The Factors Influencing Females' Participation in University Bursaries Physical Education.

A thesis submitted by Wendi Girven to Massey University College of Education in partial fulfilment of M.Ed (Spec Ed) in January, 1997.

ABSTRACT

The under-representation of females in University Bursaries Physical Education compared to their male counterparts was investigated to discover what factors influence females' participation. A variety of approaches including a postal survey, student and teacher perceptions questionnaires, focus group interviews and an informal discussion with physical educators were employed to examine the complexities and interpretations of Physical Education and sporting involvement as a physical phenomenon for females. An examination of the personal characteristics, needs, situational circumstances, the context and organisation of University Bursaries Physical Education revealed insights into the type of programmes that attract and cater for the interests of females. Results indicate that a 'gender-sensitive' and 'gender-fair' dimension was evident in those schools surveyed. Females believed that the curriculum was providing appropriate knowledge, skills, insights, attitudes and motivations that enabled them to develop their unique needs and abilities. It is anticipated that the information presented, the questions raised and the implications for future research and practice, will serve as catalysts for further discussion and research.

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It has taken a team to make a dream!

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Chapter One: Introduction

Research Problem and Questions

The problem, or issue central to this thesis, is to investigate the reasons why disproportionately fewer numbers of females participate in University Bursaries Physical Education compared to their male counterparts. Students' perspectives on those factors they consider influence participation in University Bursaries Physical Education were surveyed. The growing interest in Physical Education and sport for study is only a recent phenomenon, and it is not surprising to find that research on factors influencing females' participation, remains in the preliminary stages of descriptive analysis. The scholarly community (Harris, 1988) has begun to accumulate a body of data and explanations about females' participation in Physical Education and sport, and as a result we are witnessing an increased sophistication in the use of research strategies and relevant studies on females' involvement. Furthermore, recent research (Boutilier & San Giovanni, 1983) is developing a greater sensitivity to the complexities and interpretations of Physical Education and sporting involvement as a psychosocial and physical phenomena for females.

Research focusing primarily on females' participation in senior Physical Education in New Zealand is scarce. It is evident that recent research has not looked specifically at the factors influencing females' participation in University Bursaries Physical Education at co-educational secondary schools. This in part, can be explained by the fact that University Bursaries Physical Education is in its infancy, having been only officially introduced nationally into New Zealand schools in 1990. It is therefore, relatively unknown what aspects of University Bursaries Physical Education cater or do not cater for the interests, needs and abilities of females. Currently, educators' reflective teaching practices are the only means they have in determining how past experiences and present student perceptions of Physical Education and sport influence female participation in University Bursaries Physical Education. A study of females' involvement in University Bursaries Physical Education is an important area in this emerging field of Physical Education scholarship.

This research seeks to answer the following questions:

1. What reasons do University Bursaries Physical Education female students state as primary motivators of participation in Physical Education?

2. What aspects of the University Bursaries Physical Education programme attract female students?

3. How well do females perceive the University Bursaries Physical Education curriculum caters for their abilities?

The aim of this research is to identify the factors influencing females' participation in University Bursaries Physical Education at co-educational secondary schools.

Specifically, the purpose of this research is to:

1. Survey the reasons that account for the disproportionately fewer numbers of females in University Bursaries Physical Education compared to their male counterparts.

2. Identify aspects of University Bursaries Physical Education that (a) cater for the interests, needs and abilities of females and (b) do not cater for the interests, needs and abilities of females.

3. Examine how past experiences and perceptions of Physical Education and sport influence females' participation in University Bursaries Physical Education.

Thesis Outline

In Chapter Two relevant literature is reviewed. Chapter Three describes the research design and explains focus group, questionnaire, and sample selection procedures. Chapter Four presents the questionnaire data while Chapter Five discusses the data and relates it to the literature review information. Limitations of the study and further research are included in Chapter Five.

Explanation of Terms

The term 'female' is explored and its implications are studied from an examination of the socio-historical, sociological and gender socialisation processes that impact on the experiences females have in Physical Education .

The term 'Physical Education' and 'sport' are used jointly because the international research which is previewed establishes many of factors influencing female participation in both Physical Education and sport. It uses the terms Physical Education and sport synonymously and interchangeably. Interestingly, this blurring of definitions illustrates that no attempt has been made to analyse or differentiate meanings, let alone sort out controversies and confusion with regard to terminology. Frost (1975) confirms this observation by stating that everyone seems to know intuitively what Physical Education and sport are, but few attempt to define them. Stothart (1990) and Burt (1987) similarly agree, maintaining that many Physical Education programmes are derived from a smorgasbord philosophy, or a complex matrix of components in which Physical Education and sport are inextricably linked.

Consequently, the terms Physical Education and sport blend, with no attempt made to describe the physicality experience. Perhaps this situation exists because Physical Education and sport have always been seen as companionable. To avoid any confusion over these two definitions, discussion will focus on the salient characteristics shared by both Physical Education and sport. That is, Physical Education and sport involve the use of physical skill, physical prowess and physical exertion (Coakley, 1994). Irrefutably, a study of Physical Education and sport offers unique contexts for the study of group interactions by providing us with opportunities to describe and understand how people relate to one another.

Rationale and Significance

Grant (1991) states, in general, Physical Education has been classified by many teachers, school administrators, students and parents as a subject of marginal importance in the senior school . As a result, would this assumption reflect the reason why smaller numbers of females are participating in University Bursaries Physical Education compared to the larger numbers of

males? According to Williams (1993) while many have criticised secondary Physical Education for reinforcing sexism, a more difficult question emerges: that of, exactly what kind of curriculum should be made accessible to females? It is argued, that simply to ensure females have access to a Physical Education that reproduces and reinforces an essentially 'masculine world' is not offering equal opportunity, even if such access was achievable (Williams, 1993). When a senior Physical Education curriculum is delivered to mixed gender groupings, with the possible exception of some sports (where 'equivalent' but 'segregated' single sex activities are undertaken) is equal opportunity being expressed in practice? Clearly, the delivery of a mixed gender group curriculum ignores a whole host of factors which result in the Physical Education curriculum experiences of males and females being significantly different. Educators are justified in their concern about the disproportionately fewer numbers of females compared to their male counterparts attracted to University Bursaries Physical Education. This represents a failure of our education system to meet the needs of its females.

Chamers, (1991) states secondary schools can provide the environment for unique, special things to happen to students. Within the secondary school environment, Physical Education provides the medium through which not only positive things happen but can enhance social and emotional growth as well. Evans (1990) noted Physical Education's many worthwhile goals, particularly its underlying function of the development and nurturing of individual skill, achievement, enjoyment and responsibility. Grant (1989, 1990) provides compelling evidence to suggest that the body of knowledge in the University Bursaries Physical Education course has the potential to illuminate and contribute to the quality of life of the individual student. Arguably, while University Bursaries programmes and provisions are important, first and foremost, curriculum planning must begin with clear goals and objectives if the curricular efforts are to be meaningful (Passow, 1986). However, without clear criteria or expectations for females curricular efforts will be directionless (Passow, 1986). It is imperative, that such efforts begin with an understanding of the needs, abilities and interests of females and how they perceive the nurturing of their abilities if they are to be allowed to survive, thrive and develop their psychomotor potential.

A University Bursaries Physical Education programme catering for females must synthesise a philosophy and theory of physicality excellence. The guiding principles in the development of appropriate programming must be grounded in research recommendations and educational standards (Department of Education, 1989a). This will ensure that the programme contains viable goals, an appropriate curriculum content, specialised teaching strategies and unique learning projects that recognise the needs, abilities, and interests of females.

The Programme goals to be met, or ideals to be achieved within University Bursaries Physical Education is anchored in the provision of ample opportunities for females to reach their full potential, to the fullest extent possible. Females should have the freedom, responsibility and capability to manage their time which is an important ingredient of self-fulfilment and performance productivity. Provision for leadership capabilities ensures opportunities are given for females to recognise and actualise their responsibilities. The development of aesthetic awareness, creative thinking and physicality expression require a nurturing and challenging environment to encourage a rich variety of constructive performance outcomes.

A University Bursaries Physical Education programme catering for females should be founded in an acceptance of divergent theoretical and practical viewpoints to develop reasoning capabilities and effective decision making. As a result, product outcomes are encouraged through the development of a pattern of thinking and performing that questions, probes, tests, investigates and evaluates. The curriculum alternatives and content in University Bursaries Physical Education that facilitate the learning process is multi-dimensional. The enrichment of the curriculum can extend instruction beyond the restrictive bonds and boundaries of the course content. Thereby, developing a depth and breadth of understanding, that is of relevance to females. Courses of study and curriculum offerings need to provide challenging learning experiences. Incorporated into any programme should be provision for variations or adjustments to meet individual differences and learning styles. Programmes designed for females should ensure the systematic development of long-range goals to develop their abilities and competencies.

The guiding philosophy for planning within a University Bursaries Physical Education programme is its academic soundness. This is achievable by providing an open-ended, seamless Physical Education experience that is responsive to individual achievement levels, capabilities, concerns and interests. The content provided needs to be broad enough and rich enough to match the divergently-faceted spectrum of females abilities and provide content of significance, satisfaction and challenge. The curriculum's learning experiences must be elevated to higher levels in the psychomotor and cognitive domains. Specifically, in such areas as knowledge, comprehension, application, analysis, synthesis and evaluation. These learning experiences would then translate the affective domain into thought and performance.

Similarly, the curriculum must encourage risk-taking and adventurous behaviour. Implicit in any University Bursaries Physical Education programming is the provision of learning experiences that develop thinking-learning and communicating skills as integral components of the total teaching-learning package for females. The development of ability in University Bursaries Physical Education can only come where there is freedom - freedom to learn and develop physicality skills, demonstrate and refine those skills, and orchestrate replicable levels of performance physicality.

This thesis will reveal the situational and personal factors as described by females participating in University Bursaries Physical Education. An examination of the personal characteristics of females, their needs, situational circumstances, the context and organisation of their Physical Education experiences will also determine the affect these have on participation in University Bursaries Physical Education. The investigation should provide insights into the content of the programmes that attract females into University Bursaries Physical Education and those factors influencing this group's decision to undertake University Bursaries Physical Education, as a subject option, at co-educational secondary schools.

The significance of this study is envisaged to have implications for the future directions and our understanding of Physical Education experiences for females and their performance in University Bursaries Physical Education.

As the key to attracting females into University Bursaries Physical Education, is to provide programmes that are attractive enough to cater for the students' interests and effective enough to promote their learning development (Kirk, 1988).

Primarily, the motivation for embarking on this research was in response to a statement made by Kirk (1988). Kirk believes, "that unless physical educators make a case for the educational value of their subject, then their potential to contribute to education as an emancipatory process will be severely restricted" (pp 44). Senior Physical Education has been a curriculum subject in the school for many years, but despite this, it is constantly posited between being 'fully accepted' or 'irreverently disregarded' (Stothart 1974). Clearly, the subtle pressures required to tilt the balance in favour of Physical Education's permanent and total acceptance have yet to be achieved. The place of Physical Education continues to be problematic, but in its many forms it is undeniably located within the cultural and social context of the school, which according to Kirk and Tinning (1990) must affirm its value. Where female participation or non participation is considered, perhaps it is the subject's longstanding struggle for academic legitimacy and credibility that subsequently influences and determines its favourability as a subject choice.

Hargreaves and Reynolds (1989) have stated that the value gained from University Bursaries Physical Education participation is a product of the academic and intellectual domain, the physicality dimensions experienced and the resulting performance achievements. Indeed, that may be so, but such an assumption presumes that all students are a homogonous blend. However, the value gained for females can only be achieved when they experience the appropriate knowledge, skills, insights, attitudes and motivations that will enable them to develop their potential (Sands, 1991).

Certainly, the prevalent issue of concern is to determine whether the quality and quantity of University Bursaries Physical Education experiences is genuinely valued enough by females to attract not only their interest but also to sustain their involvement? Especially, when we consider that females are adopting more positive attitudes towards health and well-being and the cultural expectation of being active and female is being embraced (Dyer, 1989).

Theoretical Framework

During the past decade or so, females' participation in Physical Education and sport has witnessed unprecedented growth both in its range and depth of involvement. Simultaneously, the study of sport has established a legitimate area of inquiry in a variety of disciplines such as Physical Education. In addition, feminist scholars have initiated a critical evaluation of the females place in Physical Education and sport. This thesis is both theoretical and practical in nature. It explores females engagement in University Bursaries Physical Education.

To facilitate the difficult task of dealing with theoretical problems and distinctive issues involving those factors influencing females' participation in University Bursaries Physical Education, it has been necessary to provide a detailed overview of the assumptions, values, premises and concepts related to females in sport. Having explained the larger conceptual controversies and created a conceptual foundation, the methodology proceeds to substantive concrete treatment of females' participation in University Bursaries Physical by surveying students' and teachers' perceptions.

Physical Education and sport remains highly associated with the so called 'masculine' element of our culture, and the female in Physical Education and sport is still considered a female in a males' territory. Females' involvement in Physical Education and sport has always lagged behind that of males. A partial explanation of the difference can be found in the cultural constraints on females' involvement. Specifically, such constraints centre around the notion that the two roles, that of female and athlete are incongruous. The result of the cultural bias takes on many forms, from actually discouraging a female from being involved or socialising her to a point where she is denied the same opportunities as males in the sporting arena.

This thesis recognises the distinguishing features of Physical Education and sport and its intimate connections with schooling. Educational environments provide a social environment within which females experience Physical Education and sport. Therefore, these connections take on added significance when one recognises that, in industrial societies, educational institutions are a major vehicle for the transmission of dominant cultural

values, social arrangements and personal skills and attributes. Inevitably, any discussion on females' participation in Physical Education and sport must consider the influence of schooling practices in shaping the nature and consequences of participation. Females values, attitudes, knowledge of themselves and others are collectively promoted and determined by socio-historical, socialisation and gender-socialisation factors.

Limitations of Previous Research

Kunesh, Hasbrook & Lewthwaite (1992) indicate that despite low levels of physical activity among children, youth and adults, little research has been conducted to look specifically at why individuals do not become involved in various forms of activity or the factors that influence females' participation in physical activity in the senior schools (Chamers, 1991). Rather, in the past, two decades research efforts have focused almost exclusively on formal sport socialisation (Kunesh et al., 1992). The following limitations associated with this sports socialisation research, were considered in the formulation of this thesis.

Firstly, researchers have concentrated on relating to only one type of physical activity involvement, formal sport. Sparkes (1989) characterised this as a narrow emphasis on traditional games, skill acquisition, sporting success and competition. The cultural transmission of Physical Education in schools, has been enshrined in the ethos of competitive games and public school athleticism (Mangan, 1973; Treadwell, 1984; Kaye, 1990) which has been modified but absorbed into state schools (Hargreaves, 1986) and has tended to promote what Dewar (1990) has described as elitist, white, upper-middle class, Anglo-Saxon, male values.

Secondly, because researchers have concentrated on examining factors related to only one type of physical activity involvement, it is apparent that they have not identified factors that may lead to involvement in other sports or forms of physical activity (McPherson, 1986). Furthermore they have not identified factors that may lead to a lack of involvement in sport or factors that may deter rather than encourage sport and physical activity involvement for females (Hasbrook, 1989).

Thirdly, sport socialisation has traditionally been studied from a perspective in which significant others and social institutions are viewed as influencing the individual to become involved in sport (Hasbrook, 1986, 1989). This perspective assumes that sport values, beliefs, and practices are modelled and reinforced by significant others within social situations which influence the individual. However, what many researchers have failed to consider is the role the individual, in this case the female participant, plays in interpreting and shaping the social contexts in which she is located (Alanen, 1990).

Fourthly, while the importance of significant-others influences has been well documented in sports socialisation literature (Otto & Alwin, 1977), we have little understanding of why or how significant others have become influential (Hasbrook & Horn 1985; Hasbrook, 1989). This may be achieved by considering peer, parents or teacher socialising influences, the constructs of their general acceptance and the affective responses they give, may help explain why and how these potentially key agents are important to the individual's physical activity socialisation (Marsh, 1987, 1991a, 1991b). Emmons and Diener (1986) provide some evidence that the affect one experiences in a situation, may in part, influence one's decision to enter into that situation in the future.

Perhaps the most recent study on participants' physical activity and socialisation experiences to have an important impact on physical activity socialisation has been conducted by Kunesh et al., (1992). Specifically, their findings indicate that boys in Physical Education classes appeared to be the major source of negative peer treatment, primarily criticising girls' physical skill performance and constructing them as subordinate to those of boys. Positive or negative affective responses to peer treatment were reported to lead to the females' seeking or avoiding future physical activity involvement.

The Problem of Being an Athlete and Female

Being considered a participant in Physical Education and sport, and being female, has the potential to present problems. Indeed, the female participant is looked on as a special kind of female because of her interest in Physical Education and sport and because she is female, she is often looked

on as a special kind of athlete (Daly, 1989). Social expectations over-emphasise the differences between males and females and as a consequence, females are often sold short in their quest for excellence. Less is expected of them; they are given training workloads appropriate for children (male children that is), they are made coach-dependent (male coach-dependent), rather than be encouraged to be autonomous, independent athletes with appropriate workloads (Daly, 1989).

Those who have been unimpressed by the efforts of females, have typically, evaluated their athletic performances in relation to males (Hargreaves, 1982). Simon de Beavoir (1952) best described the absurdity of comparing females' participation to their male counterparts by stating that, "In sports the end in view is not success dependent on physical equipment; it is rather the attainment of perfection within the limitations of each physical type; the featherweight boxing champion is as much a champion as the heavyweight; the woman ski champion is not inferior to the faster male champion; they belong in two different classes" (p.145). The key ingredients in the education process to emerge, is that the end product of this process (in which social and environmental engineering play critical roles), is an intrinsically motivated achiever who has a holistic view of her goals related to her capabilities. Furthermore, these females appear well equipped to tackle lifes' challenges (Gordon, 1989).

Chandler (1988) maintains that each individual possesses relatively untapped potential and that this potential may be best realised in a nurturing environment. Physical Education is a people environment. It is an active environment. It is a social environment and it is a changeable environment. Previous research has highlighted that there is usually a combination of factors that influence children and youth to continue their allegiance and interest in a particular Physical Education and sporting programme (Roberts, 1981, 1983; Passer, 1982; Gould, 1982, 1987; Watson & Collis, 1982; McGuire & Cook, 1983; Brown, 1985; Coakley & White, 1992).

There is no doubt that females have suffered most as a result of a socially defined and socially transmitted female stereotype which is seen as compatible only with involvement in selected physical activities (Coles, 1979). The most general issue for Physical Education and sport is how to

encourage their participation and prevent them from dropping out. Or, to put it another way, how to capture and maintain the interests of females in Physical Education and sport. The issue of equal opportunity has never been more alive (Dyer, 1989). When applied to females' Physical Education and sporting opportunities it engenders our acceptance of the fundamental human right of a child to choose what to play and at what level. The provision of a University Education Bursaries Physical Education curriculum has the potential to expand females' involvement (Grant, 1991).

Chapter Two: Literature Review

Programming for the Interests, Needs and Abilities of Females in Physical Education

The development of physical skills in programming for females in Physical Education involves a successful interaction between genetic and environmental factors (George, 1992). A knowledge of the former informs our understanding, whilst an appreciation of the latter is most significant in promoting participation. Programming considerations for females in Physical Education are:

> What do we want females to be or do as an outcome of their Physical Education experiences?
> Is the purpose of Physical Education to promote the development of self or the contributions they can make to society?
> Is learning how to learn more important than what is being learned?
> Is quality or quantity the focus of a Physical Education programme?
> Should learning emphasise the assimilation of information or the development of physicality expression?
> Is the programme measured against the group, the average or the self?

What is valued for females in Physical Education cannot be separated from research data on the contemporary feelings of society about education and the interests, backgrounds and attitudes of the students (George, 1992; Davis & Rimm, 1994). The answers to these questions reflects personal biases, experience and knowledge. By reviewing the purposes of a programme for females and understanding the elements of the programme can shape values for the programme.

The aims and objectives of an educational programme for females in Physical Education should stress the development of the self as top priority (Daly, 1989). Programming aims and objectives which are written consonant with the concept of self direction, ensure females have some power over their own curriculum (Treffinger, 1986). The role of the teacher in the Physical

Education programme cannot be overemphasised. A teacher who not only brings professional expertise but demonstrates infectious enthusiasm and a genuine commitment to the cause of education in Physical Education is critical. Teachers who demonstrate the personal and professional characteristics required for working with females in Physical Education have a broad academic background and interests; they exhibit a zest for scholarship and learning. They are skilled in using those techniques recognised by experts in the field of Physical Education to provoke, nurture and reinforce creativity, adventurous thinking and performance (Clendening & Davies, 1980). They are neither intimidated by female students themselves nor by inherently unique problems associated with teaching the athletic in Physical Education.

Gallagher and Gallagher (1994) provide a long list of the desirable characteristics for teachers. These characteristics are: good health and physical superiority, unusual proficiency in teaching subjects, excellent sense of humour, abundant physical energy, creativeness and originality. Maker (1982) requires that teachers have a good knowledge of their subject to cater for the interest areas that many students have. Teachers need a sympathetic understanding of child development, confidence, skill in developing flexible and interesting material, highly developed skills of questioning, explaining and demonstrating, a willingness to guide rather than dictate, proven teaching ability in regular education and leadership qualities. Bearing in mind these desirable teacher characteristics, Physical Education teachers should therefore, ask the following questions about their programming for females:

What am I doing to encourage and develop the interests of this group?

How effectively are females learning independently?

What attitudes are females developing towards their own ability?

What opportunities do females have that cater for their needs?

Females participating in senior Physical Education appear to know themselves and their own values intensely. They have a strong sense of their own abilities and a survivor instinct. They seek to reach for challenges, speak opinions freely and play energetically (Leroux, 1994). In their determination for success they choose not to loose sight of being female

(Boutilier & San Giovanni, 1983). If educators acknowledge the connectedness females seek, reinforce the physicality and social skills they display, and encourage more risk-taking, then there may be less need for females to fight the conformity and traditional stereotypes of ability that cloud their options for future aspirations. Physical activity is a part of our heritage. Psychomotor competence can only enhance the quality of females' lives, as well as allowing us to marvel at the achievements of a female athlete (Newland, 1976; George, 1992).

Physical Education : A Socio-historical Overview.

It is impossible, and it would be foolhardy to generalise about the nature and structure of Physical Education for females in New Zealand without some understanding of the socio-historical context of the growth of Physical Education and sport in this country. An assessment of the current status of females in Physical Education and sport, and the influence of participation (or lack of participation) in it, which omits the historical development, simply presents a 'here and now' analysis. Such an analysis is deficient, firstly, because it does not provide an understanding of the complex social and economic conditions which give rise to the present status of females' participation in Physical Education. Secondly, it is deficient because omission of a socio-historical approach, makes the prediction of future trends and the possibilities of change difficult, if not impossible to assess. By historically highlighting the ambivalent nature of progress in females' involvement in Physical Education and sport, we can determine the extent to which participation in Physical Education and sport has been a liberating force and whether it has provided opportunities for transmitting accepted values and attitudes towards feminine behaviour. A wider implication historically, questions to what extent has females' progress in Physical Education and sport been limited by assumptions concerning females' capabilities?

Pearson (1978) explains that New Zealand Physical Education has been derived from Britain, (in particular), Europe and America. The nature of Physical Education and sport today is a mixture of what was imported but it has developed characteristics and idiosyncrasies typical of this country and of its setting in the South Pacific (Stothart, 1990). When examining the

development of Physical Education, it is important to keep in mind that New Zealand did not originally develop as an independent and individualistic society, but began as a fragment of British middle class society and was an important disseminator of British cultural values (healthy mind/healthy body; displays of courage and strength; emphasis on physical performance and fair play).

Participation in Physical Education and sport was seen to promote these noted characteristics and to ensure a vital, vigorous and morally upright society. Unfortunately, the potential for the development of such traits were restricted to men. One of the outstanding qualities of this set of dominant national values, apart from their 'sport-relatedness', was their apparent masculinity. Cushman, (1989) notes values such as humanism (balanced moral, intellectual and physical development; a sound mind in a sound body), the gentlemanly tradition (physical prowess, fair dealings, modesty in victory, cheerfulness in defeat); the tradition of manliness (Courage, endurance, loyalty, co-operation, patriotism) were the foundation stones of programming. Independence, competitiveness and individuality, are values attributed to males in this society, not females (Mallea, 1972). The pioneering Physical Education educational curriculum for girls was in contrast geared to the acquisition of manners and behaviour.

Physical Education and sport became amongst other things, a vehicle for the transmission of a male-orientated value system (Lamb & Picthorn, 1968). Physical Education programmes, sport and physical activities in which females participated, were subsequently often devalued with exercise restricted to marching for deportment, social dance and passive exercise. To stay within the acceptable bounds of femininity, games were modified, foreshortened and avoided all association with vulgarity and viciousness. There was an acceptance of the innate physical differences between men and women which limited girls' access to all sports which stressed endurance, strength or physical contact. As a result, females' physicality development was retarded. Generally, sporting experiences for females were trivialised and considered effeminate activities in which males did not wish to participate.

Although there is an obvious decline in the extent of differential involvement by females in Physical Education and sport, it is important to remember that social attitudes and ideological beliefs linger long after the social conditions which created them have changed. For example, although we no longer experience the same set of social and economic circumstances which give rise to male-orientated and sport-related values of the nineteenth century New Zealand, these values, even when unfounded in fact, function today, at worst to be interpreted as reality and at best to colour and influence patterns of thinking about those activities deemed appropriate for each sex.

Protectiveness towards females, coupled with a lack of physiological understanding and restrictive clothing had all contributed to the Victorian attitude that physical exuberance was hoydenish and unladylike (Fry, 1985). The image of women as a weak helper or fragile creature was challenged by early feminists of the nineteenth century. This era saw the introduction of Physical Education for girls as exercise for health; a fit body would enhance a fit mind, and consequently, a fit mother. Although this concept of the female body being delicate, prone to ill-health was challenged, it nevertheless delineated the boundaries of what was expected of young women. These boundaries continued to support the assumptions about the different innate characteristics and needs of young women and men. It was believed that physical activity would contribute to the natural beauty and grace that was the biological disposition of women. Physical Education historically developed on the premise that girls received 'separate' and 'different' opportunities for physical activity.

Early developments in the primary school Physical Education were governed by the edicts of English manuals for physical instruction that indicated training for boys and girls could be the same until the age of 14 and that they could be taught together. Until the 'Physical Drill in Public and Native Schools Act of 1901', there was no official concern for the physical training of girls in New Zealand primary schools despite military drills for boys and cadet corps to function in schools from 1900-1912. The anxiety and neglect of girls was a concern (Fry, 1985). Hunt (1981) documents evidence of some progress made in 1904 when there appeared some enthusiasm for new provisions. As a result, girls were given the opportunity

to take part in the massed displays that became annual events in schools (Dominion, 1909), but only after three years of physicality apprenticeship completing a series of compulsory drills. The English 1909 Syllabus, commonly adopted by New Zealand schools advocated the 'Swedish Drill' designed to limber and strengthen different muscle groups. The syllabus made little difference between girls and boys Physical Education activities but did emphasise the value of skipping for girls. Such an activity was valued because it exercised all parts of the body.

The revised Syllabus of 1920, officially adopted in New Zealand schools, placed emphasis on health and enjoyment. Games were encouraged as was dancing for all, especially the healthy gaiety of the country dances (Physical Education Syllabus, 1920). Posturing was to be avoided, which ruled out such things as the minuet, and modern ballroom. However, Dr J. Renfrew White (1924) the Medical Officer of Health in his book, "The Growing Body", contributed a solemn and purposeful note into the instructions for physical activities with the emphasis on posture and bodily development. From 1932 to 1937 the unpopular influence of his book was the exclusive official syllabus for New Zealand primary and secondary schools. The English syllabi of 1909 and 1920, adopted by New Zealand primary schools, was to have an important influence on girls' secondary schools. Not so much in the training suggested, as in the matter of uniform (Fry, 1985). 1909 and 1920 manuals carried diagrams and suggestions for a uniformed garment that was useful and becoming. In addition, the garment allowed greater freedom of movement (Syllabus for Physical Exercise, 1909; 1920).

