The healthy lifestyle concept is promoted and issues dealt with include alcohol, cancer and sexuality education. It develops an individual's interpersonal skills and discusses choosing healthy exercise and dietary practices, reducing the incidence and effects of lifestyle related diseases.

YEAR 10

FOUNDATIONS & RESPONSIBILITY FOR A HEALTHY FUTURE 5:1 (5251) Compulsory

This unit encourages individuals to take responsibility for their own health and wellbeing. It looks at issues such as drug problems in Australia, ways of avoiding injuries and diseases such as heart disease, cancer and sexually transmissible diseases (including AIDS as a growing health concern). Sexuality education is examined, especially issues relating to sexuality in today's society (for example contraception, relationships and postponement of sexual involvement).
Appendix N  Descriptors for survey responses
Total responses to the survey

| Students that chose to enrol in PES in year 11 | 10 |
| Students that chose not to enrol in PES in year 11 | 61 |
| Sample number | 71 |

Of the No's

| Students that chose not to enrol in PES | 61 |
| Students that enrolled in a Voc Ed program | 8 |
| Number of students whose responses were examined | 53 |

Average number of responses per student

| Number of responses in total given | 163 |
| Number of students whose responses were examined | 53 |
| Average number of responses per student | 3.08 |

Subject's irrelevance to future career choices

| Student placed greater importance on TEE subjects | 27 |
| Student stated that PES was not relevant to her future career | 21 |
| | 48 |

Subject's structure

| Sports available through the course were not desirable | 10 |
| Student believed other subjects would be more enjoyable | 11 |
| Student believed the subject would involve a lot of work | 2 |
| Student believed the subject would be boring | 4 |
| Student believed the subject would be stressful | 4 |
| Student believed the subject would be exhausting | 2 |
| Student believed the subject would be expensive | 1 |
| Student unable to carry equipment to school | 2 |
| Student believed the subject would be the same as Human Biology | 2 |
| Student felt uncomfortable playing with males | 1 |
| Student felt they already knew how to play the sports on offer | 1 |
| Student did not want to be involved in Triathlon | 1 |
| Student did not want to be involved in the sports carnivals | 2 |
| | 43 |

Students' previous experiences with PE classes

| Sport had been sexist - no tackling | 1 |
| Sport had been compulsory | 7 |
| Student believed sport had been studied enough already | 2 |
| Sport had been boring | 4 |
Sport had not been enjoyable 14
Sport had been too competitive 3
Student hated getting changed 2
The activities or sports played had not been enjoyed 3

<table>
<thead>
<tr>
<th>Students’ involvement in community sport</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Student believes participation in community sport makes decision permissible</td>
<td>14</td>
</tr>
<tr>
<td>Community sport involved more choice than what PES offered</td>
<td>1</td>
</tr>
<tr>
<td>Community sport was seen as more enjoyable than PES</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Students’ perceptions of their ability to participate</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Student has physical disabilities</td>
<td>1</td>
</tr>
<tr>
<td>Student doesn’t feel they have adequate sporting skills</td>
<td>7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Teachers and the students’ perceptions of them</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers were viewed as being biased - toward athletic students</td>
<td>1</td>
</tr>
<tr>
<td>Student does not like the teacher/s</td>
<td>1</td>
</tr>
<tr>
<td>Students felt that the teachers had not taught sport well previously</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other reasons</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Student believes that school activities should be academic and not sport related</td>
<td>2</td>
</tr>
<tr>
<td>Subject didn’t fit in timetable</td>
<td>1</td>
</tr>
<tr>
<td>Student gets their period</td>
<td>1</td>
</tr>
<tr>
<td>Student’s parents wanted them to do another subject</td>
<td>1</td>
</tr>
<tr>
<td>Student thought PES was a TEE subject</td>
<td>1</td>
</tr>
</tbody>
</table>