Principals of girls' schools were quick to see not only the many advantages of a uniform, but the salubrity of exercise to balance the demands of study. It was at these schools that the recreative power of Physical Education was identified. High school girls needed exercise to counteract strain and at the same time there was the opportunity to encourage more vigorous and healthy living. Physical Education was provided in secondary schools before it became a compulsory core subject in 1946 but was dependent upon the special qualifications of a Physical Education teacher and the enthusiasm of principals. Stothart (1974) states that it was the private

Protestant girls' schools that were to the fore in New Zealand in providing specialist Physical Education or 'gym'.

The Sportsmistress at a girls' school was the person who took the responsibility for games, gymnastics, swimming, athletics, keeping records of physical development, providing remedial exercises, organising deportment awards and was sometimes required to teach physiology and hygiene. Available space, equipment, the tendency to trivialise females' sport and magnify the prestige of male sports and class privilege impacted on what could be done in Physical Education. The impact of these factors contributed towards limiting females' participation. Primarily, the reason given was that outdoor activities were not at first considered essential for females. Subsequently, it was rationalised they could manage with limited space, minimal equipment and minor games (Fry, 1985).

The pattern developed with early programmes demonstrating a restricted view of a females' capacity and differences were marked in co-educational schools. Females engaged in tennis and swimming in the summer, with the possibility of cricket in girls only schools; basketball (now netball) and hockey in the winter. Athletic sports were annual social events to parade 'house spirit' and females were offered on Sports Day a variety of fun events which provided then with chances to be less vigorous. Gunby (1984) noted the deprivation and persisting limitations placed on female athletes at Rangiora High School when athletic sports in 1914 were boys only, and when in 1926 girls were included, the longest race for them was 100 yards, compared to a mile for the boys. Swimming was a most popular and appropriate physical activity for females. In particular, life-saving badges provided an opportunity for females to excel. Callisthenics was replaced in girls' schools by 'gym' and provided general physical training but this was very dependent on the bias and experience of the teacher. The common practice was to provide more advanced gymnastics for females (Fry, 1985).

The Sportsmistress however, continued to have a profound interest on the school's sporting prowess, specifically in girls' schools. The limited supply of fully trained teachers was a problem for principals but a few females in the teaching of physical culture (education) were particularly noteworthy. These teachers were: Nan King (later Mrs Bowie) at St

Margaret's College (1931-1945), Sally Heap at Auckland Girls' Grammar and Grace Sutton at Epsom Girls. These Physical Educators were not only developing sound Physical Education programmes within their respective schools but assisting with the theoretical and practical training of student teachers. Stothart (1975) points out that the Department of Education showed no interest in the innovative work that was being done by these specialists. In this respect, greater numbers of females had fewer opportunities to identify with their gender role models.

The emergence of school indoor basketball was advocated as having beneficial effects on the womanhood of this country. It was played before 1914 and netball was introduced in 1902. Hockey, also developed in the early part of that century but was regarded as a less feminine game (Longworth, 1920). However, anxiety about females' participation continued, particularly among mothers who had played no games themselves (Fry, 1985). Girls schools and the co-educational high schools were bound by the academic bias of the curriculum with girls attending secondary schools perhaps because they showed scholarly aptitude, or because their families valued education, or because their parents could afford to pay for a privilege that was socially acceptable. Thus, Physical Education was relegated to the poor curriculum relation in the family of preferred schooling subjects.

Schoolgirl heroines in books were more than likely to be sporty than brainy, in particular, the books of Angela Brazil were widely read. The characters depicted, firmly belonged to the realm of schoolgirl fiction with their exaggerated enthusiasm, superior characters and remote backgrounds. Cadogan and Craig (1976) state that the awareness of schoolgirl liberation was more self-conscious in fiction. Interestingly, it did serve a purpose at the time, of indicating that girls were capable of physical activity just as much as boys. In the 1920's, games in school Physical Education were seen to drive out much silliness, occupy vacant space and also produce an antiseptic atmosphere (Lamb & Picthorn, 1968). Similarly, games in girls' Physical Education were seen as the best corrective means to the morbidity and sentimentality of the adolescent period (Fry, 1985). The 'Gym' Mistress was expected to play her vital role by using sport as a means of social and

individual control which applied as much to girls' Physical Education training as it did to boys.

In the 1940's, physical training that would benefit all pupils was the main concern for those responsible for the major developments in New Zealand schools. The Director of Education, Dr C.E. Beeby (1941) stated, that sport was for the multitudes and not just a favoured few and was becoming a recognised part of school activity. Philip Smithells was appointed Superintendent of Physical Education in the Department of Education in 1938. In fact, it was he who recognised what was being done in a number of girls' schools and was anxious to build on the local developments. The indigenous element, especially Maori activities was also seen as an important emphasis.

The 1940's became an era which addressed the fact that Physical Education had been neglected as a whole for football (rugby) and basketball (netball). The 1933 English Syllabus and articles appearing in the Educational Gazette were initially, the templates for revitalising Physical Education teaching in primary schools. A more balanced programme of Physical Education included: rhythm, music, folk dance, Maori games, ball-handling, swimming, and ground exercises on mats. Any new developments in Physical Education, for girls, was constantly plagued with complaints about the required clothing. It was during this era that rompers and shorts were now officially recognised as appropriate uniform. In 1945 with the implementation of the Thomas Report, Physical Education became a core subject. Physical Education was obligatory for all third, fourth and fifth formers in New Zealand secondary schools for at least one hour a week. Which in reality was translated to thirty minutes for games (Sherriff, 1991).

The years after 1947 saw a great deal of progress made in Physical Education. Many publications became available to inform teachers of Physical Education theory and pedagogy, Physical Education equipment was supplied and increased, much equipment was modified, and swimming pools became common in schools. Outdoor Education became a part of the Physical Education course in small, organised camps (Sherriff, 1991) but the numbers of secondary schools increased. Gymnasiums were not built, principally, because the government did not regard them as 'essential

buildings'. Consequently, school and community halls were utilised and schools fundraised to build a gymnasium with some governmental assistance. Therefore, one area of Physical Education and a sporting experience in which females could excel, was effectively hampered by insufficient facilities and a lack of equipment.

Since the 1950's, gradual changes have taken place in Physical Education. Courses have been modified, alternative courses offered, teacher training has been developed and improved to its current format, and equipment has been updated or improved. Equity and girls' in Physical Education have been promoted as a non-sexist teaching practice in Physical Education and sport. The effect has been to enthusiastically promote Physical Education, sport and recreation for all. In particular, teachers are encouraged to think about issues of equity for girls in Physical Education, and to evaluate their own teaching in terms of gender equity. They have been introduced to successful pedagogical strategies that promote gender equity (Creighton, 1992). The 1970's heralded the development of a nationally recognised Sixth Form Certificate Course and in the 1980's Otago University developed a four year Bachelor of Physical Education degree course. 1988 saw the launching of KiwiSport, Fair Play and Sport for All. Coupled with this was the initial developments in University Bursaries Physical Education which was set up as a Higher School Certificate course to be trialled in a number of selected schools. After trialing, it was accepted as a full University Bursaries Course in 1990.

The development of Physical Education did not occur in a vacuum but reflected the social, political and economic position of women in the late nineteenth and early twentieth centuries. Ideologies around females' ability, role and behaviour became institutionalised within the Physical Education profession such that secondary school girls experienced a subject that on the one hand contributed to their liberation in terms of dress, opportunities for physical activity and access to a future profession. But on the other hand, reaffirmed clear physical sex differences, their future role as mothers and the boundaries of female sexuality.

If the aims of Physical Education are to develop skill; build self esteem through sport and exercise; develop social skills and attitudes; develop

lifetime activity habits; and teach people how to make better use of their leisuretime, are females continuing to being given an unfair deal? The current attitudes and the status afforded to Physical Education in many schools it can be argued, remains variable (Sherriff, 1991). Obviously, for a variety of reasons this has far reaching implications for the development of Physical Education and sporting abilities in our female girls and youth.

Scraton (1986) believes, it is clear that contemporary Physical Education remains underpinned by tradition and an ethos informed by sexist ideologies. It is felt that Physical Education continues to reinforce gender differences both overtly, in the activities offered, and covertly, through the attitudes and reactions of those (both women and men) involved in policy and practice. The present impetus to look at provisions, programmes, student perceptions and equity issues for females' participation serves to heighten concern that there is a very real need to address past and present inequalities in our education system and what better place to start than in Physical Education, which is in fact education for life (Northcote, 1992).

Health and Fitness

In recent years the importance of physical activity as a health related behaviour has been recognised (Embery, 1988; Kunesh, et al., 1992). Participation in Physical Education and sport has been identified as a factor that may significantly influence health outcomes (Lee & Owen, 1985, 1986; Reeder, Stanton, Langley & Chalmers, 1990). An active lifestyle has been reported to benefit physical and mental well-being (Brownell & Stunkard, 1980; Paffenger & Hyde, 1988; Powell, 1988).

There is also evidence of the physiological benefits of vigorous activity (Taylor, Jacobs & Schucke, 1978), particularly from aerobic exercise, which include a reduced risk of coronary heart disease, improved blood lipid balance, reduction of body fat and increased flexibility (Powell, Thompson, Casperson & Kendrick, 1987). Exercise improves sleeping patterns and increases recovery from minor illness and injuries (Thomas, 1979). Reductions in stress levels, improved ability to cope with daily problems (Lee & Owen, 1989) and subjective feelings of greater energy and higher self esteem provide consistent evidence that sport or exercise

involvement does have these benefits (Hughes, 1984). Moreover, the amount of physical activity in early life may be particularly important not only because it can help to establish positive life-long recreation habits (Dishman, Sallis, & Overstein, 1985) but also may be a better predictor of health outcomes than later levels of activity (Reeder et al., 1990).

These reports are consistent with the notion that youth who participate in regular Physical Education and sporting activity have a more positive attitude, do better in school work and tend to be more successful overall throughout life (Franklin, 1993). Harris (1988) states that girls mature sooner than boys and need to be introduced to sports earlier to maximise their development, particularly of the central nervous system because malleability decreases markedly by the age of 10 or 11. Frisch's (1988) recommendation to use activity to delay fat accumulation and menarche is a strong argument for specialist and relevant programming, Physical Education specialist teachers in primary schools and educated coaches involved with females.

Coleman's seminal work (1959, 1961) emphasised the effects of sport for adolescent athletes and subsequent theoretical perspectives have considered the female athlete and the potential of Physical Education and sport to enhance broadly defined non-academic outcomes, educational aspirations (Goldberg & Chandler, 1989), academic outcomes (Snyder & Spreitzer, 1991), course work selection (Marsh, 1993), homework, reduced absenteeism and subsequent university attendance (Finn, 1989). Participation in Physical Education and sport, facilitates the development of skills and attitudes that serve as resources for females Physical Education and sports quests for future success (Spady, 1971). Furthermore, Holland & Andre (1987) posit that female participation in extracurricular sporting activities enhances the total development of females in physical activity.

The changing attitudes and behaviours throughout contemporary western societies to promote an environment that attract females to exercise are encouraging. In the last twenty five years, women and girls have become physically released from the strait-jacket concept of female fragility (Sedgewick, 1989). It is recognised that life for females is as much a matter of muscle work as it is for males. What has caused these changes? Perhaps some or all of the following? Exercise has become widely accepted as

essential to good health for everyone at all stages of life. A sedentary lifestyle is seen as a health hazard. A wider role in all features of life has been accepted for females, including a physical role. Subsequently, exercise and fitness have been recognised by women as important in exploiting their wider duality role in life as a mother and wage earner.

The media have spread the word in various ways, to good and bad effect, but in general, undoubtedly popularised the concept of exercise being right for women Greendorfer, 1983b). Commercial interests (Boutilier & San Giovanni, 1983; Coakley, 1994) have pushed the exercise movement in order to make a profit from the sale of running shoes, leotards, trendy gear, head-bands, deodorants and medicaments. Body image has been associated with commerce, where the media and fashion world have firmly placed exercise to the fore, it is pictorial, dynamic and sexy (Allen, 1972; Snyder & Kivlin, 1975). Men support the idea of the body beautiful; exercise is one aspect of the wider role of females which men encourage because they sense it is in their own sexual self-interest (Boutilier & San Giovanni, 1983). Governments support it, for health and economic reasons, the medical, para-medical professions, sporting organisations and many others support it (Dyer, 1989). Schools are encouraging Physical Education and sport exercise for young girls and adolescent females because of the academic and psychological benefits (Ey, 1982).

Despite these benefits and encouraging directions in levels of female participation in Physical Education and sport, a substantial portion of the school population does not exercise on a regular basis. The following recent New Zealand research has implications for Physical Education programmes. The Preliminary Report on a National Survey of the Fitness of New Zealand School Pupils (1986) provides evidence of low fitness levels, particularly for girls. The Accident Compensation Corporation's Analysis of Claims Data and Participation Rates Survey (1984) gives evidence that a significant number of young New Zealand females drop out of physical activity from the age of fifteen. The Women's Health in New Zealand Report (1985-88), Recommendation '14' encourages all women to take a personal responsibility for and collaborate in their own health care. The New Zealand Board of Health Report (1988) considers that physical activity should be recommended

for its personal benefit to a sense of well-being and to self esteem. An Advisory Committee Report on the Prevention of Cardiovascular Disease (1986) aims to increase the proportion of the adult population enjoying regular exercise to twice that of the current level of 30% by the year 2000. The Hillary Commission Life in New Zealand Survey (1991) indicates New Zealand females' participation in leisure activities was linked to the health benefits but despite this, a large number of women lacked the confidence and self esteem necessary to lead a fulfilled leisure lifestyle.

Australian research reflects similar patterns. The Girls' Achievement and Self Esteem Project in Adelaide (1984) investigated the contribution of Physical Education and sport and found that more girls drop out of regular physical activity earlier than boys; that there were more obese girls than boys; fewer girls were involved in regular physical activity and fewer women than men return to physical activity involvement later in life. An Australian Fitness Survey (1985) showed that there were more unfit girls than there were unfit boys. In a related study researchers have estimated that approximately 50% of the students in British schools do not exercise with the intensity and frequency generally recommended for cardiovascular fitness (Stephens, Jacobs & White, 1985). Similar findings have emerged from surveys in Canada and the United States (Stephens et al., 1985).

Dyer (1986) has stated "Girls enthusiasm and participation in all forms of physical activity including sport, decline rapidly during their early high school years. Girls' average levels of fitness decline in absolute terms during these years and decline very markedly compared to boys. It is not just in school based activities that girls lose interest during these years. Their interest in all sporting and physical activity decline generally." (p.2). This would suggest that current educational practices in this area obviously are doing little to arrest this declining interest and must therefore be changed if they are to meet girls' needs and expectations.

One of the most significant and best documented aspects of females' participation Physical Education and sport is that far fewer females participate in sporting experiences and physically orientated lifestyles than males (Dyer, 1989). Not only are there fewer participants, but those who participate do so in a narrower range of activities. Two questions arise. When do females

begin to be less interested and begin to drop out? What reasons do they give at that stage? In other words, what factors would be relevant for them continuing or discontinuing in Physical Education and sport?

Franklin, (1993) states that it is a well researched concept that physical activity enhances a person's well-being. It is therefore essential to examine more closely the nature of Physical Education programming to identify important issues and evaluate the problems females' experience in Physical Education and sport. In a University Bursaries Physical Education context it is imperative to understand how females' interests can be best served. Culpan (1986) indicates, that the underlying disquiet and undertone of concern in the teaching profession focusing on females' participation and gender inequalities gives speculation to one vital question. As educators, is it not prudent to ask ourselves, to what degree is the time right for Physical Education to regenerate itself and take a more central role in the total education process of all its students, females included?

Several researchers have identified critical aspects of concern in some Physical Education programmes. These provide possible explanations for females limited participation. In Ryan's (1984) view, many issues have been identified in restricting females involvement and participation in Physical Education and sport. These issues are: the curriculum, school organisation and structure, extracurricular activities and opportunities, timetabling, grouping, uses of playground space and facilities, clothing and its restrictions on girls' play, teacher methodology and expectations, sexual harassment, policy development, cultural influences and parent and community support all contribute singularly, or jointly to affecting females' quality and quantity of active participation.

More specifically, some school Physical Education programmes are poorly managed and staffed (Eddington, 1989), leading to high drop-out rates and de-motivation of participants (Robson, 1981; Jobling & Macdonald, 1987); unsuitable exercise is widely applied for participants with inadequate objectives (Robson, 1981; Jones, 1983); little consideration is given to group dynamics as a vital feature of motivation; certain social groups are poorly catered for such as ethnic groups (Lopez, 1987). Unfortunately, in all these areas, females are still, in general, in this category of being poorly catered for

(Sedgwick, 1989; Dyer, 1989; Gordon, 1989); there is inadequate provision for individual differences - biological, social, and psychological (Abigail, 1984a). Bradbury (1990) cautions that teachers are likely to be a major influence on females' participation in Physical Education and have often reinforced gender differences because of their beliefs, attitudes and teaching practices (Jones, 1983).

Socialisation Factors Influencing Participation

Considerable data in a variety of sociological fields has investigated the many factors influencing females' participation in Physical Education and sport. These findings provide ample evidence to suggest the topic continues to be a controversial issue (Coakley, 1994). The following broad-based research findings will be examined to identify those factors that influence females' participation. These categories are: Attitudes, Family, Peers and Significant Others, The School and Physical Education Curriculum and Disengagement from Physical Education and Sport.

Attitudes

Current research indicates that females are less interested in and attribute less status to physical activity and sport than other leisure pursuits (Brumach, 1968; Campbell, 1968a; Nettleton, 1969; Norman, 1975; Cratty, 1983; Dyer, 1986). Females also participate in frequent exercise and vigorous exercise less often than males and are typically less fit than males, and are less likely to return to exercise (National Heart Foundation, 1983). Other recent studies (Connell 1975; Taylor, et al., 1978) portray females as having lower activity self esteem and more negative concepts than males and lower expectations of success than similar aged males (Dyer, 1896; 1989). However, female athletes have higher self esteem and a higher level of psychological well-being than non-participants (Melograno, 1979; Robertson, 1981; Poole, 1983).

The under-representation of females in activity settings and the low status attributed to physical activity arises from three main sources (Sands, 1991). These were, firstly, the biosocial impact of menstruation and maturity which plays a significant part in the activity embarrassment for females.

Resulting in lowered self esteem levels and females' uncertainty with respect to ongoing interest in activity. Secondly, cultural patterns of behaviour, values and expectations generated through western culture, pervasively influence contemporary views on what is appropriate or not. Thirdly, significant others, parents and siblings are understandably the most potent influence on activity attitude and the behaviour of females.

Diana Jones (1981) identified sociological myths that can be related to females' participation in Physical Education and sport that suggested females aren't interested in Physical Education and sport. The assumptions were: that females want to be males; that females who take part in physical activity and sport aren't feminine; that generally females are different from males and that female Physical Education and sport should be graceful and beautiful if they are to be acceptable. She concluded that no substantive evidence could be found to support such claims.

Pennington and Collins (1981) similarly found literature searches they conducted substantiated Jones's claims and proposed additional myths more subtle in nature, albeit devastating in their social consequences. Firstly, sport is the eminent domain of the male. This myth is akin to Jones's myth about females not being interested in physical activity. However, it can be noted that progress in terms of participation by females may be far less pronounced in other areas and for other age groups (Jones, 1981). Runners World Magazine (1980) reports that while sport and physical activity may have been the privilege of men and boys in the past, this is not the case in many parts of the world today. Pennington and Collins (1981) believe there is little question that the eminent domain of the male in physical activity and sport is eroding.

Secondly, another myth generated is that there is a universal recreational panacea for all females thus suggesting certain physical activity experiences are the antidote for all people's problems. The positive benefits of a particular recreational experience cannot however be a prescription for everyone. Such a myth affronts the essential characteristics of individuals. Females' interests, abilities, needs and characteristics are so varied and complex that they defy homogeneity and standardisation. Pennington and Collins (1981) found that Physical Education programmes that are founded

on highly prescriptive, sequential and convergent approaches to living and learning were inconsistent with the values of individuality which supposedly characterise our community. Jones (1990) points out that such programmes do indeed fail to take into account the females' needs, values and aspirations .

Accompanying the resurgence of females' interest in exercise and sport has been the belief that what is good for males is good for females. The reality associated with this myth is that Physical Education and sport has not been a positive experience for all females. Furthermore, the belief that if anything is going to benefit you it must involve sacrifice, self-discipline, pre-determined goals, and must be product orientated. Such a myth perpetuates the dominant, performance orientated Protestant ethic of our frontier forbearers (Pennington & Collins, 1981).

The suggestion that females in Physical Education and sport are unfeminine and often socially deviant is a myth. It is based on the long standing hypothesis, that when females in sport are compared with non-females in sport, females demonstrate lower scores on measures of psychological well-being and body image. Synder and Kivlin (1972) found the contrary was true. Stricklin (1978) noted positive psychological patterns require more time to emerge as females get to know themselves and feel worthy as a person.

Another well entrenched canard has been that sports and Physical Education participation is harmful to the health of females. Literature of the past one hundred years has been saturated with concern with physical injury to the reproductive organs, breasts, and with possible effects on the menstrual cycle, pregnancy and the psychological well-being of sportswomen. Although physicians and educators were unable to convince the public of the health dangers of sport for females, no substantial evidence was ever brought forward to substantiate the claims (Gilbert & Williamson, 1973). The massive volumes of research accumulated over the past decades on females at all levels of competition, convincingly shows that the health hazard argument is fictitious (Drinkwater, 1984; Puhl & Harmon 1986; Campaign, 1988). Campaign (1988) has tirelessly highlighted the positive benefits to those very female organs once considered susceptible to danger from sport.

A catalogue of myths associated with female participation continue to proliferate, and have had wide acceptance but are of dubious validity (Pennington & Collins, 1981). These beliefs include that: Physical Education and sport for women is self-indulgent; females cannot achieve true excellence in sport; females are, by nature uncompetitive; females have more time for sport and recreation than males; schools generally afford females full and equal opportunities with males for Physical Education, play, sport, and recreation.

It must be noted, active participation in Physical Education and sport can no longer be regarded merely as a matter of 'aptitude' or 'interest' with the female choosing to participate or not depending on her whims, fancies, genetic aptitude and physical ability (Kenyon, 1974; Jones, 1981; Craig, 1980). Females compete in Physical Education and sport because of the potential reward structure it possesses and because of the opportunity to evaluate their competence in interacting with the environment (Alderman, 1974). Females are slowly becoming aware of the existing myths which suggest hard work, motivation and individual sporting ability is all that is necessary to participate in and become personally fulfilled through sport (Jones, 1980b). Stated simply, certain social barriers stand in the way (Kenyon & McPherson, 1974, 1976; Gruneau & Albinson, 1976).

A number of general features have emerged from a review of the general literature that evaluate the attitudes of New Zealand school pupils and teachers' perceptions towards Physical Education (Williams & O'Neill, 1983). Firstly, while major advances in conceptualising the area of attitudes towards physical activity have been achieved over the last fifteen years, the same cannot be said for Physical Education because of the complex multidimensional nature of attitudes (Kenyon 1968a, 1968b, 1968c). A second main feature is that although there are several divergent findings regarding the relationship of attitudes to other situational variables concerned with Physical Education, there is considerable agreement in a number of areas (Williams & O'Neill, 1983). Namely, that the attitudes held towards Physical Education are generally favourable (Young, 1970; Burris, Faust & Felshin, 1973; Robson, 1979). The type of curriculum and the perception of success have also been positively related to attitudes (Brumbach & Cross, 1965;

Vincent, 1965). Young (1970) suggests that significant positive relationships exist among physical fitness, personal-social adjustment and attitudes towards Physical Education.

Bullock & Alden (1983) examined the responses of first year female university students and found that attitudes towards Physical Education were to a large extent determined by childhood and school experiences in Physical Education. The lack of play opportunities in childhood for example leads to less favourable attitudes. Similarly, other negative influences included the lack of choice of activity, the lack of interest and the inability to do well. Mista (1969) studied the attitudes of females in high school Physical Education and concluded that success in Physical Education was related to the encouragement and availability of sporting opportunities in high school backgrounds. Collectively, these findings illustrate that females held more favourable attitudes towards Physical Education. Moreover, those females involved in organised extracurricular physical activity also held favourable attitudes. The relationship between attitudes towards Physical Education and variables such as physical fitness, physical ability, and participation studies, demonstrate that females behaviours have been enhanced with greater sporting opportunities (Brumach & Cross, 1965; Mista, 1969; Young, 1970; Burris, et al., 1973). Young (1970) examined the relationships between personal-social adjustment, physical fitness and attitude towards Physical Education and concluded that both physical fitness and personal-social adjustment were significantly and positively related towards Physical Education.

Comparisons of urban and rural situations have provided evidence suggesting that students from rural areas hold more positive attitudes towards Physical Education than do urban students because of the effects of smaller class sizes (Mista, 1969; Jubela, 1973). Other research indicates that differences exist in the way rural students view the Physical Education curriculum (Milburn, 1970). Some studies have indicated that younger students have more positive attitudes toward Physical Education (Stricklin, 1969), others have reported a positive increase with age (Zafra, 1971). Baker (1969), Fawcett, (1977) and Prince (1969) however, found a decrease in the favourableness of attitude with age. Prince (1969) stated there is evidence

suggesting the trend with age for boys can be quite the opposite to that for girls. The implications of this variable of age (or of year at school) is an area that requires closer investigation because of the lack of clarity in demonstrating age differences (Brumach & Cross, 1965; Campbell, 1968b).

Family, Peer Group and Significant Others.

Hall (1974) and Richardson and Hall (1974) examined the factors influencing participation in Physical Education and sport. They state socialisation agents have a significant bearing on what a child is to become. Early in the process, certain values and attitudes are acquired as well as other social attributes. The first agents of socialisation, the nuclear family impose expectations for behaviour. Malumphy (1970) reported the family was a major factor influencing participation and not only did females have family approval for participation and competition, but also the family had a long history of participation in sports. In addition, the peer group, school personnel, neighbours, family friends, the mass media and formal agencies also impose expectations. Coakley (1987) proposed that females' initial involvement in both informal and formal organised sport activities was influenced by the availability of opportunities, support from the family, peers, role models and the general community and the individual's self-perception as a potential participant. The factors characterising self-perception were defined as: the effect of identity, self image, self esteem and experiences in physical activity. He noted that for boys, sport participation is seen as being directly linked to their development as men, whereas for girls, sports participation is seldom linked to becoming a woman.

In Western culture, although females may not be actively discouraged from playing sports, they are socialised differently from their brothers in at least two respects (Squire, 1993). First, they are less likely to learn that physical activity and achievements in Physical Education and sport can or should be uniquely important sources of rewards in their lives. Second, their playtime is more likely to be regulated and controlled by parents. This form of conditional permission not only influences the skill development of females, but also constrains the nature of the games and informal sports they will play with their friends as they mature.

The youth experience begins with an interest in participation by children with and without parental pressure (Gill, Cross & Huddleston, 1983). Pudelkiewicz (1970, 1971) states that the initial stimulus to become interested in Physical Education and sport is received from the home environment which considers sport to be an important fact of life. Sporting involvement begins in childhood and is reinforced by parental encouragement (Snyder & Spreitzer, 1973; Greendorfer & Hasbrook, 1986). Evidence from several studies also demonstrates that parents continue to treat males more favourably when it comes to Physical Education, physical activity and sport (Greendorfer & Hasbrook, 1986). As infants, females do not receive the same kind of encouragement as their brothers to be socially independent and physically active in play activities and sports. For example: girls are handled more gently and protectively than boys, boys are thrown into the air more often, given more toys requiring active play and the use of motor skills, boys are allowed to explore more of their physical environments before being cautioned and constrained by parents, whereas girls are watched more closely, even before starting to walk (Coakley, 1994).

Tasch (1952) demonstrated that certain types of motor abilities are instilled in sons in contrast to other types of abilities instilled in daughters. In essence, early childhood toy and play experiences are more likely to predispose males towards the acquisition of essential skills necessary for performance in Physical Education and sport. For instance, not only do parents continue to select toys for males and females based on gender stereotypes (Lloyd & Smith, 1985) but evidence would suggest that similar to Tasch's (1952) findings, parents continue to elicit gross motor behaviour to a greater degree from their sons than from their daughters (Lewis, 1972; Eisenberg, Wolchik, Hernandez, & Paternack, 1985). These findings are most important because toy availability and early play styles may not only influence childhood play styles, but they may result in preferences and predispositions toward specific activities in later life (Greendorfer, 1983a). Further evidence has indicated that differential expectations from parents do exist, according to the sex of the child (Rothbart & Macoby, 1966; Gill et al., 1983). Thus, the patterns of protectiveness and constant constraint during infancy limit female participation in sports activities (Coser, 1986).

As childhood advances, the pattern and trends remain unchanged, females may not be discouraged from sporting involvement per se, but may be treated differently. Fathers spend considerably less time in shared physical exercises and activities with daughters than they do with sons (Ross & Pate, 1987), playtime of females continues to be regulated rigidly by parental permission (Coakley, 1994). Fathers persist in reinforcing femininity restrictions by their 'protectiveness' (Gill et al., 1983) precluding the development of a females' social independence (Coakley, 1994). Mothers also reinforce the femininity restrictions, by locking their daughters into caretaking and nurturing roles or by actively fostering dependent relationships with their mothers. When this happens, females seldom have generous opportunities to develop competence in Physical activities and sport. It is no wonder that females end up playing different kinds of games than their brothers (Lever, 1976, 1978) and do not develop their sports skills as quickly as their brothers (Coser, 1986).

Zeigler (1973) argued that females' social structure orientated them away from the sporting world where they would assume the socially preconceived feminine model. Aside from that, Zeigler argued that if females were under the influence of older brothers, research supported the likelihood of females moving towards an interest in Physical Education and sport. Greendorfer's (1974) research claims that the influence of male athletes as role models was a prominent factor influencing female participation in Physical Education and sport. Whereas, the influences of female athletes never represented a significant role model factor for females. Greendorfer (1974) maintains before adolescence, females are influenced by their peers and family respectively, but teachers and coaches have a less than significant role. However, at the adolescent stage the influence of the family was not significant while peers and coaches, served as significant agents. Clausen (1968) and Spady (1971) provide evidence that role models were an element in childhood acquisition of sporting roles. However, they considered other factors such as the position of the child in the family and the introduction of other agents into the process during adolescence.

Germane to the issue of family influences, Landers (1970, 1971) and Portz (1973), considered ordinal position and sex of siblings significant

factors in females' participation in Physical Education and sport. Females with younger and older brothers were over-represented in Physical Education and sport. Kenyon & McPherson (1976) maintain that siblings serve as powerful role models and that the propensity for sporting involvement would increase exponentially as the number of male siblings increases. Greendorfer's (1974) research casts doubt on the credibility of the Kenyon & McPherson proposition. Her studies by contrast revealed that female participants were just as likely to have older sisters as older brothers therefore, the number of male versus female siblings was not substantially different.

Wohl & Pudelkiewicz's (1972) research determined the basic requirements for participation in Physical Education and sport. These requirements included: preliminary knowledge as well as certain abilities; acquisition of sports' roles (usually through the school); association with groups that possess an interest in sport (usually neighbourhood groups); situational factors; parental approval; sufficient margins of leisuretime and the influence of industrialisation and urbanisation (as direct factors). Other researchers, Coakley and White (1992) insisted that boyfriends were the most influential in encouraging females to dropout of sports during adolescence. Because the nature of the physicality experiences were considered too rough or interfered with their availability for young men

The School and the Physical Education Curriculum

Williams and O'Neill (1983) provide evidence revealing the relatively low status most females accord physical activity and sport. This therefore casts sufficient doubt about comprehensive and meaningful longterm change and equity for females in our educational institutions (Melograno, 1979; Bishop, Munroe & Wilson, 1979; Dyer, 1986, 1989; Sampson, 1991). Butcher (1985) examined activity patterns of females aged 11 to age 15 to identify factors related to their continued participation in sport programmes. Her findings revealed a consistent decrease in the number of hours per day in Physical Education and sport in the lower grades (6-10) and an increase in the senior involvement. Factors emerging that were strongly related to females' continued participation were: satisfaction with movement activities especially

one's own sport ability; preferences for active versus sedentary activities; independent, self assertive descriptions of themselves; participation by and encouragement from significant others (especially parents); and the availability of sport equipment.

Gould, Feltz and Weiss (1985) surveyed participatory motivation. Their data showed that the primary reasons for adolescent involvement in Physical Education and sport are: (1) fun, (2) skill development, (3) excitement and personal challenge, (4) achievement and status, (5) fitness, (6) energy or tension release, (7) friendship. Males generally valued achievement and status, whereas females primarily participated for fun and friendship. Furthermore, the influences of childhood and adolescence on sporting participatory experiences were significant (Helanko, 1960, 1969; Roberts & Sutton-Smith, 1962; Webb, 1969a, 1969b; Loy & Ingham, 1973; Snyder, 1970).

Hester (1990) reports the reasons that females participated were to 'improve skills', 'to win', 'to learn a new skills', 'or rewards' and 'to be popular'. Cutler and Merito (1967) gave the reasons for participating in physical activities were: enjoyment, a desire to keep fit, to mix with people, make friends and a break from school. Sapp & Haubenstricker (1978) and Gould et al. (1985) reported that the reason most youth gave frequently for participating was 'having fun'. Perhaps when females display these behaviours participation itself becomes an obstacle. Ironically, being a sporting participant may not be a benefit for females but rather an obstacle that hinders participation (Franklin, 1993).

The belief that females, as well as males, would benefit greatly from Physical Education and sport raises questions about stereotyping. The influence of the school environment on sex-role socialisation can be considerable (Sexton, 1970; Harrison, 1974; Stacey, Bereaud, & Daniels 1974). Research indicates that although opportunities for female participation have increased rapidly over the past two decades, societal norms continue to pressure females to conform to established sex roles (Holland & Andre, 1994). This pressure to conform has been cited as the source of role conflict between what is considered approriate female behaviour and behaviour conducive to their competitive sport participation (Williams & White, 1983;

Thirer & Wright, 1985; Watson, 1987; Goldberg & Chandler, 1989, 1991; Hall, 1988; Kane, 1988; Messner & Sabo, 1994).

Being a female is not a separate concept from the concept of being a Physical Education and sporting participant. Available data suggests role conflicts of female participants have traditionally been investigated in terms of the importance that females attach to their Physical Education and sporting experiences (Coleman, 1961; Eitzen, 1975; Feltz, 1978; Williams & White, 1983) or the social status that peers attach to sporting participation (Metheny, 1977; Kane, 1988). When females do participate, it may be another barrier simply because they are females and act as females (Cole, 1993). Females are often placed in the predicament of choosing to be either female or a sports participant (athlete). According to Felchin (1974) the female athlete is a social anomaly, because she simultaneously attempts to emphasise her femininity, while at the same time expresses a strong commitment to sports' participation. However, Silcock (1966) states that females are becoming more acceptable as sportswomen and athletes in the eyes of society as research findings indicate that the traditional dichotomy between male and female roles has been replaced by an overlapping of roles.

In reality, many programmes in which females participate are a duplication of the male programmes (Spreitzer & Snyder, 1976). The programmes are incapable of addressing the obstacles faced in being both a female and a Physical Education and sporting participant (Coles, 1979). This would suggest that being female and being an athlete are diametrically opposed. Franklin (1993) states females will be alienated from other people due to their Physical Education and sporting participation.

Blinde (1989) states that not only do male defined sports programmes celebrate male values, but they subsequently suppress the development and the expression of those values more compatible with the experiences of being female. Playing sport can be a personally empowering experience for females (Blinde, Taub & Han, 1993). Deem (1986) states that developing physical skills can give a female a distinct feeling of power that contrasts to the way in which their social life is organised in ways that females see themselves as weak, dependent and powerless (Cantor & Bernay, 1992). Being an athlete, especially a female athlete, can change the way females see themselves. It can

make them physically stronger, more competent and in more control of their lives as independent individuals (Coakley & Westcott, 1984). Talented female alienation in Physical Education may be a function of both the alienation of male values and the suppression of values consistent with females' experiences. The physical power and strength often gained through Physical Education and sporting participation goes beyond simply helping a female to feel fit; it can also make her feel less vulnerable, more independent and more in control of her physical safety and psychological well-being (Lopiano, 1984; Snyder & Spreitzer, 1991; Nelson, 1991; Coakley & White, 1992).

The extent to which schools place a high or low value on sport, will also be influential in determining the way in which females view their physical capabilities. Kenyon (1974) has found that the higher sport is placed on the school's hierarchy of values, the greater the degree of socialisation into sport. Consequently, the greater the degree of positive sanction received from school personnel for participation in sport, the greater the propensity for sport involvement. Again the implications of that research have negative ramifications for females. Because in most schools, sport is more highly valued for males than females, the motivational factors influencing female participation and success in sport is made more difficult than in males' sport (Coles, 1979). A further consequence of such findings is that females perceive that they receive less emotional and social support for their sporting efforts and are therefore not encouraged to strive for success. Coles (1977) also found that females were aware that they did not get the same amount of support for their sporting efforts from teachers as males did; the female teachers seemed disinterested in coaching sports teams, whereas the male teachers showed a more positive attitude.

Clearly, sport and exercise are valuable for all members of the community and increasingly it is becoming recognised that the physical activity of a particular group benefits the community at large as well as that group in particular (Coakley, 1994). If girls and women have lower participation rates than boys and men (Lee & Owen, 1989), and females appear to be under-represented in comparison to their male counterparts in senior Physical Education, then it is both feasible and desirable to present a

case that females are sufficiently different, socially, physically and psychologically, from male participants to be considered as a special group who may need special attention (Lee & Owen 1989).

Pennington and Collins (1981) ranked the top five factors that encouraged females' participation in sport as: fitness, appearance, feeling of well-being and control; social values group membership, making friends; fun. enjoyment, relaxation, tension release; satisfaction from achievement or performance; and family influence and support. The bottom five factors influencing participation were: non-competitive recreational activities; competitive urge; physical environment and activity in outdoors; equal opportunities to pursue similar activities as males; sex appeal and a better sex life.

In the past and to a large extent the present, Physical Education programmes have been designed and taught on the basis of assumptions about perceived capabilities of male and female youth held by educators and not on the basis of available evidence (Coles, 1979). This has meant that females particularly have only a marginal role in the world of sport and Physical Education. In this respect, females have been denied access to many activities in which they could receive considerable benefit and enjoyment. When the reported benefits to females in Physical Education and sport are highlighted it is essential to find other objective ways of analysing this group's participation. Although there are physical benefits for females who participate, they are not well represented in comparison to males (Franklin, 1993). Secondary schools by nature are structurally different from our primary schools. Based on their primary years, a females' experiences can be highly varied, depending on the diversity of their Physical Education and sports programme. If females are disadvantaged prior to coming to high school, these disadvantages can either be reinforced or addressed in the secondary years. If the decline of participating is evident in early adolescence is any indication, then we obviously need to not only assess the nature of primary school experiences, but also to view how programming in the third and fourth forms may contribute to this. The following trends are fairly indicative of the areas of concern.

Traditionally the curriculum has assumed a sporting background with heavy emphasis on 'ball' activities. Many females may not have developed a highly competent level of skill, or have felt threatened and uncomfortable in these activities. Although they are seeking involvement in a particular activity, they may find competitive games inappropriate. The very nature of the curriculum is a major issue and the notion of choice and core are also aspects that need to be addressed (Oldenhove, 1986). It has become evident that our curriculum must be more flexible and diverse taking into account the range and interests of all our students. Females are no exception and there are a great many needs which must be met differentially.

The number and variety of sports and Physical Education experiences offered can cause an inequality in both the range and actual numbers of positions available for females. The Physical Education and sports programme should balance opportunity with both access and diversity. Lunchtime clubs and structured activities for females have been a successful method adopted in some schools to encourage females in activity and make their experiences more satisfying. In secondary schools the constraints of structure and timetable can often be the most limiting factor for bringing about a change in females' participation. Schools that maintain flexibility, with staffing, numbers of students, availability of facilities, length of lessons, programming of year levels and what Physical Education is timetabled against, can better serve the needs of females by not restricting options and encouraging certain initiatives.

Role modelling has become a significant issue when looking at the way the Physical Education department deploys its staff. If female teachers are continually teaching the stereotypical 'girls' sports and vice-versa for men, then little is being done to erode and break down these barriers. Consideration should therefore be given to shared roles, or greater team teaching. A number of Hillary Commission initiatives that support 'Active Women' philosophies, and 'Sport for All', are making sport happen for females. Female sporting guestspeakers have also been deployed to raise the consciousness and awareness of females' achievements.

Currently, teaching methodology changes have helped moderate past practices. As a result, catering to the unique needs of females is being

recognised. To accomplish this methodology, changes are evident in the allocation of equitable programming, time, resources, equipment, uniforms, sports funding, facilities and teacher attention to females. Similarly, other changes have taken place in the modification of language and expectations for females involved in Physical Education. Physical educators are conscious of the need to make parents and the wider community aware of what is done in Physical Education and its related benefits to students. Furthermore, promoting potential career opportunities available through a background in Physical Education is an attempt to reduce the attrition rates. Too often the strong influence of parents is felt when students are making a subject choice. Parents in many cases inform their children that Physical Education is an 'unnecessary subject' or is 'unimportant for a career' (Oldenhove, 1986).

Bradbury (1990) argues that specific factors have an influence on the values, beliefs and attitudes of females. He maintains these factors are taught by example, assumption or by omission in our secondary schools. Thus, the presence of the 'Hidden Curriculum' reinforces and transfers a teacher's beliefs and attitudes on what is appropriate male and female behaviour and attitudes. Subsequently, students are treated and taught according to their sex rather than their potential.

Despite many claims, there is still an emphasis, particularly in Physical Education and sport, on competition rather than on enjoyment and participation (Reynolds, 1988). Competition is a source of discouragement for females because it is the social atmosphere which is the major attraction. In addition, this problem is compounded by the fact that there appears to be more time, attention and kudos given to the physical rather than the skill aspects of Physical Education. Physical Education persists in being geared to the dominant students in the class, males. Teachers apparently do this for control and management reasons and preferential treatment is given to male class members both in terms of content and teacher attention (Coakley, 1994). In an interesting study by Brophy (1981) where teachers gave more encouragement to girls than was normal, the girls became embarrassed and the teacher concerned felt guilty.

Disengagement from Physical Education and Sport

Numerous sociological studies have documented the pattern whereby females dramatically decrease their level of involvement in Physical Education and sporting activity during adolescence, often before their peak learning or performance (Davis, Kimmet, & Auty, 1991). In this regard, many females drop out from physical activity and sport, but it is not known why they drop out, what problems they face, and whether they continue in sport in any other capacity. Available research data has identified the loss of interest in sport as one of the major reasons for discontinuing participation (Sands, 1978; Boothby, Tungatt, & Townsend, 1981) or sporting failure and lack of specific sports ability (Orlick, 1974; Gould, 1982). Ironically, Butcher (1985) notes that not only do personal attributes, significant others and socialisation situations influence participation but they were related to a lack of participation.

Females lose motivation to participate and discontinue their sport for a variety of reasons: programmes overemphasise competition and winning (Orlick, 1974; Pooley, 1981); teachers and coaches have overexpectations of performance (Pooley, 1981); teachers/coaches negatively evaluate skill (Smoll, Smith, Curtis & Hunt, 1978; Pooley, 1981); students don't get enough playing time (Orlick, 1974; Gould, 1987) and furthermore students don't experience skill improvement (Feltz & Petlichoff, 1983).

Brown (1985) found withdrawal from sport and physical activity was a process that occurred overtime, during which individuals gradually divested themselves of involvement and identification with the sport role. Commitment and identifying with a sport role were critical factors, as was the degree of support from socialising agents. Brown also found that the number and importance of available activities other than sport were also critical.

Binde, Greendorfer and Hulac (1987) suggest that commitment, devotion, and centrality of a sport role as well as the programme philosophy, value structure and emphasis influenced withdrawal from Physical Education and sport. Studies have also identified several variables as predictors of lack of involvement or disengagement in Physical Education and sport. These factors include the personal attributes which focus on the individuals perceived ability or competence (Spreitzer & Snyder, 1976a; Hasbrook, 1986) socialising agents (parents and peers) (Greendorfer & Lewko, 1978a);

Snyder & Spreitzer, 1973); availability of facilities and equipment in specific settings (Greendorfer & Lewko, 1978b).

Embery (1990) maintains that females drop out of sport progressively from puberty onwards and the reasons are many and varied with changing body shape and declining self image being major contributions. Another significant factor includes the myths and misconceptions that abound from inaccurate interpretations of biological and psychological dimensions that become barriers to females' participation. Therefore, it is the negative and inferior attitudes that have become the cornerstone of the barriers (Embery, 1990).

Pennington and Collins (1981) investigated the barriers experienced by females in Physical Education and sport. A brief summary of their findings indicates identifiable barriers equally as applicable to females. The top five factors were: peer and performance pressure, domestication and family responsibilities, male domination in co-educational activities, lack of interest and motivation among females and poor female body image. The students ranked the bottom five barriers as: a lack of encouragement by parents and boyfriends, lack of skills or fitness, male orientation of many sports, health reasons (menstruation) and interest in other social/recreational pursuits.

Bradbury (1990) notes the reasons for females disliking Physical Education and sport are varied: fear, inadequacy, competitiveness, specific sporting activities, self consciousness of appearance or performance, pressure to demonstrate certain aggressive actions or behaviours, being the butt of jokes, put downs, sarcasm, ridicule from peers or teachers, lowered self esteem, and embarrassment or self consciousness about clothing.

Gould (1987) explains that the most common reasons females cited for discontinuing involvement in Physical Education and sport as personal reasons, which include psychological factors, like interest in other activities, no fun, and competitive stress; physical factors, such as injury and a lack of skill improvement; and situational factors, such as programme emphasis, poor organisation, and a lack of social support from significant others.

Boothby et al., (1981) in a related study, outlined five broad dimensions females cited for withdrawal from Physical Education and sport.

These factors include: the intrinsic interest of sport to the individual; physical ability; access to facilities; force of social constraints and commitments; and the state of social networks. Cutler and Merito (1967) presented findings to suggest that the reasons females gave for not participating in Physical Education and sport were: a perceived lack of skill, no interest or a lack of time. Zoble (1973a, 1973b) concluded that decreased participation in Physical Education and sport for females were the following: differential treatment by the father; greater prestige associated with the masculine role in sport; societies negative feelings about aggressive behaviour for females; competitiveness was a male trait. Furthermore, Zoble argues that interests and activities were things one has been conditioned for because one is masculine or feminine - not because they are inherently masculine of feminine.

Brown (1985) more directly addressed the problem of females' disengagement in Physical Education and sport by studying the factors influencing drop-out rates of age group swimmers. Contrary to conventional wisdom, continued participation was not solely a function of the degree of success attained, nor was withdrawal principally attributed to a lack of success or negative sport experiences. Rather, withdrawal from intense involvement during adolescence was gradual and involved increased participation in other activities that were endorsed by significant others. Other salient factors in the process of withdrawal for female swimmers, according to Brown included: the decreasing importance of the athletic role in one's self identity; perceived increase in the cost-benefit ratio of competitive swimming and a gradual detachment from the subculture swim clubs through social interaction with friends outside the swim world.

Robson (1979) found that individual differences in competitiveness a significant factor in the disengagement process. Gender appropriateness of sporting experiences were determined in accordance with the value systems, taboos and mores of western society thus suppressing what natural competitive drives females have for sports and physical activity. Strong (1963) elaborates on this pattern suggesting that males appear to derive more social facilitation from competition and incentives such as praise, recognition, status and prestige. Moreover, such factors are more available to males than

for females. This results in a conflict between what females would like to do and what they are pressured to do by their culture.

Harris (1975) found that females experience conflicting perceptions between their social self and competitive self-concept on and off the field. This dichotomy is illustrated by considering on the one hand the stereotypical acceptable female behaviour and on the other the qualities necessary for successful competitive participation. Del Rey (1977) found that the degree to which females attempted to emphasise their femininity while at the same time having a strong commitment to sporting activities depended on the activity in which they were engaged. It would seem therefore, that teachers, coaches and administrators must realise the choices that females make in assuming a role in physical activity. In this regard, it may be inconsistent with accepted female roles (Griffin , 1973).

Bishop, Munroe and Wilson (1979) claim that the major barrier for females' active involvement is the fact that if they take Physical Education and sport seriously, then they knowingly leave themselves open to be labelled, ostracised, slandered, rebuked and alienated. Anshel (1990) and Sands (1991) reported that many females have broken through this barrier primarily with the assistance of support networks and encouragement given to them which is a little different for females than for males.

Brown (1985) and Patriksson (1988) are supportive of the notion that lack of success is not one of the most powerful constraints to continued participation in sport. Koukouris (1994) reports that no single factor has primary responsibility for contributing to ceasing participation in sport. Many factors interact to influence a female's decision to terminate athletic involvement. Koukouris (1994) has comprehensively outlined the breadth of interacting factors that can contribute towards female athletes' disengagement in sport. These factors include: continual defeat in sport competition resulting in loss of self-confidence and a threat to self-image and therefore disengagement in sport can be caused by embarrassment for failing in sport; low morale of athletes may result from expulsion from teams; athletes autonomy and coaches' or teachers' power, control and exploitation of elite athletes; females who become conscious of the negative effects of the time-consuming and gruelling training on their social and cultural life, studies and

relationships start re-examining their priorities and values (Ulrich, 1976; Foldesi, 1978; Ferrando, 1979; Vuolle, 1978); inadequate facilities and services prevent females from reaching their full athletic potential which contributes to the decision to withdraw from organised sport; sporting injuries are the result of coaches' rigid and incorrect training programmes, excessive training of beginners at too earlier age, athletes inadequate warm-up, and a lack of proper medical supervision of athletes.

Koukouris (1994) believes poor performances in sport are a result of injuries. The accompanying stress can lead females to disengage from sport; the exclusion of females from the decision-making process in sport, the blatant discrimination between favoured athletes and others, and the administrators interventions in the selection of elite athletes and teams can lead to disengagement (Rosenberg, 1980; Mihovilovic, 1986; Werthner & Orlick, 1986); the impact of work on sparetime for training may also be an important factor in the disengagement process; many teachers and coaches are indifferent to their females' personal needs inside and outside the sporting arena, and they are unable to perceive their athletes from a holistic perspective. Thus, disengagement from sport can also be the result of some teachers' and coaches' desire to satisfy their own interests and egotism; top sport has more negative than positive effects on education, although Curtis & Ennis, (1988) found the opposite.

Another major bias in Physical Education, sport and extracurricular participation is that of social class. Once again, against common myth, youth, including females from lower socioeconomic groups have less opportunities to better their educational and cultural adjustment (Fejgin, 1994). There are several theoretical explanations for this finding. After gender, parents' educational level is the strongest determinant of athletic participation in schools and parental attitudes may be involved. Parents with more education may value the benefits of Physical Education and sport and encourage females to participate. They also probably give them a head start in participation at a younger age. Second, the negative effects of public school affiliation and school size, which are related to student socioeconomic background offer another explanation. Students from lower socioeconomic backgrounds have fewer opportunities to participate because the schools they

attend offer fewer such activities or do not encourage participation (Coleman, Hoffer & Kilgore, 1982).

Positive orientations towards physical activity in life predispose individuals to continual participation in later life (Kenyon & McPherson, 1976; Atchley, 1977; Greendorfer, 1983a). By the same token, studies have suggested that lack of participation in physical activity early in life is related to diminished activity levels in later life (Lewko & Ewing, 1980; Hasbrook & Mingesz, 1987). Many people are beginning to question the range of factors that contribute to females disengagement in Physical Education and sport. Clearly, some degree of reform is needed to introduce different structures or philosophies that may be more appropriate to the needs, interests and the abilities of females.

Gender and Equity for Excellence in Physical Education

Gender has a profound, but often subtle, influence on sport participation and behaviour in Physical Education (Costa & Guthrie, 1994). Issues pertaining to equity and participation in Physical Education go-hand-in-hand helping to influence females' attitudes and behaviours. We cannot understand the female if we ignore 'who she is' and 'where she is' (Gill, 1993). We must consider, that individual behaviour takes place within a social and historical context, where individual and psychological processes operate within that context. Each female brings to the sporting setting her unique biological and psychological makeup to any exercise setting and sport. These factors interact in complex ways to influence sporting behaviour, and it is important to keep in mind the complexity and richness of human behaviour when we examine gender identity and excellence in Physical Education.

Many people now realise that a lack of support for females in Physical Education and sport leads to a lack of interest, and a lack of interest leads to less participation (Lenskyj, 1987). So, it can no longer be claimed that real equality isn't necessary because females are simply not interested in participating in Physical Education and sport. Equity is about who gets what (Coakley, 1994). Gender equity in Physical Education and sport is important because access to valued opportunities and rewards is crucial when it comes to controlling what happens in your life and making changes in the world

around you. Currently, scholars are questioning earlier interpretations on why sports have traditionally been defined as male activities. In addition to this, scholarship investigates how sports' influence a wide range of people's ideas about masculinity and femininity. Furthermore, they seek answers to why a significant percentage of the world's population has been excluded or discouraged from participating in many sports.

Gender Beliefs

Sex roles in most societies are specific and well defined (Snyder & Spreitzer, 1978). However, the cultural prescriptions associated with gender, will vary from group to group and from time to time. Deaux (1985) has described a shift toward more egalitarian attitudes in the general society, and sport attitudes seem to be moving in that direction. Although such a finding reflects positive trends, gender stereotypes persist. In fact, they seem more persistent in the sporting setting than in other social contexts (Costa & Gutherie, 1994).

Society prides itself in its concern for the fullest development of each person's human potential, but has been quite insensitive to the social handicaps imposed by sex discrimination. Male/female disparities in wealth, power and prestige are a powerful social phenomena. Males have greater material rewards, a higher level of deference and esteem, and a more dominant position in control of both their personal lives and their social Physical Education and sporting activities. In our society, the attitudes and societal values regarding the female's role in the family and social institutions, including Physical Education and sport emerged during the Victorian era and were consistent and distinctive.

Traditional gender identity definitions have been well described by researchers (Bernard, 1968; Broverman, Broverman, Clarkson, Rosenkrantz, & Vogel, 1972; Duquin, 1978; Ogelsby, 1978) and identify two opposing extremes as outlined by Ortner (1974). The male core gender identity implies that they are active, aggressive, public, cultural, rule governed, instrumental, goal orientated, organised, dominating, competitive and controlled. The female core identity implies that females are passive, submissive, private, natural, idiosyncratic, expressive, chaotic, disorganised, subordinate, co-

operative and uncontrolled. More recent work (Deaux & Kite, 1987; Eagley & Kite 1987) has suggested that bipolar stereotypes continue to exist and also that gender stereotypes have multiple components. Deaux and Lewis (1984) have postulated that these multiple components are interrelated, and that the relationships and implications for gender-related behaviour may vary with the social context. Although gender stereotypes are of interest in themselves, they are even of more interest because they influence a wide range of attitudes and behaviours. Gender stereotypes and gender bias in evaluations of females' participation in sport certainly exist (Pheterson, Kiesler & Goldberg 1971; Wallston and Oleary 1981; Costa & Gutherie, 1994).

Western ideology has defined women as inferior to and dependent on men. Their primary role prescriptors have been as child-bearers, home-makers and sex objects. The overemphasis on protecting women and girls from the experiences of achievement and success and the under-emphasis on physical skills, fits the historical socialisation pattern of preparing women for their adult role as passive helpmates of males, standing on the sidelines of history and cheering men on to their achievements and successes (Le Clair, 1992). Duquin (1978) cites support for the subordinate role of women in any sporting setting by suggesting that parents, other adults, teachers, textbooks and the media all affirm the idea that sport, vigorous activity and risk taking are appropriate behaviours for males and negatively conventionalised for females in Physical Education and sport.

The traditional public perception of sport connotes an activity which is a sexual signature of masculinity (Therberge, 1985). Masculinity and femininity as they've been traditionally defined and displayed, demand female limitation and/or inferiority to male superiority. Social definitions still prescribe and limit the range of athletic participation for females. In our culture the institution of sport still preserves traditional gender stereotypes and differences in many ways as the 'appropriateness' of the type of sport continues to reflect the gender specific ideals of femininity. For example, much research has sought to explain the differences in women's and men's involvements in sport in terms of sex role socialisation patterns for boys and girls (Hart, 1976; Greendorfer, 1978, 1986; Bell, 1980; Harris, 1980; Anthrop & Allison; 1983; Allison & Butler, 1984). In addition, females are

less likely than males to participate in Physical Education and sport because they are taught that sporting involvement and femininity conflict (Greendorfer, 1978). The assumption is, that being an athletic female and being a woman are incompatible.

Females in our culture learn to define sporting involvement as problematic, because they are receiving powerful messages that being feminine means exhibiting certain values, behaviours and dispositions that appear natural and inevitable (Dewar, 1990). Undeniably, until there is a widespread acceptance of alternative definitions of sex role socialisation and femininity, females will continue to face problems in connection with Physical Education and playing sports.

Metheny (1965) was one of the first scholars to identify gender stereotypes in sport. In her classic analysis of sporting activities that were socially acceptable for females (those fitting the traditional feminine image), Metheny has listed a few of the general principles. According to Metheny, then, acceptable sports for women (e.g. gymnastics, swimming, tennis) were those which emphasised the aesthetic qualities. These sports were often individual activities in contrast to those that emphasised direct competition and team sports. Although Metheny offered her analysis over 30 years ago, gender stereotypes have not faded away and the analysis could debatebly serve as a model today. More recently, Kane (1988) confirmed the gender stereotyping of sports as suggested by Metheny persists. More explicitly they have identified physicality as the central feature in gender stereotyping of sport.

Gender beliefs in Physical Education and sport are pervasive, powerful, and as we have seen, begin early in life (Greendorfer, 1987; Birrell, 1988). Ostrow, Jones and Spiker (1981) reported both gender and age biases in ratings of the appropriateness of various sport activities for females and males of different ages. Griffin (1973) reported that undergraduates rated female athletes and female professors as furthest from the image of the ideal women, whereas the roles of girlfriend and mother rated much closer. Selby and Lewko (1976) found gender influences on children's attitudes toward females in sport. Girls were more positive than boys; girls who participated were more positive than non-participants; boys

who participated were more negative than were non-participants. Landers (1970, 1971) asked male and female observers to rate the performances of a male and female athlete on the same endurance task. Although the performances were identical, both male and female observers rated the male performer higher.

Overall, gender belief systems seem to flourish in the world of Physical Education and sport (Jones, 1980a, 1980b). Sport activities are gender stereotyped, and the sex-typing of sport activities seems linked with other gender beliefs such as physicality (Coasta & Gutherie, 1994). Gender beliefs influence social processes, suggesting that influence is at least as likely in sport as in other social interactions. Sport sociologists have done the most to advance our understanding of gender and to incorporate feminist frameworks and alternative approaches. The following feminist sport scholars report that gender bias is pervasive in society, particularly sport society. Their unique research contributions continue to highlight many pertinent gender issues. Birrell (1988) traced gender and sport research from sex differences, through to gender roles, to current considerations of gender relations in a dynamic, sociocultural context. Hall (1988) criticised sport psychology's limited focus on femininity and masculinity and advocated a more thoughtful consideration of gender as a pervasive influence. Lenskyj (1987) in her provocative analysis of sexuality and gender, emphasises the historical and sociocultural pressures toward compulsory heterosexuality that influence women's sport and exercise participation. Dewar (1987) has extended feminist sport scholarship to a critical analysis of gender in Physical Education curricula and educational practice. Therberge (1987) also has written extensively on gender issues, and her discussion of the relationship gender to power and empowerment in sport is particularly relevant.

Femininity versus Masculinity

Hall (1990) states that we should recognise that femininity and masculinity are socially constructed, historically specific and mediated by social class, race and ethnicity. For most females, then, engaging in Physical Education and sport invokes two contradictory role expectations: the expectations associated with being female, and the expectations of being an

athlete. The traits often associated with being an athlete - aggressiveness, tough-mindedness, dominance, self-confidence and risk-taking are usually associated with males rather than females (Harris, 1971). In contrast, mentally healthy females are likely to be described as dependent, emotional, intuitive, passive and submissive (Broverman, et al., 1970). The considerable work of Hart (1976) and Harris (1973) assert that females' participating in sport often face great stress, and that by choosing to participate in a sport setting she places herself outside the social mainstream because competitive sports are still primarily the prerogative of the male in this society.

In recent years, the sex roles in modern societies have been liberalised and one might question whether Physical Education and sporting involvement for females still carries a stigma. Indeed, one of the oldest and most persistent disparities throughout sport has been the notion that athletic participation tends to masculinize the physique and behaviour of females (Sherriff, 1969), thereby suggesting, that a residue of the Victorian ideals of femininity remains within our culture. Unsurprisingly, those ideals manifest themselves in the continued stigma and social sanctions imposed on the female involved in Physical Education and sport. For example, sports such as hockey, softball, and soccer are not perceived as sports that enhance femininity and stereotypical labelling abounds describing female athletes as masculine and muscular (Snyder & Kivlin (1975). Females have been stigmatised in sport and labelled as masculine, by a society that believed females who had excellent physical ability were not feminine. Masculine in this sense, refers to body structure and behaviour patterns, not biological conditions. Every culture defines appropriate and inappropriate male and female appearance and behaviour (they vary from culture to culture) and establishes severe negative sanctions for those who do not meet the cultural standards of masculinity and femininity.

The impression that physical activity produces masculine body types is undoubtedly a result of the fact that some females in Physical Education and sport are indeed masculine and exhibit movement characteristics more commonly found in males. But there is another dimension to this issue. Until very recently, the top level athletes in most sports and Physical

Education were males. To become highly proficient in these sports, males learned to employ the most effective and efficient movement patterns to execute the skills. When females engage in the same sports, the movement patterns necessary for highly skilled proficiency correspond to those employed by male athletes. Thus, the female who is seen using movement patterns that were traditionally associated with male performers was labelled 'masculine'.

Unfortunately, the threat of masculinization has been sufficiently terrifying to prevent many female athletes from attempting to become physically active, and those who have become elite athletes have often been 'haunted' by fears of becoming masculine. Harris (1980) noted that the negative sanctions that discourage females from serious competition in athletics stemmed from two fears: the fear that their behaviour would become masculinized and the fear that their physiques will become masculinized.

There is no evidence to support the notion that vigorous physical exercise alters the basic biological constitution of the females, making her more male. The argument about sports' presumed masculinity effect on females continues to be attacked vigorously by feminist writers who have exposed the ideological foundations of it (Boutilier & San Giovanni, 1983). They have emphasised that definitions of feminine and masculine behaviour are culturally determined, and as they point out contemporarily females are no longer willing to have traditional definitions imposed on them, especially when these definitions prevent them from highly valued sporting activities (Therberge, 1985).

For many feminists the notion that females become masculinized from sporting participation is a hoax to enforce cultural traditions. Indeed in recent years some females have completely repudiated the traditional definitions that identify muscles with masculinity. Talented female bodybuilding is a 'classic' example of this repudiation and is a rapidly growing sport. Campaign (1988) states that just like male bodybuilders the females are judged on the symmetry and proportions of their physiques, on their muscularity and definition, and on their posing routines.

When explanations with respect to the failure of sportswomen to perform up to the athletic record standards set by males are considered,

differences exist and are true in many sports. Although females' performances as a group may appear less spectacular than those of men as a group, some females surpass male athletes in certain sports and some females seem as competent as men to fulfil even the most strenuous of roles. Those who have been unimpressed by sportswomen have typically evaluated their performances in relation to men's (Hargreaves, 1982).

The definitions of appropriate gender behaviour were pervasive and influential in all spheres of life that were to have a profound influence on the participation and performance of females in athletic activities (Blinde & Greendorfer, 1985). Historically the socialisation of women into 'proper' feminine behaviour and the stigma attached to being defined as 'unfeminine' coupled with the bombardment of cultural images, constrictive stereotyping and myths about physiological capabilities have been harshly translated into impenetrable structural barriers that excluded females from certain types of athletic participation. Additionally, females in Physical Education and sport have been discriminated against with regard to the evolution of performance and the distribution of resources. Females in sport continue to be restricted by the patriarchs of their communities, as regulations, informal norms that govern females' participation vary among time, cultures, civilisations and social classes.

Given the fact that a substantial proportion of the population views athletic participation as incongruous with femininity, one might suppose that females' participation in sport would produce role conflicts or psychological strain such as cognitive dissonance (Snyder, Kivlin & Spreitzer, 1975). It follows that, if a female has internalised two contradictory role prescriptions, then behavioural and psychological ambiguity, confusion, and a lack of psychological integration would be anticipated. One pertinent study (Snyder & Kivlin, 1975) indicated that female intercollegiate athletes demonstrated higher scores on the three dimensions of psychological well-being than the non athletes and tended to refute the assumption that athletic participation has a negative impact on females. Furthermore, when this research was replicated with samples of female athletes in Australia and India, the cross-national data provided additional support for the positive relationship between athletic involvement and psychological well-being (Snyder & Kivlin, 1975).

In short, data from these research studies offer little evidence of the psychological stress on the part of this group of female athletes.

Another dimension of common interest concerning the female athlete is the analysis of their self image. One common measure of self image is to determine an individual's feelings towards her body. Studies of body image show positive correlations with self-esteem and self-concept and negative correlations with anxiety and insecurity (Secord & Jourard, 1953; Zion, 1965; Berscheid, Walster & Bohrnstedt, 1973). Arguably, research generally supports the thesis of positive feedback between physical activity and body image (Harris, 1973).

Snyder and Kivlin's (1975) research studies have focused on samples of collegiate female athletes and nonathletes. While the elite athlete is likely to be deeply involved in the athletic and sporting role, would different results be found with younger and less involved athletes? Snyder and Spreitzer, (1976a) addressed themselves to this question by surveying female athletes and non-athletes in Ohio. The female participants were involved in gymnastics, basketball and track. Theoretically, since gymnastics is usually considered an 'appropriate' sport for females, one might expect to find differences between the participants in this sport in comparison to those in basketball or track. However, this assumption was not borne out by this study. The results indicated in general, that the high school female participants expressed a body image that was as favourable as the comparison sample of non-participants.

These studies of psychological well-being and self-perception are not conclusive, nevertheless, they provide no evidence for the belief that participation in athletics is psychologically stressful for females. Perhaps, as studies on male samples have indicated, increased physical activity and fitness tend to promote mental well-being (Snyder & Spreitzer, 1976b). Likewise, even though female participation in Physical Education and sport has an aura of stigma, many female participants receive positive feedback in the form of recognition and rewards from parents and friends.

The research of Ogilvie and Tutko (1971) demonstrated that female athletes tended to be more independent, creative, and autonomous than male athletes. Perhaps as females' strive to overcome barriers, they develop

increased self-confidence and security. Therein lies the implications for females, with evidence suggesting either more psychologically secure females enter Physical Education and sport, or they develop this ego-strength through participation. As a result of the liberalising and broadening of the sex roles in the last decade, the social and psychological costs of participation are probably diminishing with a concomitant increase in the rewards and recognition gained (Coakley, 1994). It is also probable that through participation, females as well as males, are able to gain increased awareness of themselves, their bodies, their capabilities and an appreciation of motor ability and skill learning. These studies provide support and optimism for the continued expansion of sport and physical activities for females in schools.

Historically, contempt for the female has been shown by the contention that females are not interested or are not very good at sports. Those who made this point typically referred to the paucity of females in sports and deemed their performances were inferior to those of men. Such arguments, like all cultural norm expectations of social regularities, tend to ignore the social structure. Women in the past pursued certain roles and not others because that was the cultural norm and because males and females were related to each other in a relatively stable structure of power and differential status in which males apportioned the roles they preferred because they had the power to do so and could thus promote more status for themselves. Women's roles were residual, and the norm merely sustained the existing structure of power and status. The role of 'athlete' has been culturally associated with male-role enactment and females have simply been socialised out of sport by a variety of powerful socialisation agencies.

From a sociological perspective, the female athlete violates the traditional sex-role expectations. However, from an enlightened perspective, we might view the female in Physical Education and sport as a liberationist. Somehow, she has freed herself from the traditional female sex role insofar as she has become involved in sport. Certainly, refutations of stereotypical statements are attempts by females in sport to free themselves from the shackles of traditional role prescriptions and social control. Thereby, redefining and broadening the range of behaviour that is available and acceptable for them.

Gender Excellence and Equity in Schools

Fundamentally, the major problem for females in Physical Education and sport, is males in Physical Education and sport (Carrington & Leaman, 1986). Andrew, Rigler & Young (1976) investigated areas of Physical Education and sport to see if there were practices or conditions which tendered to discriminate girls as recipients and women as teachers. No attempt was made to interpret or draw conclusions but the results were viewed as an indication of what the researchers saw as an indication of what may be a general pattern in New Zealand schools. This pattern was reflected in the following trends: domination, significance and status of male sports, females were less interested in Physical Education but received equal opportunities, lack of suitable equipment for female participants, staff and parents supported boys teams but seldom girls teams, junior classes in secondary schools received 50% more time allocation to Physical Education, in secondary schools 75% of head of departments were males, a low priority was given to Physical Education in schools by many teachers and reinforced by a similar attitude among school inspectors, classes were seldomly segregated and teaching staff lacked the necessary preparation in teaching Physical Education. Consequently, women preferred to teach some games that provided uncomplicated organisation and clear rules as opposed to those sections of the curriculum that required a greater knowledge or experience in physicality skills such as gymnastics. Of those surveyed in the secondary schools 24% of the women teachers and 27% of the men considered Physical Education a low priority subject.

Equity for females in Physical Education and sport does not mean that females will wish to participate in exactly the same activities or in necessarily the same activities as males, rather, that females are seeking equal opportunities so that activities of their choice are provided and administered in a fair and unbiased environment (Embery, 1988). Eitzen (1992), for example, claimed that Physical Education and sports as they are organised now, are non-democratic, opportunistic, and oppressive; they legitimate inequalities; and leave no room for freedom of choice, privacy and individualism. Similarly, Almond (1983) maintains that the Physical

Education curriculum is really competitive sport which takes a lion share of time and resources. For many female participants, the competitive experience is the only experience they encounter. Fernandez-Balboa (1993) argued that through the 'hidden curriculum' in Physical Education and sport, females are socialised into accepting particular modes of thinking and acting that support and legitimise power structures and social inequalities. These modes are characterised by apathy, indifference, apolitical attitudes, compliance with authority, dependence on institutional control, anxiety and powerlessness. Thus, he added, Physical Education lacks some of the fundamental values, such as equity, freedom, co-operation and self-actualisation.

Sage (1993) called on physical educators to rethink their roles and challenge the values that were "unjust, insensitive, sexist, racist and limiting" (p.162), so that they would not automatically reproduce the power system that supports the interests of the dominant elites. Embery, (1990) considers that women's sport in its emergent state has the chance to minimise the abhorrent features of male sport The real dilemma is whether or not females should compete in sport for the same reasons as men, or develop a co-operative system providing participation and fair play. Reynolds, (1988) believes raising the status of females in Physical Education and sport will raise the status of sport itself. Furthermore, increased female participation can enhance society. Fejgin (1994) reaffirms the established knowledge that the school curriculum, is unequally distributed across gender and socioeconomic groups. As might be expected, gender is the strongest determinant of participation in Physical Education and sport. Any exclusion of any social group from any form of social activity by negative socialisation is coercion used by the dominant group for its benefit. In fact, there is growing evidence that schools contribute to the observed disproportionately (Scraton, 1990; Wright, 1993).

Physical Education and sport is so essentially a masculine domain, that even as females participate, they are in danger of reinforcing masculine values and masculine power (Bryson, 1990). This has the effect of tacitly devaluing things females do and making their achievements seem inferior. Many have criticised secondary Physical Education practice for reinforcing sexism (Leaman, 1984; Evans, 1985; Scraton, 1986; Talbot, 1986a). It is at

puberty that the educational system assumes a greater importance in sex-role socialisation (Boutilier & SanGiovanni, 1983). Physical Education in the primary schools for females in appropriate sex-role behaviour often amounts to benign neglect. In secondary school the Physical Education curriculum could be criticised as actively discriminatory, as teachers, parents and school officials consider proper gender-role identity at this age too important to leave to the vagaries of chance learning. The result is that sex-segregated policies and practices are consciously and actively promoted. Puberty is seen as a time when both sexes must accept and embrace their proper sex and gender identity. Physical Education and sport are seen as a vital area for developing an acute awareness of masculinity and femininity (Boutilier & San Giovanni, 1993).

At this point, it is important to discuss the controversial area of the place of sex segregation or mixed classes in Physical Education. Traditional sex segregation does little to create understanding between the sexes. It augments attitudes that announce or appear to ameliorate the stereotypical polarities of masculinity and femininity in sport. It also stifles the recognition of the similarities between the sexes and restricts opportunities for co-operation (Messner & Sabo 1994). Merely mixing males and females together for Physical Education without creating a change in teaching approaches, may only serve to exacerbate misconceptions and mistrust between the sexes and further reinforce masculine dominance. A number of studies of mixed Physical Education classes in schools have demonstrated that challenging gender stereotypes is no easy task (Griffin, 1983; Abigail, 1984b; Duncan, 1985; Evans, 1985; Lopez, 1985). Many studies evidence the creation of hostility between the sexes with males exhibiting egotistical behaviours or aggressive confidence in themselves.

Certainly, Scraton (1987) maintains that females need space away from males. The reason cited, is to facilitate a more successful development of females' skills and confidences in Physical Education. Nevertheless, no matter how much females gain within all-female support environments, male hegemonic models predominate. Scraton (1984) acknowledges the trend towards mixed groupings for options in the later years of high school

Physical Education often appear to be more for economic and organisational convenience rather than any educational justification.

Melangrano (1979) reveals that traditional organisational procedures and habits in Physical Education are sex-role stereotyped and teachers exhibit doubt about their ability to manage or see the value of mixed classes (Sands, 1991). Male teachers in particular have expectations about sexuality and motherhood (Scraton, 1990). Other expectations regarding maleness and femaleness also influence student-teacher interactions. Griffin (1981, 1985, 1989) and Harrison (1987) have indicated that systematic preferential treatment for boys is directly related to teachers' perceptions and expectations.

The commonly sex-typed view of females in mixed Physical Education classes is that they should be non-assertive, quiet, neat and polite. Perceptions and expectations of boys on the otherhand mean boys require: better educational resources, need to be more competitive, need more sports opportunities, need to be more achievement-orientated and produce tangible behavioural outcomes. Boys in mixed classes receive more attention, praise, criticism, questions, discussions and responses from both male and female teachers. Teachers in mixed classes often use and do not react to gender-laden language (Scraton, 1990). Melograno (1979) reported that the greatest anxiety experienced by a female was that as a result of her athletic ability she might be perceived by others as a tomboy instead of as a lady.

If these factors are operating in schools, then it is hypothesised that a system of expectations and behaviour might contribute to lower the participation level of females in Physical Education and sport. Males are more physically assertive; females do not develop such skills as quickly, males physically dominate activities; teachers provide more interaction; females have less relative success; teachers praise males more - say females are weak; females react as weak to avoid taunting and subsequently do not try as hard as males.

Jones (1981) and latterly Costa and Gutherie (1994), examined the cultural constraints hindering the active participation of females by suggesting that contemporary attitudes are a major constraint to their involvement. They strongly advocate a femininist perspective in Physical Education research. Jones (1981) looked at society's attitudes towards females and considered the

role the formal education system has in reflecting and reinforcing these attitudes with specific reference to the Physical Education curriculum. In a series of articles, Fry (1985, 1986) has focused on the development of Physical Education and sports for girls, both in primary and secondary schools from 1900 to 1945. Abigail (1984a) looked at the disadvantages females face in curriculum subjects, including Physical Education, and found sexist practices in schools.

Robson (1979) more specifically studied the attitudes of teachers and students towards 'girls' participation in Physical Education, and found that while girls had favourable attitudes, many teachers had stereotyped ideas which were reflected in their programmes. Similarly, gender differences were significantly reported in research conducted by Williams (1981, 1982). Melograno (1979) and Griffin (1981) have posited that gender discrimination in the education setting may have moved from more overt discrimination to subtle sex-role stereotyping and discrimination in recent times. It is apparent, that recent research seems to indicate that Physical Education programmes in general are neither exemplars of excellence nor equity (Knoppers, 1988). According to Griffin (1983, 1985), Leaman (1986) and Talbot (1986b), gender equity is not the norm. They argue that much of what is done in Physical Education, including the curriculum, instructional techniques, teacher-student and student-student interaction, is influenced by gender in an asymmetric way. Duquin (1982) notes that although gender stratification occurs throughout the school, it is especially problematic in Physical Education.

In our secondary schools, females may be said to have the same access to the Physical Education curriculum: no students are prevented by virtue of their sex, religion or race. But even when this desirable state of affairs exists, it is important to question whether females have equal opportunities to learn and express themselves through physical activity. We could argue that equal access is demonstrably insufficient (Scraton, 1990). Equal provision does not mean equal learning or equal opportunities (Scraton, 1992). A differentiated curriculum diet in secondary school is further reinforced by extracurricular provisions which, more often than not, favour males (Leaman, 1986). A more difficult question to emerge is that of exactly

what kind of curriculum we want to make accessible to females? The apparent contradiction it could be argued, is that access to a Physical Education curriculum is not offering equal opportunity.

The school remains a primary and essential preserver of the societal establishment and was initially constructed to educate and prepare boys for adult life (Arnot, 1984). Greenstein (1965) in addressing the basic socialisation question of who learns what from whom, under what circumstances, and with what affects, highlights the pervasive presence of sexism within contemporary educational systems. The nature of 'who', whether male or female, determines in a large part the 'what' that is learned, the circumstances under 'which' it is learned, and the 'consequences' of the social learning provided by educational institutions (Boutilier & SanGiovanni, 1983). The addition of females into the education system lead to an adjustment of the curriculum and of the process, rather than the reconstruction of the system (Knoppers, 1988). The result was the developmental patterns of white middle class boys determined the curriculum and how it was taught (Shakeshaft, 1986).

Physical Education and sport resulted in a primarily sport-dominated curriculum (Diller & Houston, 1983). Hall and Richardson (1983) state that most sporting activities were invented by men, for males, emphasising competition and dominated by the motto 'Higher, swifter, farther'. In addition, boys see adult men using their athletic skills in many arenas and are taught that competitive skills are synonymous with success in the adult world (Lenskyj, 1987). Females that experience a curriculum designed for boys will see no continuity between the skills inherent in this curriculum and their lives as adult women (Hall & Richardson, 1983; Leaman, 1986; Talbot, 1986b). Gilligan (1982) maintains that the emphasis on competition may also be problematic for those who value an ethic of care, an ethic rooted in a sensitivity to the feelings of others. Instead, those who value the ethics of care and may respond more to activities in the curriculum that emphasise co-operation (Gilligan, 1982; Shakeshaft, 1986).

Leaman, (1986) and Talbot, (1986a) state that it is no wonder that many females are bored in Physical Education, while Hall and Richardson, (1983), Leaman, (1986) and Talbot, (1986b) believe many females perceive

Physical Education as irrelevant because its content has no apparent link to their lives as adult women. Meanwhile, Raithel, (1987) has highlighted concern over the declining levels of females' fitness and Bennett, Whitaker, Smith and Sablove, (1987) provide evidence that there has been little or no improvement in female movement skills.

According to Abigail (1984b) the factors working against females in Physical Education include: lack of understanding by staff of how socialisation processes constrain females, ignorance of the component of sex differences (Talbot, 1986b); discouraging messages to females from counselling staff and careers speakers, lack of role models and of alternative lifestyles, biases in school textbooks and careers information, lack of interest in informing parents of the limitations of the traditional patterns for girls, paternalistic and patronising treatment (Abigail, 1984a); resistance by staff to concentrating attention on females, trivialisation and hostility towards the issue of sexual equality (Griffin, 1985); and a lack of interest in taking any concrete action to raise females' confidence in their abilities, the invisibility of women in the language and pictorial matter and overt and covert discrimination.

Williams (1982) cautions that teachers are likely to be a major influence on females' participation in Physical Education. They have often reinforced gender differences through their beliefs, attitudes and teaching practices (Williams, 1982; Jones, 1983; Robson, 1987). Unfortunately, many teachers (male especially, but also females) lower the expectations of many girls in activity settings. Teachers, frequently conform to a plethora of cultural expectations which is reflected in their class organisation, student-teacher interaction, teacher language and role modelling (Sands, 1991). Oldenhove (1990) reported that females often had limited access to equipment and space and were harassed because of their body shape, clothing, appearance and the way in which they went about their particular activities. They are frequently intimidated by males (Charmers, 1991) and subsequently their confidence levels are continually undermined by behaviour which keeps them from participating on an equal basis with males. Females have therefore been conditioned to accept that Physical Education is more important for males (Williams, 1982). Eddington (1989) found that the majority of females

surveyed in Physical Education felt that teachers spent their time equitably between both sexes, but her observations acutely demonstrated that males dominated equipment, teacher time and space and that females were unaware of this and accepted the situation as normal.

Physical Education teachers themselves accepted the notion of the 'passive female role' and considered female adolescent activity avoidance to be normal (Williams, 1982; Jobling & Mcdonald, 1987; Robson, 1987). Consequently, these teachers provided programmes to fit their expectation that females did not participate actively and were not competitive or aggressive in their approach to games. Oldenhove (1987) and Bradbury (1990) note that when teachers were not adequately skilled in the teaching of Physical Education, then Physical Education became games playing, thus the skill discrepancies between males and females increased. Students saw more male teachers taking Physical Education than females. There was an overwhelmingly apparent lack of female role models (Eddington, 1989). Moreover, stereotypes were reinforced when female teachers taught girls' Physical Education and school sport and male teachers taught boys' Physical Education and sport.

Corbin and Fox (1985) believe that the major aim of all Physical Education programmes is to equip students with the fitness solving skills as well as positive attitude towards involvement in physical activity. In the long term it is believed that this objective will enhance the chance of students achieving lifetime fitness and health. Almond (1983) believes children should be sensitised into making the best of themselves, and helped to recognise the value of an active lifestyle. Raising females' self esteem is an important step to improving outcomes for females in other educational fields. There is strong evidence to suggest that a project which improves females' participation in physical skills development will have beneficial flow-on effects in terms of self image, confidence and achievement in other areas of schooling (Ryan, 1984)

If we are concerned with the quality outcomes for females in Physical Education, we must be concerned with equality (Department of Education, 1989b; Ey, 1989; Marsh, 1993). Sexist attitudes and practices have historically disadvantaged females in Physical Education. Melograno (1979),

Dyer (1986) and Sampson (1991) have provided specific areas in which exemplary and innovative equity programmes have been developed and where positive outcomes have occurred for females and females alike. Sands (1991) highlights the possibility of all females engaging in activity with continued enthusiasm. For example, females have experienced some immunity to social pressures and have remained active during adolescence as a result of their high levels of perceived competence and interest. However, females do continue to be subjected to immense cultural pressure exerted by parents and peers (Sands, 1991). The possibility of proactively instituting change demands that individual teachers and coaches undertake a comprehensive analysis of their own interaction patterns and expectations. It is important that an appraisal of the ideological nature of the immediate staff they work with is undertaken. Furthermore, an evaluation of the wider ideological spectrum and position of the school staff may be instrumental in improving an understanding of the structures in place in the schools (Sands 1990). Meaningful and lasting change toward equity requires an understanding of the process of change and how this might juxtapose with overriding situational features. The contextual dimensions such as the teacher-student climate, the student-student climate and the teacher-teacher climate are important areas contributing towards change.

Initially teachers must monitor their teaching and interaction processes. Griffin (1981, 1985) refers to the personal monitoring of teacher language and the elimination of sexist innuendo and gender-free resource material. There appears to be little rationale in teachers developing equitable practices and structures in class if they continue to permit inequitable language, behaviour and expectations to occur between class members. In terms of teaching, the teacher should develop lesson plans based on the principal of individualisation and assess motor performances on the basis of self improvement. Objective self improvement over time (for each individual) is superior to drills and practices designed for all (Coakley, 1994).

Griffin (1985) reflects that much subtle discrimination and sabotage of mixed Physical Education classes comes about because the structure of these settings clashes with the personal philosophy or ideological stances of others in the Physical Education Department. This seems to occur more particularly,

but not exclusively in male dominated departments (Sands, 1991). Scraton (1992) states that there will be staff who hold specific viewpoints on the nature of women and their sporting involvement. The complex arrangements or alignments of personal philosophies make it imperative staff predisposed to the value of gender equity in their schools align themselves, share ideals and goal set for change with those more likely to be similarly committed (Talbot 1990).

Willee (1978) sounds a resounding note of professional responsibility for all practitioners, that inactivity is a form of suicide. No-one has the right to inflict inactivity on children. In seeking an end to the battle of the sporting sexes and a genuine partnership of females and men, we can create the realisation that females and males are not opposites and are more alike and related than different, except as individuals. Females are taught to care and are learning to care enough to be brave; men who have been taught to be brave must learn to be brave enough to care (Greendorfer, 1979). The necessary first step towards a journey of excellence in Physical Education for females is equity. Females, require respect with regards to their ability and the freedom to exercise their desire for success.

Chapter Three: Methodology

There are many different approaches to social research and these are based on different philosophical assumptions which reflect different beliefs about the purpose of science and the nature of social reality (Codd, 1993; Neuman, 1994). All research is concerned with increasing knowledge through systematic forms of inquiry, but the purposes of the inquiry may differ depending upon who is undertaking the research and the context in which it occurs (Strauss, 1987; Denzin, 1989).

Quantitative Research

Traditionally, the most commonly ascribed characteristic of quantitative research is that it aims to count and measure things (Berg, 1989). Quantitative research is concerned with discussing facts about social phenomena and assumes a fixed and measurable reality. This is achieved by observing behaviour in real life situations (Greendorfer & Hasbrook, 1985). Quantitative research takes the view that the role of informants is to supply data that has been systematically defined by the researcher (Babbie, 1995). Arguably, many quantitative researchers believe that informants possess a lack of clear understanding of their social world. It is therefore up to the social scientists to provide accurate accounts of what is really going on out there by using the tools of science (Cuff, 1979). The quantitative researcher borrows familiar lay concepts, then gives them precise definitions and develops measurement techniques that allow the researcher to uncover regularities among the subjects observable characteristics. Of particular interest to the quantitative researcher are explanations that offer causes. According to Goodwin and Goodwin, (1984), the individual's interpretation of her or his situation, stands outside the analysis or play only a small part of it. Therefore social facts, it can be argued, can only be explained by other social facts and in terms which are quite different from those employed by the informants themselves (Fox, 1979). Babbie (1995) comments that one of the direct goals of the scientist, social or other, is to either define, describe or explain why things are the way they are.

The handling of data in quantitative research is predominantly through statistical analyses where the data are collected, collated and produced through measuring things (Cohen & Manion, 1989). Furthermore, the data is analysed through numerical comparisons and statistical inferences. Data is reported and conclusions drawn on the basis of these statistical analyses.

Qualitative Research

Qualitative researchers, are less confident of the existence of the social facts and doubt there is an objective reality. Bryman (1988) explains that qualitative researchers believe that an individual's view of the world has developed cumulatively and is contributed to by particular life experiences. It is assumed that the world may look different to other people and qualitative research sets out to understand more about the view of the world people have (Bell, Bush, Fox, Goodey, & Goulding 1984). Qualitative research gathers information about a subject's beliefs, attitudes, values, knowledge and experiences (Greendorfer & Hasbrook, 1985) and represent only reports of behaviour, attitudes and values. Primarily, this approach to research is concerned with understanding human behaviour from the informant's perspective and assumes there is a dynamic and negotiated reality. For this reason, qualitative researchers seek to uncover the thoughts, perceptions and feelings experienced by informants. Minichiello, Aroni, Timewell & Alexander (1995) explain that qualitative researchers, are most interested in studying how people attach meanings to and organise their lives and how this in turn influences their actions.

Qualitative methods, such as in-depth interviews and participant observation, allow the researcher to gain access to the motives, meanings, actions and reactions of people in the context of their daily lives. This methodological approach, without relying on the predetermined and prescriptive requirements of quantitative methodologies, elicits perceptions of the informants' viewpoints. The focus of qualitative research is not to reveal causal relationships, but rather to discuss the nature of phenomena as humanly experienced.

Qualitative researchers, are not necessarily concerned with assigning numbers to their observations or transcripts (Babbie, 1995). Data from

participant observation, unstructured interviews and oral accounts are studied from themes in the natural language of the participants (Patton, 1990). The classification system used to code the data is not usually numerical. The data is transformed by using the language of scientific knowledge to make the participant's descriptions and experiences of their social world accessible to those who have participated in it.

Methodological Pluralism

However, in practice, it is not always easy to categorise some research as either quantitative or qualitative (Hoinville & Jowell, 1989). Of the numerous research methods available, some tend to be more or less quantitative whereas others tend to be more or less qualitative. Despite such associations, however, it is important to realise that research methods are not inherently quantitative or qualitative (Kelly, 1978; Stanley & Wise, 1983; Morgan, 1988). For example, sports sociologists Greendorfer and Hasbrook (1985) explain that observational field studies can observe actual behaviour in real life situations and although observational methods appear to be more closely related to the quantitative approach, they can also be qualitative. Similarly, Denzin (1989) concludes, that although the survey method is often quantitative, some small-scale survey work is so detailed, exploratory and sensitive that it illuminates an issue or a perspective of the world rather than providing a set of facts. Furthermore, questionnaires can come up with quantifiable data, or by exploring an issue, provide a qualitative perspective (de Vauss, 1995). Neuman (1994) states "that researchers operate primarily within one approach but also combine elements from others" (p.74). Action research employs both quantitative and qualitative approaches. In action research the development of collaborative research makes no sharp division between the 'researchers' and the 'researched' (Kemmis & McTaggart, 1988). In order to gather information about those factors influencing females' participation in University Bursaries Physical Education, survey methodology was used in the present study. The mode of data collection and analysis used in this research was a mixture of quantitative and qualitative methodology . For example, focus groups were used which are characteristic of a qualitative methodology and the use of a students' and teachers'

perception questionnaires combined both qualitative and quantitative methodologies. A partial blending of these methodologies was used because increasingly, researchers are recognising the benefits of combining qualitative and quantitative procedures, resulting in greater methodological mixes that strengthen the research design (Kreuger, 1989). Overall, the survey method was quantitative with the goal of this investigation sharing the traditional characteristics of qualitative research which is focused on understanding, description and discovery (Patton, 1990). The setting was natural and familiar and used a small, non-random sample.

The Survey Method

Survey methods are now widely accepted as a means of gathering information for decisions for research (Moser & Kalton, 1989). They are used extensively in social and economic research. In other cases, surveys are also contributing to academic theory and scholarship. The tendency for societies to collect data about themselves, their characteristics, their behaviour patterns and their attitudes has grown dramatically this century (Hornville & Jowell, 1989).

The idea for a survey can arise in many different ways: a survey may be required to provide a solution to a problem of public policy or produce data needed for business management, or to test hypotheses developed by social scientists. Therefore, the purpose of many surveys is the provision of information for a specific purpose. (Moser & Kalton, 1986). In doing survey research, data is collected on part of a population to assess the relative incidence, distribution and interrelations of naturally occurring phenomena (Kerlinger, 1986).

Surveys are orientated in the present. Two factors have been previously determined in order to conduct survey research. First, the data needed to solve the clear definition of the problem does not already exist. Second, the field setting in which those data could be obtained, do exist. Surveys rely on the technique of self report to obtain information about such variables as people's attitudes, opinions, behaviours and demographic characteristics (Greendorfer & Hasbrook, 1985). The data is collected by means of interviews or questionnaires. Although surveys cannot establish

causality they can explore, describe, classify and suggest relationships among variables (Kirk, 1995).

Surveys are not without their critics. Frequently, surveys are criticised for their mindless empiricism (Mills, 1959; Young, 1966), or being inherently positivistic (Denzin, 1989; de Vauss, 1995). That is, surveys have been equated with a sterile, ritualistic and rigid model of science (de Vauss, 1995) which merely collect a mass of facts and statistics (Denzin, 1989). Neuman (1994) states that survey research has developed within the positivist approach to social science. Although surveys are capable of producing quantitative information using scientific or technical tools, nothing about the nature of the method itself precludes creative thinking or sociological imagination. Good surveys require creative imagination, reflection, interpretation and insight (de Vauss, 1995).

Survey research is accused of looking only selectively at behaviour and the specific situations in which they occur (Davis, 1971; Costner, 1974), and often criticised for an inability of getting fully at the meaningful aspects of social action (Denzin, 1989). Furthermore, the statistical techniques used by researchers have lead to a great deal of criticism because researchers attempt to make causal links on the basis of correlational data (Hornville & Jowell, 1989). Too frequently, these criticisms are of poorly designed, executed and analysed surveys. They are not in fact criticisms of the method itself, but are based on a misunderstanding of what the survey results can achieve (de Vauss, 1995). Like so many criticisms of surveys, this criticism is of a common practice but not of the method itself. Many of the weaknesses are made worse by the practice of many of the surveys and they are not as serious as many of the critics would have us believe (de Vauss, 1995). In the end, methodological pluralism is the desirable position (Cohen & Manion, 1989; Neuman, 1994).

Survey methodology was used in this present study of those factors influencing females' participation in University Bursaries Physical Education because it was the most appropriate means of probing the research questions for two major reasons. First, the literature review of previous survey studies had provided both the rational, context and knowledge base for this study. Secondly, many studies in education and the social sciences use surveys to

describe the characteristics of groups of people called populations (Anderson, 1990). Survey research is particularly useful when the researcher wants to find out something about the opinions, thoughts, attitudes, and values of a particular group of people.

Focus group interviews and questionnaires were used as the main method of primary data collection. The prime goal of this research was to gain accurate understanding and to use methods and techniques which would enhance understanding. Therefore, a variety of data collection techniques were employed and different units of analysis used. One example of this was a postal survey of the gender distribution of students in New Zealand co-educational secondary schools completing University Bursaries Physical Education, in 1996 (Appendix A). This survey was used to support the initial hypothesis that there were fewer females than males participating in this subject.

The Sample

One way of finding out about a group is to collect information from everyone in that group. For large groups of people this is impractical and expensive. The alternative is to collect information from only some people in the group in such a way that their responses and characteristics reflect those of the group from which they were drawn. This procedure is easier, cheaper and faster than surveying all the members of the group. A sample is therefore a small scale representation, a kind of miniature model of the population from which it is selected (Hoinville & Jowell, 1989). Because a sample merely includes a part, and not all of the total population, it can never be an exact replica (de Vauss, 1995). But in many respects it will resemble it closely and it is this resemblance that makes sampling so useful in the study of populations too large to study in their entirety.

There are two types of samples: probability and non-probability. A probability sample is one in which each person in the population has an equal, or at least known chance (probability) of being selected. In a non-probability sample some people have a greater, but unknown, chance than others of selection. Purposive sampling is a form of non-probability sampling where cases are judged as typical of some cases of interest to the researcher. Within

this study participants were selected to be included in the sample on the basis of their typicality (Cohen & Manion, 1989). In this way a sample is built up that is satisfactory to the researcher's specific needs. They are not selected randomly. While this method does not ensure representativeness, such a method can provide useful and relevant information (Bell, 1993).

The limitations associated with purposive sampling, as with non-probability samples generally, is the inability to estimate their representativeness. With a non-probability sample it is impossible to both estimate sampling variability from the sample and to know about all possible biases involved. This study will not attempt to seek generalisation, except at the abstract level to other similar populations or situations. The interest is not to generalise to the larger population, but rather to generalise to theory.

The participants in this research represented a non-probability, purposive sample. Representative populations were obtained by including presumably typical groups in the sample (Kerlinger, 1986) and were drawn from five different schools. Using purposive sampling, non-randomly selected schools were chosen to survey all the students undertaking University Bursaries Physical Education in those selected schools. In addition, teachers' perceptions of University Bursaries Physical Education were non-randomly selected in those schools where students' perceptions of University Bursaries Physical Education were surveyed.

Sample Composition

School 1	Female	Male
19 Students	9	10
School 2	Female	Male
10 Students	5	5
School 3	Female	Male
12 Students	5	7
School 4	Female	Male
9 Students	4	5
School 5	Female	Male
13 Students	6	7
Total 63 Students	**Female** 29	**Male** 34

Table 5: Sample Composition of Student Participants.

As can be seen, these gender groupings are not of equal size, but a variation in the gender distribution reflects a difference typically found in these groups of University Bursaries Physical Education students (Appendix, A).

School 1	Female	Male
11 Teachers	4	7
School 2	Female	Male
5 Teachers	3	2
School 3	Female	Male
5 Teachers	2	3
School 4	Female	Male
1 Teacher	1	
School 5	Female	Male
5 Teachers	1	4
Total 27 Teachers	**Female** 11	**Male** 16

Table 6: Sample Composition of Teacher Participants.

These groupings represent the gender distribution of the numbers of teacher participants who completed the teacher perception questionnaire.

The Sample Selection

A purposive sample procedure was chosen because all researchers are dependent on the goodwill and availability of subjects (de Vauss, 1995). Schools were selected on the basis of discussions with Principals and Physical Education Departments of co-educational secondary schools who had expressed an interest in this project and were agreeable, for an opportunity to participate. Subsequently, they offered their support, encouragement and commitment to be involved in this research. Opportunity samples of this kind are generally acceptable as long as the make-up of the sample is clearly stated and the limitations for the data realised (Bell, 1993). However, even in this small study, an effort has been made to select as representative a sample as possible. The sample was representative of students and teachers from wide ranging socio-economic and educational backgrounds resident in Auckland, Hamilton, Thames, Palmerston North and Wanganui. They represented a student and teacher mixture of urban, suburban and rural dwellers.

Focus Group Interviews

A focus group is typically composed of seven to ten people, but the size can range from as few as four to as many as twelve (Krueger 1989). The size of the group is conditional on two factors: it must be small enough for everyone to have an opportunity to share insights and yet large enough to provide a diversity of perceptions. Focus groups can be useful at virtually any point in a research programme, but they are particularly useful for exploratory research where rather little is known about the phenomenon of interest (Stewart & Shamdasni, 1989). As a result, focus group interviews were used early in this research project to produce relevant items in the questionnaire (Appendix B).

Focus group interviews have typically five characteristics or features (Krueger, 1989). They are a group of people who possess certain characteristics and provide data of a qualitative nature in a focused discussion. Focus groups in this research were useful for obtaining general background information about a topic which involved orientating the researcher to a new field (Morgan, 1988). The focus groups were used in stimulating new ideas

and creative concepts based on the informants' insights and were particularly useful in learning how participants talk about the phenomenon of interest

The advantage in using focus groups in the preliminary stages of survey research was their ability to explore topics in a relatively new area of interest for the researcher. Substantively, this strength came from the opportunity to collect data from the group interaction. The fact that the group interviews can produce useful data with relatively little direct input from the researcher is a distinct advantage. This allows the researcher to learn about participants' attitudes, opinions, experiences and perspectives thereby enabling the researcher to get closer to the participants' understanding of the researcher's topic of interest. Morgan (1988) states that focus groups are useful when it comes to investigating what participants think, but they excel at uncovering why participants think as they do.

Correspondingly, focus groups do have several potential weaknesses, the limitations of which were considered in the formulation of this research:

i) The focus group allows the participants to influence and interact with one another, and as a result, group members are able to influence the course of discussion (Krueger, 1989).

ii) Focus groups are difficult to assemble and vary considerably, so that each focus group tends to have unique characteristics (Higgenbotham & Cox, 1979).

iii) Focus group data is difficult to analyse because group interactions occur in a social environment, and comments must be interpreted within each context (Krueger, 1989).

iv) The researcher requires a degree of skill to facilitate meaningful discussion and stimulate conversation (Morgan, 1988).

Focus group interviews have been recommended in the construction of questionnaires (Rossi, Wright & Anderson, 1983; Converse & Presser, 1986) and also in identifying key issues. The most obvious way in which focus groups can assist in the item construction in questionnaires is through providing evidence on how participants typically talk about the topic in question. The important use for preliminary focus groups is therefore to assist the researcher with a more comprehensive understanding of the participants' opinions and viewpoints as possible.

Focus groups are also useful beyond the preliminary or exploratory process of survey research. In particular, they can augment the pretesting that is necessary to evaluate the survey instrument (e.g. questionnaire). Focus group interviews were used a second time in this research to trial the students' and teachers' perceptions questionnaires. Knodel and Pramualratana (1984) had suggested that focus groups make it easier to detect if participants fail to understand a question as a researcher has intended it. It was found, that by pretesting this questionnaire with a focus group not only located problem areas, but allowed immediate exploration of how to correct them.

As the various examples show, focus groups have a considerable potential for contributing to survey research. For these reasons, focus groups were used in the generation of the students' questionnaire and subsequently in the piloting of the students' and teachers' questionnaire. Given the importance of surveys to social science research, it makes good sense to make use of every advantage focus groups offer (Morgan, 1988).

Instrumentation

A number of techniques can be used to collect survey data. The data can be collected by observation, indepth interviews, content analysis, questionnaire or a range of other techniques (Sommer & Sommer, 1980). The most widely used technique is the questionnaire (de Vauss, 1995). The questionnaire is a highly structured data collection technique whereby each participant is asked the same set of questions. Typically, when using questionnaires, it is difficult to go back to people to collect additional information that might later be discovered is needed. Therefore, it is crucial to think ahead and anticipate what information will be needed to ensure the relevant questions are asked. There are a number of ways of working out which questions to ask. The research problem will affect which concepts need to be measured. The literature reviewed will also act as a guide and indicator for those concepts we devise, which are also crucial in determining which questions to ask. In addition, intuitive beliefs about the mechanisms by which variables are linked or about factors which may explain relationships will necessitate certain questions being included. Finally, the way the data is to be analysed affects what information is needed.

In explanatory survey research which aims to describe or explain, it is useful to consider carefully four aspects of the questionnaire. It is important to clarify what it is the researcher is trying to explain and develop questions to measure it. These are measures of the dependent variable. Similarly, it is important for the researcher to have questions to tap each of the causal variables. These are the measures of the independent variables. Measures of test variables are used by the researcher to help clarify the nature and links between independent and dependent variables. In addition, background measures provide information that helps the researcher see whether patterns differ for various subgroups. Questions about age, and gender are examples. The art of questionnaire design involves thinking ahead about the research problem, what the concepts mean and how data will be analysed. The questionnaire should reflect both theoretical thinking and an understanding of data analysis (Anderson, 1990).

In addition, it is also important to be clear about the precise type of information required in a questionnaire. Denzin (1989) states explanatory survey research should be guided by a clear understanding and awareness of question content. Four distinct types of question content to emerge were: behaviour, beliefs, attitudes and attributes. In practical terms this leads to the systematic development of questions for each type, rather than a haphazard set of questions on the broad topic, which may or may not tap all types of data. If researchers are interested in behaviour, questions would be formulated to establish what people do. But too often, researchers try to use behavioural measures to extrapolate beliefs and attitudes where there is a real danger of misinterpretation. Similarly, if researchers are interested in beliefs, in what people believe is true or false, there is a need to ask different types of questions. The researcher must be cognisant of the fact that the focus of belief questions is on establishing what people think is true, rather than on the accuracy of those beliefs. Belief questions which ascertain what participants think are true, can furthermore, be distinguished from attitude questions which try to establish what participants think is desirable. By comparison, attribute questions are specifically designed to obtain information about the participants' characteristics. Failure to adequately distinguish between these

four types of information, does suggest a lack of clarity about the research questions and a poor conceptualisation of the research problem.

The wording of questions is fundamental and considerable attention was undertaken by the researcher to develop clear, unambiguous and useful questions (de Vauss, 1995). The most obvious problems with question wording addressed in this research were: using simple language, the use of shortened questions to avoid confusion, avoiding double-barrelled questions that ask more than one question at once, leading questions, negative questions, bias, questions that were likely to produce a response set and making sure the participants of the questionnaire had the necessary knowledge to answer the questions.

Another aspect of question construction is to decide on the response format. A closed or forced-choice question is one in which a number of alternative answers are provided from which participants are to select one or more. An open-ended question format is one in which participants formulate their own answers. Both styles have generated disagreement about which is preferable (Neuman, 1994). The choice of open or closed-questions depends on many factors and the key to this is to develop a good set of unbiased responses. There is no right or wrong approach (Anderson, 1990). Gallup (1947) suggested for key variables, it may be worth using a combination of closed and open responses.

There are advantages and disadvantages to be considered with the use of both open and closed questions (Anderson, 1990; Neuman, 1994; de Vauss, 1995). The major problem with closed question approaches is that on some issues they can create false opinions or force a person to give a response that does not reflect their true position. Moreover, the closed question approach is not very good at taking into account people's qualifiers to the answers they tick. However, this can be ameliorated with the use of an open-ended question immediately following a closed question response, thus, requiring the participant to provide additional information not adequately covered in the closed question. The answers of different participants are easier to compare, replicate and statistically analyse in closed-questions. A closed-question approach can be useful where a questionnaire is long or participants' motivation is not high and does not discriminate against the less

talkative and inarticulate responses. Furthermore, closed-questions are useful because they are quick to answer and allow participants to classify themselves, thus avoiding subjectivity in coder interpretation.

The major difficulty of using open-ended questions is that they require the setting up of taxonomies or categories that stand up to objective interpretation and scoring. Accommodating open-ended answers will also take up a lot of space in the questionnaire. Furthermore, comparisons, statistical analyses and coding responses are difficult. The advantages of open-ended questions are their ability to permit a number of possible answers. Consequently, unanticipated findings can be discovered that permit insightful answers to complex and sensitive issues.

The use of students' perceptions questionnaires coupled with teachers' perceptions questionnaires were the instrumentation used in this research (Appendix (C) and Appendix (D)). Students' responded to a twelve page questionnaire, consisting of closed-questions as well as open-ended items developed from focus group interviews conducted with two groups of eight students from several of the previous year's University Bursaries Physical Education classes in a particular school. The two focus groups consisted of four female and four male volunteers.

The questionnaire was then designed in conjunction with the focus group interviews and an extensive literature review. The questionnaire tapped the following categories: a) background information, b) experiences of Physical Education, c) current perceptions of University Bursaries' Physical Education, d) participation factors, e) the benefits of University Bursaries' Physical Education, f) gender issues in University Bursaries' Physical Education. Teachers also, responded to a five page questionnaire consisting of open-ended, ranking and checklist items, that attempted to gauge their perceptions of University Bursaries' Physical Education. In both the students' and teachers' perceptions questionnaires, the types of questions asked were determined by and limited to issues directly relating to the research problem.

The questionnaire employed the use of both open and closed question formats. Closed question responses were obtained using the following approaches.

1. Checklists. These consisted of a list of items of which participants were requested to tick each relevant item.
2. Ranking formats. These provided participants with a list of alternative answers, but rather than selecting between them they were asked to rank their importance.
3. Likert-style formats or rating scales. These involved providing participants with statements and asking them how strongly they agree or disagree.
4. Semantic differential formats. These consisted of choosing adjectives to represent the two extremes of a continuum and asking participants to circle a mark between the two extremes.

Pilot Testing

Once a questionnaire has been developed, each question and the questionnaire as a whole, must be evaluated rigorously before final administration (de Vauss, 1995). The purpose of pilot testing is to assist with the process which has already taken place in the development and phrasing of each question. Pilot testing will evaluate how participants' interpret the questions meaning and checks whether the range of response alternatives is sufficient (Converse & Presser, 1986). By administering a complete questionnaire, the pilot testing enables the further evaluation of each individual item and the questionnaire as a whole (Fielding & Fielding, 1986). This process relies on participants' comments about the questions and analyses their comments in conjunction with the interviewer's comments to improve the questionnaire (Patton, 1990). A researcher proceeds to use the information gained in the pilot testing to revise questions where necessary, to shorten the questionnaire, re-order questions and pay special attention to the final layout of the questionnaire, to ensure it is clear for participants (Marshall & Rossman 1989).

The pilot testing of the students' perceptions questionnaire was undertaken with a focus group interview of eight student volunteers. The students were informed that the purpose of the pilot test was to identify ambiguities in the instructions of the questionnaire and to help clarify the wording of the questions. The pilot test permitted overall reactions including,

students' opinions on the questionnaire, a discussion on the content of the questionnaire and specific items, and comments on the length of the questionnaire. Following pilot testing, the questionnaire was re-edited and suggested changes incorporated.

A similar pilot test was conducted with a small focus group of teachers to elicit their responses to the teachers' perceptions questionnaire. Teachers completed the questionnaire individually and wrote marginal comments on it. The group then discussed the questionnaire. The completed questionnaires' marginal comments were reviewed and changes incorporated.

Validity and Reliability

Two generally accepted primary requisites of survey questionnaire measurement are validity and reliability (Sekaran, 1992; Linn & Gronlund, 1995). The first primary requisite, validity, measures the effectiveness of a survey questionnaire for the purposes for which it is used. The second primary requisite, reliability, refers to the consistency of the measurement thereby ensuring the repeatability of the findings. Validity and reliability are closely related. By definition, a valid measure will accurately reflect the variables being assessed and will therefore have a high degree of reliability (Linn & Gronlund, 1995). In contrast, a measure may be reliable but not valid (Hopkins, Stanley & Hopkins, 1990). Furthermore, De Vauss (1995) comments, reliability does not ensure validity, but validity assures reliability. Anderson (1990) maintains, that if a survey questionnaire is well constructed, it assists in the validity and reliability of data. A systematic and relevant development of the following issues pertaining to validity and reliability were pivotal to this study of those factors influencing females' participation in University Bursaries' Physical Education.

Validity

Validity tests the effectiveness of a survey questionnaire's purpose by asking whether the instrument measures what it is supposed to measure (Sekaran, 1992). Validity is an extremely important concept, since it determines the confidence the researcher places on the decisions made regarding the outcome variables being measured (Wiersma, 1995). The

validity of survey questionnaires can be elucidated by asking such questions as:

a)   What does this survey questionnaire actually measure?

b)   To what extent does the survey questionnaire measure a particular characteristic, ability, quality, trait or variable?

c)   In what situation or under what condition does the survey questionnaire have this degree of validity?

d)   To what degree does the survey questionnaire do the job that it is intended to do?

Validity is therefore a multifaceted concept and can be viewed as the accuracy of specified inferences made from its data. These inferences will pertain to:

1.   Performance on a 'constellation' of items (Content validity).

2.   The degree to which certain psychological traits or constructs are actually represented by responses made in the questionnaire (Construct validity).

3. Performance on some criterion (Criterion-related validity).

The classification of validity into these three subtypes will subsume the general purposes for which the survey questionnaire is used.

A measure of content validity is demonstrated by showing that the information gathered about a participant's beliefs, attitudes, values, knowledge and experiences includes an adequate and representative set of items to tap the concepts. The more those scale items represent the concept being measured, the greater the content validity. Content validity is a function of how well the rudiments of a concept have been described. In the present study content validity was partly developed by the use of focus group interviews in the preliminary stages of the questionnaire design and development. Focus groups determined the extent to which the appropriateness of students' perceptions provided a relevant and representative sample of the characteristics, traits, abilities and concepts under consideration. Furthermore, focus groups were used in the piloting of both the student and teacher survey questionnaires to establish and evaluate the degree to which the questionnaires' adequately tapped the elements and dimensions of those concepts being surveyed.

Typically, to establish content validity the survey questionnaire required a measure of face validity. An instrument is said to have face validity, if on first impression, it appears to measure the intended content or trait (Sekaran, 1992). This process was used as an initial screening procedure in survey questionnaire item selection (Wiersma, 1995). Judgements of face validity were based on an inspection of the students' and teachers' survey questionnaires' item content to decide specifically whether:

(a) All survey items were relevant and related to Physical Education, University Bursaries Physical Education and gender issues.

(b) The survey items 'represent' the essential characteristics of Physical Education, University Bursaries Physical Education, and gender issues

(c) There are enough survey items in the questionnaire to support intended generalisations from the survey questionnaire responses to a comprehensive discussion on Physical Education, University Bursaries Physical Education, and gender issues.

(d) The survey items and the keyed responses or answers were accurate.

The determination of construct validity, is essentially, a search for evidence that helps an understanding of what a survey questionnaire is really measuring, and how that instrument works across a variety of settings and conditions (Wiersma & Jurs, 1990). A construct is a trait, attribute or quality, something that cannot be observed directly but is observed from psychological theory (Cunningham, 1986). Items in a survey questionnaire do not measure constructs directly; rather they measure performance or behaviours that reflect constructs. Construct validity was established fundamentally by making predictions about the survey questionnaire responses. Some of those predictions were: (1) survey questionnaire responses should be positively correlated with other measures of the same construct, (2) groups that are known to differ on the domain should have responses that are significantly different, (3) patterns of responses across participants should not differ across race, gender or other characteristics.

The next stage involved the process of developing a measure of psychological construct by conducting analyses to confirm predictions that would establish validity. This involved:

a)   Developing a set of items based on a rational analysis of the construct (theory).

b)   Deducing testable predictions regarding the relationship between the construct and other empirical resources.

c)   Obtaining the data required to investigate predicted relationships empirically.

d)   Eliminating items that operate contrary to theory.

Focus group sessions also helped to illuminate construct validity. Construct validity was partly based on the accumulation of evidence from focus groups but also derived from the following sources:

i)   Defining the domain of the tasks to be measured. If a single construct was being measured, the items would evoke similar types of responses and be highly interrelated.

ii)   Analysing the mental processes required by the questionnaire items. The mental processes called forth by questionnaire items were determined both by piloting the questionnaire items and by administering the survey questionnaire to focus groups for discussion and having them 'think aloud' as they answer.

iii)   Comparing scores before and after some particular treatment. From the theory underlying some of the traits measured, it was possible to predict that the responses of a particular item would change (or remain the same) under various conditions. When those predictions were verified, the results supported construct validation.

Criterion related validity is established when the measures of a survey questionnaire differentiates individuals on a criterion it is expected to predict (Sekaran, 1992). A relevant criterion for such differentiation would be high and low performances based on teacher judgement. Predictive validity is the ability of the survey questionnaire to differentiate among individuals as to a future criterion. It refers to how well the survey questionnaire predicts some future performance. If co-educational secondary schools use Sixth Form Certificate Physical Education (6FC) grade point criterion for admission into University Bursaries' Physical Education (UBPE), for example, the predictive validity of 6FC would be worth knowing. This predictive validity would have been established on a group of UBPE students similar to those

surveyed. It would be expressed as a correlation coefficient, and a high coefficient would indicate that students who did well in 6FC tended to do well in UBPE, while those who scored low on 6FC tended to do poorly. A low correlation coefficient would indicate that there is little relationship between 6FC performance and success in UBPE.

Concurrent validity was established when survey questionnaire items discriminated between individuals who are known to be different (eg. males and females); to an extent, that they would respond differently on the survey questionnaire. Concurrent validity has two important uses. First, it is a useful predecessor for predictive validity. If 6FC scores, for example, do not correlate with those who are succeeding right now, then there is no value in completing a long term, predictive validity study that might take a number of years. Second, concurrent validity enables the use of one instrument instead of another instrument. If admission to UBPE requires students to (1) complete 6FC or (2) surveys students to demonstrate they have a knowledge of the subject matter of 6FC, concurrent validity would enable the Physical Education Department to demonstrate that success on the survey measures the same thing as success on the 6FC course. Like predictive validity, concurrent validity is expressed by a correlation coefficient.

Several considerations emerged in determining the legitimacy of the criterion variable in these validation approaches:

i) Care was taken to establish that the criterion variable was valid.

ii) Because criterion validity is needed to confirm the legitimacy of any inferences made about an individual's performance on a criterion variable, it was imperative that the individuals involved in the investigation were similar to those individuals for whom predictions are to be made. The less similarity there is between those for whom predictions are made, the more tentative the predictions would be.

iii) By the same token, the conditions surrounding the validation study (or studies) should be comparable to the conditions undertaken of those intended to be made.

Reliability

The reliability of a measure indicates the stability and consistency with which the survey questionnaire is measuring the concept and helps to assess the repeatability of a measure (Gay, 1985; Gronlund, 1985). A survey instrument can always be repeated but it is a matter of how consistent, therefore reliable these measures are. Nitko (1983) and Vockell (1983) caution that, the reliability of survey questionnaire responses may be inconsistent because:

(1)   Participants' behaviours are unstable, varying unpredicatably from moment-to-moment or occasion-to-occasion.

(2)   The survey questionnaire items or content vary.
The major sources of unreliability include: faulty items, excessively difficult items, excessively easy items, inadequate numbers of items and a dissimilarity of items.

(3)   The persons or processes employed in decoding are inconsistent.
Constructing a reliable survey questionnaire meant controlling the extraneous factors to the greatest extent possible to minimise the sources of unreliability.

The procedures and purposes for developing strategies for building reliability into a survey questionnaire were:

a)   The use of technically correct, unambiguous items.
This ensures the participant is able to give the answer they really want to give.

b)   Including sufficient survey items.
A longer survey is generally more reliable than a shorter one because it provides larger and hence a potentially more representative sample of the participants' responses.

c)   Targeting items.
Items were written for a specific goal or objective. Each item represented an attempt to measure a particular variable. The extent to which the overall objective of a survey questionnaire was broken down into more specific objectives, resulted in a greater degree correspondence between the items. Sub-dividing, assisted in the development of targeted specific items, thus increasing the likelihood

that items within a cluster were assessing the same domain. Since coefficient reliability is based on item correspondence or agreement, targeting was employed to ensure reliability.

d) Constructing items of an appropriate level of comprehension. It was important to measure what the participant actually knows and not their luck at giving responses or figuring out what the questions mean. The inclusion of easy response items at the beginning of the questionnaire served motivational purposes such as bolstering participant confidence or making the participants feel comfortable answering the questionnaire.

e) Controlling the conditions of the survey questionnaire administration. Wherever possible in the administration of the survey questionnaire, care was taken to control as many conditions of survey administration as possible. Conditions were avoided that created unnecessary stress and discomfort for the participants. Distractions were kept to a minimum. Similarly, the researcher's direct intervention was kept to a minimum when answering questions. The physical environment was made as comfortable as possible. It was recognised that if conditions varied considerably from one survey setting to another, the results of the survey would reflect these variations and hence would be less reliable than if conditions remained similar.

f) Standardising the scoring procedures. Open-ended questions were used, but objective instruments such as Likert Scales and Semantic Differentials were preferred because their structured format allowed for greater consistency in scoring the responses.

Generally, the statistical methods of estimating reliability, test-retest reliability and parallel-form reliability, require data collected from two surveying situations. One exception, is the estimation of internal-consistency for calculating reliability which uses interitem-consistency reliability or split-half reliability. Internal-consistency estimates were obtained from the data gathered in a single surveying exercise. Popham (1981) believes internal-consistency estimates should be thought of as revealing the extent to which the items of the survey questionnaire are internally consistent with one another - that is, the extent to which the items are homogenous. The most

popular test of inter-item consistency reliability is Cronbach's coefficient alpha. This was used for multipoint-scaled items and provided a more generaliseable estimate of the internal-consistency form of reliability. Coefficient alpha computed the inter-item consistency of items on the survey questionnaire.

In conclusion, validity and reliability attest to the scientific rigour applied to this study of those factors influencing females' participation in University Bursaries' Physical Education. Validity measures tested how well the survey questionnaire that was developed measured the particular concepts it was supposed to measure. Reliability measures tested how consistently items on the survey questionnaire measured the concepts being measured.

Data Processing and Data Analysis

Neuman (1994) remarks that in all data analysis data is put into categories which are manipulated in order to identify patterns and arrive at generalisations that summarise distinctions within the concrete, raw data. A partial blending of quantitative and qualitative approaches in data processing and data analysis was characteristic of this research.

Quantitative approaches employed a highly specialised, standardised set of data processing and analysis techniques built on applied mathematic foundations. The majority of data processing and analysis did not begin until all the data had been collected, condensed, manipulated and then processed into numbers. A knowledge of mathematics and the symbolic use of the language of statistics was used to establish relationships between variables to discuss causal relationships.

Qualitative approaches were used in conjunction with the quantitative data processing and data analysis phases. Patterns or relationships were discovered early in the research from focus group interviews and in the pilot testing of the questionnaires. The results of the early data analysis informed the subsequent data collection which was a quantitative and qualitative methodological mix. In contrast to the quantitative approach, the qualitative approach provided evidence to illustrate theory, generalisation or a plausible interpretation of the facts. The data collected were in the form of words which were context bound. A set of interwoven concepts emerged to supply

supportive evidence offering many explanations. The researcher was required to assess and evaluate notes supplied from focus group interviews. This form of analysis and theorising made it possible for implicit assumptions to emerge that were incorporated into the survey research instrument, namely the questionnaire.

Information from the survey questionnaires was organised, manipulated and summarised in table format to represent statistical data obtained from research.

Ethics in Survey Research

Anderson (1990) states "All human behaviour is subject to ethical principles, rules and conventions distinguishing socially acceptable behaviour from that which is generally considered unacceptable" (p.17). The practice of educational research was no exception (Frankel, 1987). Bouma (1993) describes that the responsible researcher is:

1. Considerate.
2. Protects confidentiality.
3. Does nothing to injure, harm, or disturb the participants of the research.
4. Keeps data collected on participants secure.
5. Accurately records information and reports the findings of research in a public manner.

This research was conducted in accordance with the ethical standards outlined in Massey University's 'Code of Ethical Conduct' (1990) and adhered to the range of ethical issues involved.

Voluntary Participation

Voluntary participation means that participants can agree to answer questions and refuse to participate at any time. One way of ensuring that the participants understand that participation is voluntary is to tell them explicitly. For example, at the beginning of both the students' and teachers' perceptions questionnaires the participants were told:

"Although your participation in this questionnaire will be greatly valued, you are not required to participate. You can stop at any point or choose not to answer a particular question". Neuman (1994) believes, that researchers will

experience fewer problems with participant co-operation if questionnaires ask well-developed questions in a sensitive way, treat participants with respect and ensure confidentiality.

Informed Consent

Informed consent is closely associated with voluntary participation. Voluntary participation implies that the participants make a choice, based on accurate information. While the principle of informed consent seems reasonable and desirable, it is not straight forward. Several issues emerge. How much information should be provided before a participant can be considered informed? How fully informed should the participants be? What does it mean to be informed?

Simply providing detailed descriptions of a study does not mean that participants will be any more enlightened as a result. Indeed, detailed technical information may distract, confuse or overwhelm, rather than inform. Too much detail may discourage participation, not because participants are better informed, but because they are bored to distraction. Furthermore, providing detailed information about the study design, hypotheses or theories that are being tested, can distort the way participants answer questions and undermine the validity of the findings.

The basic information outlined to all participants completing the questionnaire were:

1. The purpose of the study and its basic procedures.
2. An outline of any foreseeable risks, embarrassment or discomfort.
3. A description of the likely benefits of the study for students and teachers.
4. A description of how the participant was selected for the study.
5. An offer to answer any questions.
6. A statement that participation is voluntary and the participant is free to withdraw at any time or decline to answer particular questions.
7. The identity of the researcher.
8. Some information about the way in which the data and its conclusions were put together.

Informed consent was obtained before participants took part in the focus group interviews (Appendix E), responded to the pilot testing of the questionnaire (Appendix F), and responded to the questionnaire (Appendix E). The participants signed written consent forms. Because this research involved students, the consent of the parents/caregivers was sought in conjunction with that of the school.

Minimisation of Harm, Principles of Anonymity and Confidentiality.

The type of questions that a survey research asks can distress and embarrass participants and may create psychological harm. Simply selecting a person for a survey can also be potentially harmful. The most obvious way in which a participant can be harmed in survey research is if the confidentiality of the responses is not honoured. Typically, survey participants are assured that their responses will be either anonymous or confidential. In the survey questionnaire, anonymity ensures that the researcher will not and cannot identify the participant. The participant remains nameless. Confidentiality, means that the researcher ensures no one has access to the completed questionnaires. The main reasons for assuring confidentiality were to first, improve the quality and honesty of the responses, especially on sensitive issues. Second, encourage participation in the study and thus to improve the representativeness of the sample. Third, offer confidentiality to protect a person's privacy.

However, as was the case with the focus group interviews used in this research, the researcher provided confidentiality without anonymity. The participants did not remain anonymous or nameless because the researcher could privately link individual names to specific responses (Neuman, 1994). Confidentiality was nevertheless assured, with the information from the focus group interviews not made public.

Personal and Professional Responsibility

It is important to recognise the effects of what researchers do, and to reflect on the effect that this has on other researchers and on an individual's capacity to make credible contributions to social science understanding. If

research roles are performed poorly, it is not just the researcher who suffers, but the whole discipline of which researchers are members. Researchers can undermine the capacity of other researchers to make a contribution to debates in which other social scientists ought to be involved. Furthermore, if researchers claim greater expertise than they possess, underanalyse or misinterpret data, they bring the discipline and their fellow professionals into disrepute. Neuman (1994) urges the social researcher to be self-aware, "as they have a responsibility and a role as intellectuals in society" (p.456).

Analysis and Reporting

It is important to represent data accurately and truthfully to avoid selective reporting. This is chiefly because selective distorted analyses can readily paint a misleading picture (Hoinville & Jowell, 1989). The replication of results has been one of the key safeguards against falsification. Replication requires that another researcher can collect comparable data in the same way and thus check the validity and reliability of any set of results. However, true replication is less achievable in survey research. This is because social surveys rely on samples in a particular place and time, and to the extent that the same time and place of two surveys (and thus the samples) are different, then any variation between results can be defended in terms of sample differences. This makes true replication extremely difficult.

Additionally, results can be misrepresented without fabricating them. A researcher can distort results by inappropriately analysing data. This may not be deliberate but may mislead nevertheless. It is therefore important, that the researcher ensure they have the necessary skills to analyse the data thoroughly and appropriately. Perhaps the most common way in which a researcher misleads is by only reporting convenient or positive results. Rather than fabricating results or manipulating data to achieve the desired results, a misleading impression can be achieved simply by not reporting inconvenient results. An important safeguard against misreporting or misanalysis of results is to make data sets publicly available (Appendix A). Making data readily available for analysis by others is perhaps the survey researcher's closest approximation to replication. While it does not prevent falsification of the original data set, it does act as a check on misanalysis.

Researchers should acknowledge that data collection and analysis are affected by their values. This requires the researcher to look at all the data, including the negative results, and ensure inconvenient results are reported. It is only by doing this that researchers can extend their knowledge beyond that which their beliefs and prejudices dictate (de Vauss, 1995).

Conclusion

The basis for doing social research was informed by an awareness of quantitative and qualitative research approaches. The logic of survey research flows directly from a quantitative approach to social science but can also borrow characteristics more typical of qualitative approaches (Hoinville & Jowell, 1989). The survey will ask many people about their characteristics, beliefs, opinions, and past and present experiences or behaviour. A survey researcher begins with a research problem and develops a survey instrument, such as a questionnaire, which is used to measure variables. The questionnaire is pilot tested with a small set of participants, similar to those used in the final survey. After these phases, data is collected, then organised in preparation for analysis and the final report.

Survey research is guided by three broad sets of considerations. First, technical considerations which involve ensuring that matters such as sample design and questionnaire construction and the like are as rigorous as possible. Second, practical considerations requiring the survey design must take account of the realities such as deadlines, budget and the purpose of the research . Third, ethical considerations which must shape the final design of a survey. Ideally, a survey will be technically correct, practically efficient and ethically sound (de Vauss, 1995).

Chapter Four: Results

Introduction

The problem, or issue central to this thesis, is to investigate the reasons why disproportionately fewer numbers of females participate in University Bursaries Physical Education compared to their male counterparts.

This research seeks to answer the following questions:

1. What reasons do University Bursaries Physical Education female students state as primary motivators of participation in Physical Education?
2. What aspects of the University Bursaries Physical Education programme attract female students?
3. How well do females perceive the University Bursaries Physical Education curriculum caters for their special abilities?

The aim of this research is to identify the factors influencing females' participation in University Bursaries Physical Education at co-educational secondary schools.

Specifically, the purpose of this research is to:

1. Survey the reasons that account for the disproportionately fewer numbers of females in University Bursaries Physical Education compared to their male counterparts.
2. Identify aspects of University Bursaries Physical Education that (a) cater for the interests, needs and abilities of females and (b) do not cater for the interests, needs and abilities of females.
3. Examine how past experiences and perceptions of Physical Education and sport influence females' participation in University Bursaries Physical Education.

The Sample

Sample Composition of Student Participants or cases.

Female Participants	Male Participants	Total Number of Participants
(29)	(34)	(63)

Sample Composition of Teacher Participants or cases.

Female Participants	Male Participants	Total Number of Participants
(11)	(16)	(27)

The number of participants or cases surveyed will be represented in the following format e.g. (29).

Instrumentation

The use of students' perceptions questionnaires coupled with teachers' perceptions questionnaires were the instrumentation used in this research (Appendix (C) and Appendix (D)). Students responded to a twelve page questionnaire consisting of fifty five questions. The questionnaire addressed the following categories:

- Background Information.
- Experiences of Physical Education.
- Current Perceptions of University Bursaries Physical Education.
- Participation Factors.
- Benefits of University Bursaries Physical Education.
- Gender Issues in University Bursaries Physical Education

Teachers responded to a five page questionnaire consisting of eleven questions that attempted to gauge their perceptions of University Bursaries Physical Education. The questionnaire tapped the following categories:

- University Bursaries Physical Education's Inclusion in the Senior School Curriculum.
- Factors Influencing Students' Participation in University Bursaries Physical Education.
- Characteristics of Talented Females and Talented Males in

University Bursaries Physical Education.

- University Bursaries Physical Education as a Viable Subject
  Choice.

In addition to the students' survey questionnaire and a teachers' survey questionnaire the researcher completed a postal survey in New Zealand to determine the gender distribution of students currently undertaking University Bursaries Physical Education.

Reporting of Questionnaire Results

Results will be reported in one of the following formats:

- Wilcoxon Matched-Pairs Signed-Ranks Test Table.
- Mann-Whitney Non-Parametric Test Results in Table Format.
- Ranked Bullet Pointed Closed/Open Question Responses.
- Cross-Tabulations using Chi-Squares.
- Ranking Tables Reporting Gendered Responses.
- Statistical Packages for the Social Sciences Tables (SPSS).
- t-tests for Independent and Paired Samples in Table Format.
- Focus Group Interviews.

Definitions of the Reported Statistical Tests Used:
Wilcoxon Matched-Pairs Signed-Ranks Test

Wilcoxon Matched-Pairs Signed-Ranks Tests were used where the researcher was comparing two related distributions. For example, the numbers of females and males undertaking University Bursaries Physical Education at the same school to see if they are different. It is a non-parametric version of the paired t-test and therefore makes fewer assumptions about the shapes of the distributions. For each school the number of females is subtracted from the number of males. If the distributions are the same it would be expected that these differences lie around zero. That is, more or less equal numbers of positive and negative differences, of more or less the same sizes. If the probability of the test is less than 0.05 then there is a significant difference.

Mann-Whitney Non Parametric Test

Some results compare scores on Likert Scales or require one response in a multi-choice question. The Mann-Whitney Nonparametric Test was used to compare those scores. The test uses ranks rather than means and overcomes arguments about how well a number can represent a range of responses such as the amount of enjoyment or unpleasantness etc. The probability value of less than 0.05 is a significance by gender. Mann-Whitney Nonparametric Test results are reported in the following table format.

- The Question Category.
- The Question Item.
- Gendered Response i) Cases; ii) Mean Ranks; Sum of Mean Ranks. The mean responses will be abbreviated in the tables as: Mean Ranks =Mean; Sum of Ranks= Sum.
- Significance of Results: i) sf: Significant. ii) n.sf: Not significant.

Ranked Bullet Pointed Closed/Open Question Responses

Students responded to Closed/Open Questions under the following categories:

- Both the same because: (ie no gender differences).
- Females because:
- Males because:

Cross-Tabulations using Chi Squares

Differences in the answer to a question (yes/no) by gender are made using a cross-tabulation of the answers - gender across the top, and reply (yes/no) down the side. Each cell contains the count of the number of females who answered yes, the number who answered no, the number of males that answered yes, the number who answered no. If there is no connection between the answers and gender, it would be expected that the counts be in proportion to the number of females/males and the number who answered yes/no. For example, if there were 100 people-50 females and 50 males, and 50 people who answered yes and 50 people who answered no, then it would be expected that 25 people are in each gender/reply cell.

Usually the researcher observes different counts from what is expected. The chi-square is calculated by summing up the squared differences between observed count and expected count, divided by the expected count. There is a theoretical distribution for the chi-square and by comparing this with the actual chi-square number from the data the researcher is able to get the probability value (p-value). The chi-square itself is of no intrinsic interest, it is just a step towards getting the p-value which is what the researcher is interested in. If the p-value is less than 0.05 there is a significant difference in the replies by gender.

Ranking Tables Reporting Gendered Responses

Gendered responses are ranked according to importance. For example, where students indicated outstanding ability in a particular sport the sum total of responses for individual sports has been ranked. The higher the rank the more popular the sport.

Statistical Packages for the Social Sciences (SPSS)

Statistical Packages for the Social Sciences Tables tabulates variables and statistics. The tables are most useful in summarising data. Tests of significance aren't available with tables.

t-tests for Independent and Paired Samples

t-tests compare the means of a measurement between two different groups. For example, if a group of people were weighed, presumably the males would weigh more than the females. The t-test indicates whether the mean weight of the males is significantly different from the mean weight of the females. The two samples are females and males. They are independent because each weighing is done on a different person. If on the other hand, everyone is weighed, then given a meal and weighed again, then a paired t-test could be used to investigate if there was a significant weight gain before and after the meal. There are two related samples, everyone before the meal, and the same people after meal. Each person is weighed twice and the two samples are not independent.

Focus Group Interviews

Focus groups can follow quantitative procedures (Appendix I and J). Questionnaires typically provide a sizeable amount of data, and focused interviews can provide insights about the meaning and interpretation of results. Two focus groups were used. One focus group, consisted of a mixed gendered grouping of four male and four females, currently undertaking University Bursaries Physical Education in 1996. A second focus group, consisted of six female students currently undertaking University Bursaries Physical Education in 1996.

Focus groups provided additional insight, interpretation and meaning to the following issues:
- Gender Issues
- Background Information
- Current Perceptions of University Bursaries Physical Education
- Participation Factors in University Bursaries Physical Education
- Benefits of University Bursaries Physical Education
- Perceptions of Ability and Success in University Bursaries Physical Education.

Reliability

Reliability is the extent to which the test or procedure produces similar results under constant conditions on all occasions. Cronbach Alpha was used for checking reliability and was applied to additive scales to ascertain whether all the questions are measuring the same thing and could be added together to get an overall score. The reliability coefficient needs to be 0.8 or over to indicate good reliability. The following table details the Reliability Analysis for the additive scales used in the Students' Perceptions Questionnaire and the Teachers' Perceptions Questionnaire.

Students' Perceptions Questionnaire Reliability Analysis-Scale

Question Number	Number of Cases	Number of Items	Reliability Coefficient	Reliability confirmed (√) or not confirmed (x)
Q14	(59)	9	0.8310	(√)
Q15	(57)	12	0.4275	(x)
Q16	(58)	8	0.5944	(x)
Q36-48	(60)	13	0.5397	(x)
Q49-55	(57)	7	0.5287	(x)

Teachers' Perceptions Questionnaire Reliability Analysis-Scale

Question Number	Number of Cases	Number of Items	Reliability Coefficient	Reliability confirmed (√) or not confirmed (x)
Q4	(25)	(7)	0.7984	(x)

Gender Survey

A postal survey of 208 New Zealand co-educational schools undertaking University Bursaries Physical Education in 1996 was conducted to determine the gender distribution of students. There was an 83.2% response rate.

Gender Survey Results:

(92) Schools	Where males outnumbered females.
(37) Schools	Where females outnumbered males.
(44) Schools	Where there were equal numbers.
(173) Schools	Total Number of survey returns.

A Wilcoxon Matched-Pairs Signed-Ranks Test reveals significant results.

Results of the Students' Perceptions Questionnaire

Students' responded to a twelve page questionnaire consisting of fifty five questions.

Gender Issues in University Bursaries Physical Education.

Students indicated how often they experienced the following feelings in University Bursaries Physical Education. The Mann-Whitney nonparametric test was used to compare the scores. The higher the rank, the more frequently the feeling was felt. If the probability of the test is less than 0.05 then there is a significant difference.

Question	Female	Male	s. f
I feel teachers think females are naturally better than males.	Cases (29) Mean 28.28 Sum 820.0	Cases (34) Mean 35.18 Sum 1196	n.sf
I feel males are given the same amount of encouragement to succeed as females.	Cases (29) Mean 32.98 Sum 956.5	Cases (34) Mean 31.16 Sum 1060	n.sf
I feel the types of activities we do are unsuitable for males.	Cases (29) Mean 29.00 Sum 841.0	Cases (34) Mean 34.56 Sum 1175	s.f
I feel this subject is best suited for females.	Cases (29) Mean 29.12 Sum 844.5	Cases (34) Mean 34.46 Sum 1172	n.sf
I feel male achievement is valued in class.	Cases (29) Mean 32.55 Sum 944.0	Cases (34) Mean 31.53 Sum 1072	n.sf
I feel teachers have sex-stereotyped ideas on what is appropriate for males and females.	Cases (29) Mean 31.72 Sum 920	Cases (34) Mean 32.24 Sum 1096	n.sf
I feel males lack role models in this subject.	Cases (29) Mean 30.57 Sum 886.5	Cases (34) Mean 33.22 Sum 1130	n.sf

I feel females lack role models in this subject.	Cases (29) Mean 31.40 Sum 910. 5	Cases (34) Mean 32.51 Sum 1106	n.sf
I feel students perform best in those physical activities they see are appropriate for their sex/gender.	Cases (29) Mean 28.33 Sum 821.5	Cases (34) Mean 35.13 Sum 1195	s.f
I feel males experience less success because females dominate equipment.	Cases (28) Mean 32.36 Sum 906.0	Cases (34) Mean 30.79 Sum 1047	n.sf
I feel teaching students in a mixed gender group provides everyone with equal opportunities.	Cases (29) Mean 31.66 Sum 918.0	Cases (34) Mean 32.29 Sum 1098	n.sf
I feel teachers have a lower expectation of females' abilities.	Cases (29) Mean 35.88 Sum 1041	Cases (33) Mean 27.65 Sum 912. 5	s.f
I feel females are successful because they need more attention.	Cases (29) Mean 26.78 Sum 776. 5	Cases (33) Mean 35.65 Sum 1177	s.f

In each of the following series of questions students were required to indicate which gender for example gets most attention in University Bursaries Physical Education. The response was either female, male or both the same. The Mann-Whitney nonparametric test was used to compare the scores. The higher the rank, the more the answer indicated males. If the probability of the test is less than 0.05 then there is a significant difference.

Question	Female	Male	s. f
Who requires more time to develop their skills in University Bursaries Physical Education. Females/Males/Both the Same?	Cases (28) Mean 32.77 Sum 917.5	Cases (33) Mean 29.50 Sum 973.5	n.sf
Who gets most attention in University Bursaries Physical Education. Females/Males/Both the Same?	Cases (28) Mean 36.23 Sum 1015	Cases (34) Mean 27.60 Sum 938.5	sf
Who gains the greater satisfaction working co-operatively in University Bursaries Physical Education. Females/Males/Both the Same?	Cases (28) Mean 30.29 Sum 848.0	Cases (34) Mean 32.50 Sum 1105	n.sf
Who are more competitive in University Bursaries Physical Education. Females/Males/Both the Same?	Cases (28) Mean 27.70 Sum 775.5	Cases (34) Mean 34.63 Sum 1178	sf
Who gets the most encouragement in University Bursaries Physical Education. Females/Males/Both the Same?	Cases (29) Mean 34.21 Sum 992.0	Cases (34) Mean 30.12 Sum 1024	n.sf
Who is more motivated to achieve in University Bursaries Physical Education. Females/Males/Both the Same?	Cases (29) Mean 28.21 Sum 818.0	Cases (34) Mean 35.24 Sum 1198	n.sf
Who are more successful in University Bursaries Physical Education. Females/Males/Both the Same?	Cases (28) Mean 29.27 Sum 819.5	Cases (32) Mean 31.58 Sum 1011	n.sf

Qualitative Analyses

Six open-ended questions will now be examined. These results are not a representative sample but are the sum total of responses.

The students responses are gender ranked in importance under the format headings:

- Both the same because:
- Females because:
- Males because:

Who gains the greater satisfaction working co-operatively in University Bursaries Physical Education?

Both the same because:

Female Response

- Students get out of it what they are prepared to put in.

Male Response

- Students challenge and compete against one another in different ways.
- Everyone works towards a degree of satisfaction.
- All students become friends and earn what they deserve.
- Students learn from each other.

Females because:

Female Response

- They do better in assignment work because they help each other.
- They are generally not as independent as the males.

Male Response

- They are less competitive than the males.
- They look and learn very well.

Males because:

Female Response

- No responses.

Male Response

- They strive on competition.
- They try to show off which results in them having greater satisfaction.

Who are more competitive in University Bursaries Physical Education?

Both the same because:

Female Response
- Both sexes want to win.

Male Response
- It depends on personal motivations.

Females because:

Female Response
- It is human nature.
- They strive for personal bests.

Male Response
- No responses.

Males because:

Female Response
- They tend to dominate the physical aspects of the course.
- It is their nature.
- They compete with one another.
- It is the macho thing to do.
- They have bigger egos.
- There are more of them in class.
- That is the way mates are.

Male Response
- They are naturally highly competitive.
- Winning means more to them.
- They need to demonstrate how good they are.
- They are more smarter at sport than females.
- They do not want to look useless.
- More participate.
- Its the macho thing to do.

Who gets the most encouragement in University Bursaries Physical Education?

Both the same because:

Female Response	Male Response
• It is about the individual not the sex of the person.	• It depends on the students' personal motivations.
• We all get the same amount of encouragement to improve our skills.	
• As we share common goals and need to achieve and therefore the amount of encouragement is equal.	
• Our teacher is not sexist.	
• Females want to do well but just don't believe they can.	
• But females need to be pushed along as they often lack the motivation.	

Females because:

Female Response	Male Response
• Teachers want them to succeed in male-dominated sports activities.	• Teachers feel they are unable to do as well as males in the practicals.
	• They quickly loose interest.
	• The teacher is attracted to them.
	• They need encouragement to do better.

Males because:

Female Response	Male Response
• No responses.	• No responses.

Who is more motivated to achieve in University Bursaries Physical Education?

Both because:

Female Response

- Everyone wants to achieve well and pass.
- It depends on the individual.
- As students want to gain the highest mark possible.
- Motivation depends on the individual's personality not their gender.

Male Response

- Both sexes want to succeed it depends on the students' attitudes.
- It is a state of mind not what sex you are.

Females because:

Female Response

- They cope with the theory work well.
- They are motivated to achieve.
- They are more determined and focused.
- That is their nature.
- They try to get rid of their stereotyped images in sport.

Male Response

- They want to achieve, males just cruise.
- They feel the need to compete against the males.

Males because:

Female Response

- They have more role models.
- More males take the subject.

Male Response

- They are generally more motivated to succeed in sport.
- They don't get the same amount of encouragement and attention as females.
- They have their peer support.

Who are more successful in University Bursaries Physical Education?

Both the same because:

Female Response
- We share equal opportunities.
- It is up to the individual to succeed.
- You cannot calculate who is better because it is actually equal.

Male Response
- As they must put in the same amount of work to be successful.
- Males succeed in the practicals and females succeed in the theory aspects of the course. It evens out.
- Individuals on their own earn their success.
- It is a measure of your ability not your gender.

Females because:

Female Response
- They are better at the assignment work.
- They are more competitive and do work a lot harder.

Male Response
- They are better at the theory aspects of the course which are worth more marks.
- They fill the 'top placings' in class despite a male being first.

Males because:

Female Response
- The successful males are very successful and the females are quite slack at times.
- Just look at the national results.

Male Response
- They are more motivated.
- They are more adept in the subject or simply just smarter.

Who requires more time to develop their skills in University Bursaries Physical Education?

Both the same because:

Female Response

- Everyone can develop their skills in Physical Education if they have the determination and encouragement they need.
- The modules are new to everyone.
- It depends on the individual.
- Males and females are equal.
- The assignments are based on students' personal improvements.
- The aim of the course is to help you improve your own ability.
- It is not your gender but your own performance ability and individualism that counts.
- Males are better on the practical components and females are better on the theory components.

Male Response

- It depends on the individual skill level although females are usually lower.
- It depends on who listens and puts their mind to it and who wants to succeed.
- Males are better at the practicals and females are better at the theory work.
- It depends on an individual's level of motivation.
- It depends on how much effort you put in.
- It depends on the individual's state of mind.
- It depends on the group situation
- Individuals need to work on different areas.
- The course is designed to provide everyone with new experiences. No gender is advantaged.

Males because:

Female Response

- No responses.

Male Response

- No responses.

Females because:

Female Response	Male Response
• They require more encouragement and attention.	• They need more help in the practicals.
• Males are more athletic.	• Of their limited experiences and lack of physical attributes.
• They are not as good as the males.	• They have not been brought up with sport like males have.
• They are prepared to stand back and take a passive role. Males just do it!	• They lack the skill and co-ordination.
• Males develop their skills faster and are highly motivated.	• Their experiences of sport are different to those of the males.
	• Males get into developing their sporting skills at an earlier age.

Who gets most attention in University Bursaries Physical Education?

Both the Same because:

Female Response	Male Response
• Everyone is equal.	• No responses.
• Everyone gets attention when they request it.	
• Teachers are not influenced by gender but by the individual.	
• Whoever shows they are motivated get attention.	
• We have a fair teacher.	
• Students draw attention to themselves in different ways according to their specific needs.	
• Why should one gender get more attention?	

Females because:

Female Response

- They want to achieve.
- Teachers feel they have more of a brain.

Male Response

- They need it.
- They are more willing to ask for help.
- Teachers feel they need extra attention.
- The teacher appears to prefer females. More tolerant of them.
- The teacher has a greater attraction to them.

Males because:

Female Response

- Our teacher likes soccer.
- We play male-orientated sports and the females are told they are not 'cool' or 'good' enough.
- They get higher marks in the practicals.
- There are more of them in class and they demand attention.
- They are easily all quite loud. The females compete with the loudness to get attention also.

Male Response

- They play a variety of sports well.

Background Information
Are Physical Education and sport different?

90.3% (56 students) perceived Physical Education and sport to be different. Of these 48.2% (27 students) are female and 51.8% (29 students) are male. A no response indicating Physical Education and sport are not different was given by 9.7% (6 students). Of these 33.3% (2 students) are female compared to 66.7% (4 students) who are male.

The number of missing observations was 1. The result is not significant.

Which of your parents or caregivers is interested in Physical Education?

Parents/Ccaregivers interested in Physical Education	% Females	% Males	Total Percentages
Female parent/caregiver	(6) 46.2%	(7) 53.8%	(13) 20.6%
Male parent/caregiver	(9) 47.4%	(10) 52.6%	(19) 30.2%
Both	(9) 40.9%	(13) 59.1%	(22) 34.9%
Neither	(7) 53.8%	(6) 46.2%	(13) 20.6%

Percents and totals based on respondents. 63 valid cases; 0 missing cases.

Who of the following have encouraged you in Physical Education?

Significant Influences	% Females	% Males	Total Percentages
Mother	(18) 41.9%	(25) 58.1%	(43) 71.7%
Father	(14) 34.1%	(27) 65.9%	(41) 68.3%
Sister	(11) 61.1%	(7) 38.9%	(18) 30.0%
Brother	(8) 40.0%	(12) 60.0%	(20) 33.3%
Grandmother	(9) 56.3%	(7) 43.8%	(16) 26.7%
Grandfather	(5) 31.3%	(11) 68.8%	(16) 26.7%
Aunt	(5) 62.5%	(3) 37.5%	(8) 13.3%
Uncle	(6) 60.0%	(4) 40.0%	(10) 16.7%
Female Coach	(13) 68.4%	(6) 31.6%	(19) 31.7%
Male Coach	(14) 41.2%	(20) 58.8%	(34) 56.7%
Female Teacher	(14) 70.0%	(6) 30.0%	(20) 33.3%
Male Teacher	(14) 46.7%	(16) 53.3%	(30) 50.0%
Female Friend	(23) 62.2%	(14) 37.8%	(37) 61.7%
Male Friend	(15) 46.9%	(17) 53.1%	(32) 53.3%
Whanau	(1) 25.0%	(3) 75.0%	(4) 6.7%
Iwi	(0) 0.0%	(2) 100.0%	(2) 3.3%

Percents and totals based on respondents. 60 valid cases; 3 missing cases.

Do you intend to complete University or Poly/Tech courses in Physical Education?

32.8% (20 students) surveyed intend to complete a University or Poly Tech course in Physical Education. Of these 55% (11 students) are female and 45% (9 students) are male. 67.2% (41 students) do not intend to complete a University or Poly Tech course in Physical Education. Of these 41.5% (17 students) are female and 58.5% (24 students) are male. The number of missing observations was 2. The result is not significant.

Are you thinking about a career in Physical Education or sport?

41.3% (26 students) are thinking about a career in Physical Education and sport. 38.5% (10 students) of these are female and 61.5% (16 students) are male. 58.7% (37 students) are not thinking about a career in Physical Education and sport. 51.4% (19 students) are female and 48.6% (18 students) are male. The number of missing observations was 0. The result is not significant.

Do you participate regularly in a team sport ?

82.3% (51 students) participate regularly in a team sport. 45.1% (23 students) are female compared to 54.9% (28 students) who are male. 17.7% (11 students) did not participate in a regular team sport. 54.5% (6 students) were female and 45.5% (5 students) were male. The number of missing observations was 1. This result was not significant.

Do you participate regularly in an individual sport?

68.6% (35 students) surveyed participate regularly in an individual sport. 37.1% (13 students) are female compared to 62.9% (22 students) who are male students. 31.4% (16 students) surveyed do not participate regularly in an individual sport. 56.3% (9 students) are female compared to 43.8% (7 students) who are male. The number of missing observations was 12. This result is not significant.

Which of the following activities do you participate in at least three times a week for fitness or health reasons?

Activity	Female Percentage	Male Percentage	Total Percentage
Jog	(9) 37.5%	(15) 62.5%	(24) 50%
Swim	(5) 55.6%	(4) 44.4%	(9) 18.8%
Gym	(4) 28.6%	(10) 71.4%	(14) 29.2%
Cycle	(6) 66.7%	(3) 33.3%	(9) 18.8%
Walk	(15) 53.6%	(13) 46.4%	(28) 58.3%
Aerobic Class	(1) 100%	(0) 0.0%	(1) 2.1%

Percents and totals based on respondents. 48 valid cases; 15 missing cases.

The result is not significant.

Other activities for the female students included:

Hockey, netball, badminton practice, dancing and skating. Hockey and netball were the most popular activities.

Other activities for the males included:

Soccer, rugby, hockey, cricket, tennis, power-rider, volleyball, skill training, weight training, basketball and inline skating. Soccer, rugby, hockey and cricket were the most popular activities.

How did students describe their overall ability in Physical Education?

Rating	Female Percentage	Male Percentage	Total Percentage
Excellent	(3) 27.3%	(8) 72.7%	(11) 18.3
Very Good	(11) 44.0%	(14) 56.0	(25) 41.7
Good	(7) 58.3%	(5) 41.7%	(12) 20.0%
Average	(5) 62.5%	(3) 37.5%	(8) 13.3%
Fair	(2) 50.0%	(2) 50.0%	(4) 6.7%
Poor	(0) 0.0%	(0) 0.0%	(0) 0.0%

Percents and totals based on respondents. 60 valid cases; 3 missing cases.

The result is not significant.

Do students think they have outstanding ability in all sports?

    12.7% (8 students) responded that they had outstanding ability in all sports compared to 87.3% (55 students) who perceived they did not. Of the 12.7% (8 students) who perceived they had outstanding ability in all sports 25% (2 students) are female and 75% (6 students) are male. The number of missing observations was 0. This result is not significant.

Do students think they have outstanding ability in a particular sport or sports?

    75% (45 students) surveyed perceived they had outstanding ability in a particular sport or sports. 37.8% (17 students) of these are female compared to 62.2% (28 students) who are male. The number of missing observations was 3. The result is not significant.

The following table ranks by gender those sports where students indicated outstanding ability.

FEMALES

	Sport
1	Swimming
2=	Cricket, soccer.
4=	Rugby, running, netball, cycling.
8=	Touch rugby, tennis, softball, karate, hockey, triathlon, basketball, multisports, table tennis, equestrian, kickboxing, BigFooting, snowboarding, rollerblading, rowing

MALES

	Sport
1	Swimming
2=	Hockey, cricket, rugby, soccer.
6=	Athletics, rowing, touch rugby, tennis, surfing.
11=	Basketball, cross-country running, squash, skating.
14=	Snowboarding, kayaking volleyball, shooting, roller hockey, skate-boarding, windsurfing.

On a six point Likert Scale students chose between a pair of adjectives to indicate how closely the adjective describes their attitudes towards their experiences of Physical Education. The Mann-Whitney Nonparametric Test was used to compare the scores. The higher the rank, the more negative the response. The level of statistical significance is less than 0.05.

Question 14	Female	Male	s. f
Enjoyable 1 2 3 4 5 6 Unpleasant	Cases (28) Mean 31.64 Sum 886.0	Cases (34) Mean 31.38 Sum 1067	n.sf
Satisfying 1 2 3 4 5 6 Dissatisfying	Cases (28) Mean 33.14 Sum 928.0	Cases 34 Mean 30.15 Sum 1025	n.sf
Interesting 1 2 3 4 5 6 Uninteresting	Cases 28 Mean 34.23 Sum 958.5	Cases 33 Mean 28.6 Sum 932.5	n.sf
Challenging 1 2 3 4 5 6 Unchallenging	Cases 28 Mean 31.57 Sum 884.0	Cases 34 Mean 31.44 Sum 1069	n.sf
Favourable 1 2 3 4 5 6 Unfavourable	Cases 27 Mean 29.33 Sum 792.0	Cases 33 Mean 31.45 Sum 1038	n.sf
Stimulating 1 2 3 4 5 6 Boring	Cases 28 Mean 34.89 Sum 977.0	Cases 34 Mean 28.71 Sum 976.0	n.sf
Encouraging 1 2 3 4 5 6 Discouraging	Cases 28 Mean 32.04 Sum 897.0	Cases 34 Mean 31.06 Sum 1056	n.sf
Easy 1 2 3 4 5 6 Hard	Cases 28 Mean 33.11 Sum 927.0	Cases 33 Mean 29.21 Sum 964.0	n.sf
Worthwhile 1 2 3 4 5 6 Worthless	Cases 28 Mean 32.25 Sum 903.0	Cases 34 Mean 30.88 Sum 1050	n.sf

Students were also asked to provide other adjectives to best indicate their attitude towards their experiences of Physical Education. Three additional adjectives were given. Females responded with the adjectives fun and educational. A male responded with the adjective active.

Current Perceptions of University Bursaries Physical Education
Students were asked to read a series of statements about why University Bursaries Physical Education was chosen this year and indicate the extent to which they agree or disagree. The Mann-Whitney Nonparametric Test was used to compare the scores. The higher the rank, the more agreement there was. The level of statistical significance is less than 0.05.

Questions	Female	Male	s. f
It is an easy subject.	Case (28) Mean 29.02 Sum 812.5	Case (34) Mean 33.54 Sum 1141	n.sf
There was no final examination.	Case (28) Mean 30.80 Sum 862.5	Case (33) Mean 31.17 Sum 1029	n.sf
There was no other subject I could take.	Case (28) Mean 35.50 Sum 994.0	Case (34) Mean 28.21 Sum 959	sf
It involved working outside the classroom.	Case (28) Mean 31.14 Sum 872.0	Case (34) Mean 31.79 Sum 1081	n.sf
It was recommended by other students as being worthwhile taking.	Case (28) Mean 33.09 Sum 926.5	Case (33) Mean 29.3 Sum 964.5	n.sf
Of the varied programme it offered.	Case (27) Mean 30.94 Sum 835.5	Case (34) Mean 31.04 Sum 1056	n.sf
Of the Physical Education Department teaching the subject.	Case (26) Mean 28.67 Sum 745.5	Case (33) Mean 31.05 Sum 1025	n.sf

The Physical Education Department promoted this subject.	Case (28) Mean 30.02 Sum 840.5	Case (33) Mean 31.83 Sum 1051	n.sf
I have completed Sixth Form Certificate Physical Education.	Case (28) Mean 30.36 Sum 850.0	Case (34) Mean 32.44 Sum 1103	n.sf
I consider the subject important.	Case (28) Mean 31.16 Sum 872.5	Case (34) Mean 31.78 Sum 1081	n.sf
It was a subject in which I could obtain a high grade.	Case (26) Mean 22.75 Sum 591.5	Case (34) Mean 36.43 Sum 1239.0	sf
It has a theory and practical component.	Case (28) Mean 34.43 Sum 964.0	Case (34) Mean 29.09 Sum 989.0	n.sf

Other reasons why University Bursaries Physical Education was chosen as a subject this year by ranked gendered response were:

Female Response
- Enjoyable
- Interesting
- Importance of an active lifestyle.

Male Response
- High interest in sport.
- Non academic course.
- Incentive of having a ski trip.
- The Outdoor Education Module.

Students read statements about University Bursaries Physical Education and indicated the extent to which they agreed or disagreed. The Mann-Whitney Nonparametric Test was used to compare the scores. The higher the rank, the more agreement there was. The level of statistical significance is ‹ 0.05.

Questions	Female	Male	s. f
Harder work than other classes.	Case (28) Mean 33.43 Sum 936.0	Case (33) Mean 28.94 Sum 955.0	n.sf
More varied work than other classes.	Case (28) Mean 30.0 Sum 840.0	Case (34) Mean 32.74 Sum 1113	n.sf
More time-consuming work than other classes.	Case (28) Mean 31.91 Sum 893.5	Case (33) Mean 30.23 Sum 997.0	n.sf
More interesting work than other classes.	Case (28) Mean 30.80 Sum 862.5	Case (34) Mean 32.07 Sum 1091	n.sf
Is more fun than other classes.	Case (28) Mean 28.02 Sum 784.5	Case (33) Mean 33.53 Sum 1107	n.sf
A subject where I learn something new.	Case (27) Mean 28.98 Sum 782.5	Case (34) Mean 32.60 Sum 1109	n.sf
A subject where I am stimulated to try new things.	Case (28) Mean 27.50 Sum 770.0	Case (34) Mean 34.79 Sum 1183	sf
A subject where I can demonstrate my talent.	Case (27) Mean 23.41 Sum 632.0	Case (34) Mean 37.03 Sum 1259	sf

Two additional responses were given. A female responded that the subject was not harder work but it was harder to get good marks. A male indicated that the subject had an extremely high assignment workload compared to other subjects.

Students were given a list of twenty two characteristics and asked to indicate those qualities they felt <u>females</u> must have in order to be successful in University Bursaries Physical Education. The following table gives a breakdown of the gendered case responses and percentages.

Behavioural Characteristic	Females	Males	Total Number of Cases	Missing Cases
Passive	(3) 33.3%	(6) 66.7%	(9)	(54)
Aggressive	(11) 64.7%	(6) 35.3%	(17)	(46)
Skilful	(18) 58.1%	(13) 41.9%	(31)	(32)
Caring	(4) 40%	(6) 60%	(10)	(53)
Disciplined	(20) 52.6%	(18) 47.4%	(38)	(25)
Co-operative	(20) 51.3%	(19) 48.7%	(39)	(24)
Achievement-Orientated	(23) 65.7%	(12) 34.3%	(35)	(28)
Competitive	(20) 57.1%	(15) 42.9%	(35)	(28)
Sensitive	(5) 71.4%	(2) 28.6%	(7)	(56)
Athletic	(12) 44.4%	(15) 55.6%	(27)	(36)
Intelligent	(16) 55.2%	(13) 44.8%	(29)	(34)
Determined	(26) 54.2%	(22) 45.8%	(48)	(15)
Passionate	(5) 45.5%	(6) 54.5%	(11)	(52)
Emotional	(1) 20.0%	(4) 80%	(5)	(58)
Physical	(19) 55.9%	(15) 44.1%	(34)	(29)
Hardworking	(26) 56.5%	(20) 43.5%	(46)	(17)
Creative	(9) 45.0%	(11) 55%	(20)	(43)
Motivated	(26) 55.3%	(21) 44.7%	(47)	(16)
Sociable	(17) 51.5%	(16) 48.5%	(33)	(30)
Show Initiative	(20) 55.6%	(16) 44.4%	(36)	(27)
Committed	(25) 62.5%	(15) 37.5%	(40)	(23)
Inquisitive	(8) 50.0%	(8) 50.0%	(16)	(47)

A SPPS Table was used to summarise this data. The table rank tabulates the variables and mean statistics.

Female Responses				Male Responses			
Rank	Success Attributes for Females	Cases	%	Rank	Success Attributes for Females	Cases	%
1=	Motivated	(26)	92.9%	1	Determined	(22)	95.7%
1=	Determined	(26)	92.9%	2	Motivated	(21)	91.3%
1=	Hardworking	(26)	92.9%	3	Hardworking	(20)	87%
4	Committed	(25)	89.3%	4	Co-operative	(19)	82.6%
5	Achievement-Orientated	(23)	82.1%	5	Disciplined	(18)	78.3%
6=	Disciplined	(20)	71.4%	6=	Show Initiative	(16)	69.6%
6=	Co-operative	(20)	71.4%	6=	Sociable	(16)	69.6%
6=	Show Initiative	(20)	71.4%	8=	Committed	(15)	65.2%
10	Physical	(19)	67.9%	8=	Athletic	(15)	65.2%
11	Skilful	(18)	64.3%	8=	Physical	(15)	65.2%
12	Sociable	(17)	60.7%	12=	Skilful	(13)	56.5%
13	Intelligent	(16)	57.1%	12=	Intelligent	(13)	56.5%
14	Athletic	(12)	42.9%	14	Achievement-Orientated	(12)	52.5%
15	Aggressive	(11)	39.3%	15	Creative	(11)	47.8%
16	Creative	(9)	32.1%	16	Inquisitive	(8)	34.8%
17	Inquisitive	(8)	28.6%	17=	Passionate	(6)	26.1%
18=	Sensitive	(5)	17.9%	17=	Passive	(6)	26.1%
18=	Passionate	(5)	17.9%	17=	Aggressive	(6)	26.1%
20	Caring	(4)	14.3%	17=	Caring	(6)	26.1%
21	Passive	(3)	10.7%	21	Emotional	(4)	17.4%
22	Emotional	(1)	3.6%	22	Sensitive	(2)	8.7%

Students were given a list of twenty two characteristics and asked to indicate those qualities they felt <u>males</u> must have in order to be successful in University Bursaries Physical Education. The following table gives a breakdown of the gendered case responses and percentages.

Behavioural Characteristic	Females	Males	Total Number of Cases	Missing Cases
Passive	(3) 30.0%	(7) 70%	(10)	(53)
Aggressive	(9) 45%	(11) 55%	(20)	(43)
Skilful	(18) 46.2%	(21) 53.8%	(39)	(24)
Caring	(7) 46.7%	(8) 53.3%	(15)	(48)
Disciplined	(21) 42.0%	(29) 58.0%	(50)	(13)
Co-operative	(21) 39.6%	(32) 60.4%	(53)	(10)
Achievement-Orientated	(23) 51.1%	(22) 48.9%	(45)	(18)
Competitive	(17) 40.5%	(25) 59.5	(42)	(21)
Sensitive	(7) 58.3%	(5) 41.7%	(12)	(51)
Athletic	(14) 34.1%	(27) 65.9%	(42)	(22)
Intelligent	(18) 45.0%	(22) 55.0%	(40)	(23)
Determined	(25) 47.2%	(28) 52.8%	(53)	(10)
Passionate	(7) 63.6%	(4) 36.4%	(11)	(52)
Emotional	(1) 33.3%	(2) 66.7%	(3)	(60)
Physical	(21) 45.7%	(25) 54.3%	(46)	(17)
Hardworking	(26) 44.8%	(32) 55.2%	(58)	(5)
Creative	(8) 32.0%	(17) 68.0%	(25)	(38)
Motivated	(25) 45.5%	(30) 54.5%	(55)	(8)
Sociable	(15) 41.7%	(21) 58.3%	(36)	(27)
Show Initiative	(21) 45.7%	(25) 54.3%	(46)	(17)
Committed	(24) 47.1%	(27) 52.9%	(51)	(12)
Inquisitive	(9) 45.0%	(11) 55.0%	(20)	(43)

A SPPS Table was used to rank summarise this data.

Rank	Success Attributes for Males	Cases	%	Rank	Success Attributes for Males	Cases	%
1	Hardworking	(26)	96.3%	1=	Hardworking	(32)	97.0%
2=	Motivated	(25)	92.6%	1=	Co-operative	(32)	97.0%
2=	Determined	(25)	92.6%	3	Motivated	(30)	90.9%
4	Committed	(24)	88.9%	4	Disciplined	(29)	87.9%
5	Achievement-Orientated	(23)	85.2%	5	Determined	(28)	84.8%
6=	Disciplined	(22)	77.8%	6=	Committed	(27)	81.8%
6=	Co-operative	(22)	77.8%	6=	Athletic	(27)	81.8%
6=	Physical	(22)	77.8%	8=	Show Initiative	(25)	75.8%
6=	Show Initiative	(22)	77.8%	8=	Competitive	(25)	75.8%
10=	Skilful	(18)	66.7%	8=	Physical	(25)	75.8%
10=	Intelligent	(18)	66.7%	11=	Achievement-Orientated	(22)	66.7%
12	Competitive	(17)	63.9%	11=	Intelligent	(22)	66.7%
13	Sociable	(15)	55.6%	13=	Sociable	(21)	63.6%
14	Athletic	(14)	51.9%	13=	Skilful	(21)	63.6%
15=	Aggressive	(9)	33.3%	15	Creative	(17)	51.5%
15=	Inquisitive	(9)	33.3%	16=	Inquisitive	(11)	33.3%
17	Creative	(8)	29.6%	16=	Aggressive	(11)	33.3%
18=	Passionate	(7)	25.9%	18	Caring	(8)	24.2%
18=	Sensitive	(7)	25.9%	19	Passive	(7)	21.2%
18=	Caring	(7)	25.9%	20	Sensitive	(5)	15.2%
21	Passive	(3)	11.1%	21	Passionate	(4)	12.1%
22	Emotional	(1)	3.7%	22	Emotional	(2)	6.1%

Female Responses — Male Responses

Other behavioural characteristics of successful <u>females</u> were:

Female Response	Male Response
• Confident	• Exhibitionist
• Muscular	• Ability to work with males
• Teamsperson	• Not intimidated by males
• Stubborn	• Self Esteem
	• Concentration

Other behavioural characteristics of successful <u>males</u> were:

Female Response	Male Response
• Companionable	• Concentration
• Intelligent	• Self Esteem

Participation Factors in University Bursaries Physical Education

Students ranked the importance of the following reasons for participating in University Bursaries Physical Education in order of preference (1=main reason; 12=least reason).

A SPPS Table was used to rank summarise this data. The table tabulates the variables and mean statistics given for each question by gender.

Female Response Ranking

Reason for Participation	Ranking	Mean
Family Influence	1	10.68
Release of Tension	2	9.64
Improved Appearance	3	9.32
Friendship	4	7.71
Health	5	6.07
Satisfaction	6	5.75
Fitness	7	4.93
Skill Development	8	4.54
Fun	9	4.32
New Experiences	10	3.89
Achievement	11	3.32
Personal Challenge	12	3.00

Male Response Ranking

Reason for Participation	Ranking	Mean
Family Influence	1	11.21
Release of Tension	2	9.24
Improved Appearance	3	9.18
Friendship	4	7.70
Health	5	6.03
New Experiences	6	5.70
Satisfaction	7	5.33
Skill Development	8	4.91
Achievement	9	4.85
Personal Challenge	10	4.30
Fitness	11	4.18
Fun	12	3.56

The following series of tables examines each individual reason and the percentages of those preferences.

Reason for Participation	Importance Ranking	Cases
Satisfaction	1 0.0%	(0)
	2 9.5%	(6)
	3 14.3%	(9)
	4 9.5%	(6)
Valid cases (61)	5 12.7%	(8)
Missing cases (2)	6 22.2%	(14)
	7 9.5%	(6)
	8 7.9%	(5)
	9 4.8%	(3)
	10 4.8%	(3)
	11 1.6%	(1)
	12 0.0%	(0)

Reason for Participation	Importance Ranking	Cases
Fitness	1 9.5%	(6)
	2 17.5%	(11)
	3 14.3%	(9)
	4 9.5%	(6)
Valid cases (61)	5 11.1%	(7)
Missing cases (2)	6 15.9%	(10)
	7 7.9%	(5)
	8 3.2%	(2)
	9 3.2%	(2)
	10 0.0%	(0)
	11 4.8%	(3)
	12 0.0%	(0)

Reason for Participation	Importance Ranking	Cases
Fun	1 20.6%	(13)
	2 17.5%	(11)
	3 9.5%	(6)
	4 11.1%	(7)
Valid cases (60)	5 4.8%	(3)
Missing cases (3)	6 11.1%	(7)
	7 11.1%	(7)
	8 9.5%	(6)
	9 0.0%	(0)
	10 0.0%	(0)
	11 0.0%	(0)
	12 0.0%	(0)

Reason for Participation	Importance Ranking	Cases
Friendship	1 1.6%	(1)
	2 0.0%	(0)
	3 6.3%	(4)
	4 1.6%	(1)
Valid cases (61)	5 12.7%	(8)
Missing cases (2)	6 3.2%	(2)
	7 17.5%	(11)
	8 7.9%	(5)
	9 22.2%	(14)
	10 15.9%	(10)
	11 3.2%	(2)
	12 4.8%	(3)

Reason for Participation	Importance Ranking		Cases
Skill Development	1	9.5%	(6)
	2	17.5%	(11)
	3	12.7%	(8)
	4	7.9%	(5)
Valid cases (61)	5	9.5%	(6)
Missing cases (2)	6	12.7%	(8)
	7	9.5%	(6)
	8	9.5%	(6)
	9	3.2%	(2)
	10	3.2%	(2)
	11	1.6%	(1)
	12	0.0%	(0)

Reason for Participation	Importance Ranking		Cases
Personal Challenge	1	22.2%	(14)
	2	17.5%	(11)
	3	19.0%	(12)
	4	9.5%	(6)
Valid cases (61)	5	7.9%	(5)
Missing cases (2)	6	4.8%	(3)
	7	4.8%	(3)
	8	3.2%	(2)
	9	3.2%	(2)
	10	3.2%	(2)
	11	0.0%	(0)
	12	1.6%	(1)

Reason for Participation	Importance Ranking		Cases
Release of Tension	1	1.6%	(1)
	2	1.6%	(1)
	3	1.6%	(1)
	4	0.0%	(0)
Valid cases (61)	5	3.2%	(2)
Missing cases (2)	6	3.2%	(2)
	7	4.8%	(3)
	8	9.5%	(6)
	9	12.7%	(8)
	10	15.9%	(10)
	11	28.6%	(18)
	12	14.3%	(9)

Reason for Participation	Importance Ranking		Cases
Family Influence	1	0.0%	(0)
	2	1.6%	(1)
	3	0.0%	(0)
	4	1.6%	(1)
Valid cases (61)	5	0.0%	(0)
Missing cases (2)	6	1.6%	(1)
	7	0.0%	(0)
	8	1.6%	(1)
	9	3.2%	(2)
	10	12.7%	(8)
	11	20.6%	(13)
	12	54.0%	(34)

Reason for Participation	Importance Ranking	Cases
Improved Appearance	1 0.0%	(0)
	2 1.6%	(1)
	3 4.8%	(3)
	4 3.2%	(2)
Valid cases (61)	5 3.2%	(2)
Missing cases (2)	6 6.3%	(4)
	7 3.2%	(2)
	8 1.6%	(1)
	9 7.9%	(5)
	10 27.0%	(17)
	11 22.2%	(14)
	12 15.9%	(10)

Reason for Participation	Importance Ranking	Cases
Health	1 1.6%	(1)
	2 12.7%	(8)
	3 9.5%	(6)
	4 9.5%	(6)
Valid cases (61)	5 9.5%	(6)
Missing cases (2)	6 3.2%	(2)
	7 12.7%	(8)
	8 14.3%	(9)
	9 19.0%	(12)
	10 1.6%	(1)
	11 3.2%	(2)
	12 0.0%	(0)

Reason for Participation	Importance Ranking	Cases
Achievement	1 20.6%	(13)
	2 12.7%	(8)
	3 15.9%	(10)
	4 11.1%	(7)
Valid cases (61)	5 12.7%	(8)
Missing cases (2)	6 3.2%	(2)
	7 1.6%	(1)
	8 9.5%	(6)
	9 4.8%	(3)
	10 1.6%	(1)
	11 3.2%	(2)
	12 0.0%	(0)

Reason for Participation	Importance Ranking	Cases
New Experiences	1 7.9%	(5)
	2 17.5%	(11)
	3 6.3%	(4)
	4 19.0%	(12)
Valid cases (61)	5 9.5%	(6)
Missing cases (2)	6 6.3%	(4)
	7 7.9%	(5)
	8 12.7%	(8)
	9 4.8%	(3)
	10 4.8%	(3)
	11 0.0%	(0)
	12 0.0%	(0)

Students were asked why did they think there are not more female students participating in University Bursaries Physical Education? They had to rank the following reasons in order from (1=most likely; to 9=least likely).

A SPPS (Statistical Package for Social Sciences) Table was used to summarise this data. The table tabulates the variables and mean statistics by gender.

Female Response Ranking

Reason for Lack of Participation	Ranking	Mean
The curriculum is designed to encourage males more than females	1	7.00
Health Reasons	2	6.78
Lack of Peer Support	3	5.41
Lack of Skill	4	5.37
Lack of Time	5	5.26
Lack of encouragement from parents	6	5.11
Intimidation by males	7	4.67
Lack of interest	8	3.04
Interest in non-sporting activities	9	2.86

Male Response Ranking

Reason for Lack of Participation	Ranking	Mean
The curriculum is designed to encourage males more than female	1	6.42
Lack of time	2	5.93
Lack of skill	3	5.63
Lack of encouragement from parents	4	5.53
Health reasons	5	5.38
Lack of peer support	6	4.19
Intimidation from males	7	3.76
Interest in non-sporting activities	8	3.19
Lack of interest	9	3.16

An analysis of variance using t-tests for Independent Samples compared the means of measurement between the responses of the females and males to determine the level of statistical significance. The tables provide data on the specific variable under the headings sum of measurement scores; mean of measurement scores; standard deviation and sum of squares. Comparisons between and within female and male groups determine the level of statistical significance. The level of statistical significance is less than 0.05.

Lack Of Encouragement From Parents

	Cases	Sum	Mean	Std Dev	Sum of Sq	sf
Female	(27)	138	5.1111	1.9480	99.6667	n.sf
Male	(32)	177	5.5313	2.5901	207.9688	
Totals	(59)	315	5.3390	2.3194	306.6354	

Number of missing observations: 4

Lack Of Time

	Cases	Sum	Mean	Std Dev	Sum of Sq	sf
Female	(27)	142	5.2593	1.9532	99.1852	n.sf
Male	(30)	178	5.9333	2.2427	145.8667	
Totals	(57)	320	5.6140	2.1108	245.0519	

Number of missing observations: 6

Lack Of Skill

	Cases	Sum	Mean	Std Dev	Sum of Sq	sf
Female	(27)	145	5.3704	2.5743	172.2964	n.sf
Male	(32)	180	5.6250	2.4063	179.5000	
Totals	(59)	325	5.5085	2.4843	351.7963	

Number of missing observations: 4

Interest In Non-Sporting Activities

	Cases	Sum	Mean	Std Dev	Sum of Sq	sf
Female	(28)	80	2.8571	1.9572	103.4286	n.sf
Male	(32)	102	3.18575	2.2496	156.8750	
Totals	(60)	182	3.0333	2.1185	260.3036	

Number of missing observations: 3

Health Reasons

	Cases	Sum	Mean	Std Dev	Sum of Sq	sf
Female	(27)	183	6.7778	1.9871	102.6667	sf
Male	(32)	172	5.3750	2.2107	151.5000	
Totals	(59)	355	6.0169	2.1116	254.1667	

Number of missing observations: 4

Lack Of Interest

	Cases	Sum	Mean	Std Dev	Sum of Sq	sf
Female	(28)	85	3.0357	2.2358	134.9643	n.sf
Male	(32)	101	3.1563	1.6286	82.2188	
Totals	(60)	186	3.1000	1.9351	217.1830	

Number of missing observations: 3

Lack Of Peer Support

	Cases	Sum	Mean	Std Dev	Sum of Sq	sf
Female	(27)	146	5.4074	2.4692	158.5185	sf
Male	(32)	134	4.1875	1.8741	108.8750	
Totals	(59)	280	4.7458	2.1659	267.3935	

Number of missing observations: 4

Intimidation By Males

	Cases	Sum	Mean	Std Dev	Sum of Sq	sf
Female	(27)	126	4.6667	2.8011	204.0000	n.sf
Male	(34)	128	3.7647	2.5472	214.1176	
Totals	(61)	254	4.1639	2.6621	418.1176	

Number of missing observations: 2

The Curriculum Is Designed To Encourage Males More Than Females

	Cases	Sum	Mean	Std Dev	Sum of Sq	sf
Female	(27)	189	7.0000	2.1304	118.0000	n.sf
Male	(31)	199	6.4194	2.9639	263.5484	
Totals	(58)	388	6.6897	2.6102	381.5484	

Number of missing observations: 5

How could University Bursaries Physical Education attract more **female** students?

Female Responses

- Encourage the health aspects of the course.
- Offer a range of sporting activities that are of interest to females e.g. netball.
- Shorter and more interesting theory components.
- Emphasis not on skill ability but the improvements made in skill development.
- Teachers could divide their time more equitably between the females and males during the skill development sessions.
- Use of practical assessments that involve less 'aggressive' and less 'physical' sporting activities. Use sports that both sexes can perform equally in.
- Reduce the entry requirements so that the subject is not so difficult to get in to.
- Promoting the subject widely at school.
- More female sporting role models.
- Targeting and interesting younger females.
- More activities that involve less risk.
- More active support from males.

How could University Bursaries Physical Education attract more **female** students?

Male Responses

- Emphasis on less male-dominated sports.
- Less practical more theory.
- Topics that are more interesting to females.
- Offer modules on popular female sports e.g. netball.
- Offer activities that build females' confidence.
- Greater leniency on the practical assessments.
- Less competition in sport with the males.
- Modules on healthy body maintenance.
- Get rid of the typical female stereotype that females are not physical.
- Encourage female participation by saying they don't have to be good at sport.
- Promoting the course for females.
- Female Head of Physical Education Department.
- Female only classes.
- Less contact sports.
- Get the females' boyfriends to join in.
- Reduce the course costs.
- Easier sports.

How could University Bursaries Physical Education attract more **male** students?

Female Responses

- Less written work and a reduction in the theory components. Males are put off by the amount of written work in assignments.
- Greater emphasis on physically demanding male-orientated sports.
- Sports with male role models students can identify with.
- More practical assessments based on strength and aggressive sports.
- Options to choose sports males are good at.
- Make the entry requirements difficult.
- Advertise Physical Education courses.
- Encouragement from teachers.

How could University Bursaries Physical education attract more **male** students?

Male Responses

- Less written work.
- More practical activities.
- Offer more physically challenging activities.
- Reduce the number of assignments.
- Greater variety of fun sport.
- Highlighting the fact that University Bursaries Physical Education is not as theory-based as Sixth Form Certificate.
- Reduce the costs of participating in the course.
- Offer a variety of sports in the Sports Module.

The Benefits of University Bursaries Physical Education.

Participation in University Bursaries Physical Education benefits students general academic success:

Perception	Female		Male		Row Total %	
Agree	(13)	46.4%	(15)	53.6%	(28)	44.4%
Disagree	(8)	61.5%	(5)	38.5%	(13)	20.6%
Unsure	(8)	36.4%	(14)	63.6%	(22)	34.9%

Number of missing observations: 0. Result is not significant.

Participation in University Bursaries Physical Education helps students develop confidence in themselves:

Perception	Female		Male		Row Total %	
Agree	(29)	48.3%	(31)	51.7%	(60)	95.2%
Disagree	(0)	0.0%	(1)	100.0%	(1)	1.6%
Unsure	(0)	0.0%	(2)	100.0%	(2)	3.2%

Number of missing observations: 0. Result is not significant.

Participation in University Bursaries Physical Education increases students involvement in other school activities:

Perception	Female		Male		Row Total %	
Agree	(22)	42.3%	(30)	57.3%	(52)	82.5%
Disagree	(4)	80.0%	(1)	20.0%	(5)	7.9%
Unsure	(3)	50.0%	(3)	50.0%	(6)	9.5%

Number of missing observations: 0. Result is not significant.

Participation in University Bursaries Physical Education makes students popular with their peers:

Perception	Female		Male		Row Total %	
Agree	(1)	12.5%	(7)	87.5%	(8)	12.9%
Disagree	(19)	57.6%	(14)	42.4%	(33)	53.2%
Unsure	(8)	38.1%	(13)	61.9%	(21)	33.9%
Column Total	(28)	45.2%	(34)	54.8%	(62)	100.0%

Number of missing observations: 1. Result is significant.

Participation in University Bursaries Physical Education results in students having high educational aspirations:

Perception	Female		Male		Row Total %	
Agree	(11)	52.4%	(10)	47.6%	(21)	33.9%
Disagree	(9)	47.4%	(10)	52.6%	(19)	30.6%
Unsure	(8)	36.4%	(14)	63.6%	(22)	35.5%
Column Total	(28)	45.2%	(34)	54.8%	(62)	100.0%

Number of missing observations: 1. Result is not significant.

Participation in University Bursaries Physical Education provides opportunities for students to socially mature:

Perception	Female		Male		Row Total %	
Agree	(15)	40.5%	(22)	59.5%	(37)	58.7%
Disagree	(9)	100.0%	(0)	0.0%	(9)	14.3%
Unsure	(5)	29.4%	(12)	70.6%	(17)	27.0%
Column Total	(29)	46.0%	(34)	54.0%	(63)	100.0%

Number of missing observations: 0. Result is significant.

Participation in University Bursaries Physical Education builds character:

Perception	Female		Male		Row Total %	
Agree	(23)	43.4%	(30)	56.6%	(53)	85.5%
Disagree	(2)	66.7%	(1)	33.3%	(3)	4.8%
Unsure	(4)	66.7%	(2)	33.3%	(6)	9.7%
Column Total	(29)	46.8%	(33)	53.2%	(62)	100.0%

Number of missing observations: 1. Result is not significant.

Participation in University Bursaries Physical Education develops students' independence:

Perception	Female		Male		Row Total %	
Agree	(25)	47.2%	(28)	52.8%	(53)	85.5%
Disagree	(1)	25.00	(3)	75.0%	(4)	6.5%
Unsure	(3)	60.0%	(2)	40.0%	(5)	8.1%
Column Total	(29)	46.8%	(33)	53.2%	(62)	100.0%

Number of missing observations: 1. Result is not significant.

Participation in University Bursaries Physical Education develops students' sporting talent:

Perception	Female		Male		Row Total %	
Agree	(20)	42.6%	(27)	57.4%	(47)	75.5%
Disagree	(6)	54.5%	(5)	45.5%	(11)	17.7%
Unsure	(3)	75.0%	(1)	25.0%	(4)	6.5%
Column Total	(29)	46.8%	(33)	53.2%	(62)	100.0%

Number of missing observations: 1. Result is not significant.

Participation in University Bursaries Physical Education influences students' occupational aspirations:

Perception	Female		Male		Row Total %	
Agree	(13)	43.3%	(17)	56.7%	(30)	48.4%
Disagree	(7)	63.6%	(4)	36.4%	(11)	17.7%
Unsure	(8)	38.1%	(13)	61.9%	(21)	33.9%
Column Total	(28)	45.2%	(34)	54.8%	(62)	100.0%

Number of missing observations: 1. Result is not significant.

Are there any other benefits to be gained from participation in University Bursaries Physical Education?

Female Responses

- Chance to work hard, set high goals and work towards high aspirations.
- Awareness of personal fitness.
- Better knowledge of the body and its functions.
- Lifestyle Education.
- Better health.
- Opportunities to experience new activities.
- Possibility of high grades.
- High levels of social interaction.
- Development of new skills.
- Challenging outdoor pursuits.
- Learning time management skills.
- Learning to balance work demands with social life.
- Developing personal confidence levels.
- Learning to utilise individual abilities.
- Inspired learning.

Male Responses

- Encourages students to be outgoing and ambitious, to set and achieve goals.
- Knowledge of body functions and how to look after the body.
- Good health and well-being later in life.
- Social aspects, building strong friendships.
- Building self confidence in any sporting area.
- Learning new skills.
- Encouragement to continue activities later in life.
- No external exams and no end of year study.
- Excellent opportunities to spend time with people in and out of school associated with sport.
- Provides a reality check or gauge by which you can judge how sportsminded you are.

What aspects of University Bursaries Physical Education would you like most changed?

Female Responses

- No internal assessment but an exam at the end of the year.
- Assessment tasks need to be clearly outlined and explained fully.
- Assessment marking schedules need to be clearer and fairer.
- No national moderation resulting in the scaling down of marks.
- Assignments made smaller.
- Reduce the number of written assignments.
- Reduce the amount of repetitious information that is required for assignments.
- No Personalised Exercise Programme assignment because it becomes too long and boring.
- No assessment on the Personalised Exercise Programme because it does not cater for students with health problems.
- Increase the number of Modules undertaken in a year. Three modules in a year become too long and boring.
- More practical time.
- Greater involvement of teachers.
- No 16km run.
- More marks for natural fitness talent.
- Students should be given more opportunities to organise their own sports for study.

Male Responses

- The number of assignments reduced.
- Improved marking schedules.
- Less emphasis on the quantity of written work and more emphasis on the quality of written work.
- Internal assessment replaced by an external exam.
- Reduce the great number of 5% assignment tasks. They are work intensive for very few marks.
- Too many assignments in a close proximity to one another.
- Assessment tasks conflict with assessments due in many other subjects.
- The time-consuming theory components.
- No 16km run.
- Assignments need to ne nationally moderated.
- Opportunities to use personal sporting interests in the theory components of the course.
- Inclusion of a Sports Management Module.
- Don't do two skill development modules in a year e.g. golf and kayaking.
- The course needs to be more flexible. It is too structured.
- More fun sports and fun activities.
- More opportunities to unwind and release built up tension.

What aspects of University Bursaries Physical Education do you like most?

Female Responses

- The balance of theory with practicals.
- Internal Assessment.
- No final exam.
- Practicals.
- Challenging and interesting new sports.
- Time outside the classroom.
- Personalised Fitness Programme.
- Assignment tasks broken down into many smaller tasks.
- Skill development done at own pace.
- Interesting work done in groups.
- Co-operation of all the class to get things done.
- Anatomy and physiology studies.
- Social and fun aspects and the new experiences we have shared.
- Recreational fun periods when there is a break from doing modules.
- Physical challenges and the excitement of achieving set goals.
- Practical work in the Leisure Module.

Male Responses

- Practical aspects of Physical Education.
- Trips away eg. Ski Trip and Canoe Trip.
- New sporting experiences.
- Skill development.
- Education outside the classroom.
- Outdoor Education Module.
- The course variety.
- Friendships that are built up.
- Learning new skills and applying them in a variety of challenging settings.
- Personal satisfaction in gaining high marks.
- The mixture of theory and practical sessions.
- Sport components of the course.
- Team Building Camps.
- Learning new sporting concepts.
- Personalised Exercise Programme.
- Course content is not teacher orientated like other subjects.
- Course is relevant and worthwhile to the individual e.g. Fitness Studies.
- Recreational fun periods when there is a break from doing modules.

Teachers' Perceptions Questionnaire

Teachers responded to a five page questionnaire consisting of eleven questions that attempted to gauge their perceptions of University Bursaries Physical Education.

Teacher Sample

Total Number of Participants	Female Participants	Male Participants
27	11	16

Are Physical Education and sport different?

27 participants said Physical Education and sport were different.

Which of the factors below have contributed towards University Bursaries Physical Education's inclusion in the senior school curriculum?

The need for a wider variety of subjects.

Opinion	Cases	%
Strongly Disagree	(0)	00.0%
Disagree	(3)	11.1%
Agree	(14)	51.9%
Strongly Agree	(10)	37.0%

Valid cases (27); Missing cases (0).

The larger numbers of students returning to secondary school.

Opinion	Cases	%
Strongly Disagree	(1)	3.7%
Disagree	(4)	14.8%
Agree	(18)	66.7%
Strongly Agree	(4)	14.8%

Valid Cases (27); Missing cases (0).

The subject is seen as being as equally as important as other subjects.

Opinion	Cases	%
Strongly Disagree	(0)	00.0%
Disagree	(9)	33.3%
Agree	(8)	29.6%
Strongly Agree	(9)	33.3%

Valid Cases (26); Missing cases (1).

The subject promotes an understanding of the positive value of physical activity.

Opinion	Cases	%
Strongly Disagree	(0)	00.0%
Disagree	(2)	7.4%
Agree	(9)	33.3%
Strongly Agree	(15)	55.6%

Valid Cases (26); Missing cases (1).

Physical Education is a legitimate educational activity.

Opinion	Cases	%
Strongly Disagree	(0)	00.0%
Disagree	(3)	11.1%
Agree	(6)	22.2%
Strongly Agree	(17)	63.0%

Valid Cases (26); Missing cases (1).

Physical Education can be justified in its own right.

Opinion	Cases	%
Strongly Disagree	(0)	00.0%
Disagree	(1)	3.7%
Agree	(9)	33.3%
Strongly Agree	(17)	63.0%

Valid Cases (27); Missing cases (0).

The subject makes a positive statement about the relationship between theory and practice.

Opinion	Cases	%
Strongly Disagree	(0)	0.00%
Disagree	(3)	11.1%
Agree	(10)	37.0%
Strongly Agree	(13)	48.1%

Valid cases (26); Missing cases (1).

The Mann-Whitney nonparametric test was used to compare these scores. The higher the rank, the more agreement there was. The level of statistical significance is less than 0.05.

Question	Female	Male	s. f
The need for a wider variety of subjects.	Cases (11) Mean 11.4 Sum 122.5	Cases (16) Mean 15.97 Sum 255.5	n.sf
The larger number of students returning to secondary school.	Cases (11) Mean 11.27 Sum 124.0	Cases (16) Mean 15.88 Sum 254.0	sf
The subject is seen as being as equally as important as other subjects.	Cases (11) Mean 12.73 Sum 140.0	Cases (15) Mean 14.07 Sum 211.0	n.sf
The subject promotes an understanding of the positive value of physical activity.	Cases (11) Mean 15.73 Sum 173.0	Cases (15) Mean 11.87 Sum 178.0	n.sf
The subject is a legitimate educational activity.	Cases (11) Mean 14.45 Sum 159.0	Cases (15) Mean 12.80 Sum 192.0	n.sf
The subject can be justified in its own right.	Cases (11) Mean 15.45 Sum 170.0	Cases (16) Mean 13.0 Sum 208.0	n.sf
The subject makes a positive statement about the relationship between theory and practice.	Cases (11) Mean 14.18 Sum 156.0	Cases (15) Mean 13.0 Sum 195.0	n.sf

Other factors that participants think may have contributed were gender ranked:

Female Responses

- Parents have demanded to have the subject available.
- Interest level and enthusiasm of students was high.
- The Principal encouraged the value of the subject as being most worthwhile.

Male Responses

- High standards of professionalism displayed by the subject associations.
- Strong traditions of Physical Education and sport in the school.
- Physical Education Department initiated senior courses in Physical Education a decade a go. Therefore a very strong subject basis.

Which of these factors have contributed towards University Bursaries Physical Education's effort to gain academic recognition in the school curriculum?

Factor	Female		Male	
	Cases	%	Cases	%
Physical Education is not taken seriously.	(7)	46.7%	(8)	53.3%
Physical Education is a peripheral subject.	(6)	40.0%	(9)	60.0%
Physical Education does not provide appropriate knowledge and learning experiences.	(4)	50.0%	(4)	50.0%
Physical Education is a non academic subject.	(9)	47.4%	(10)	52.6%
Physical Education is of marginal importance.	(6)	42.9%	(8)	57.1%
No examinations for Physical Education.	(5)	71.4%	(2)	28.6%
Internal assessment procedures raise concern over how educational standards are to be maintained.	(5)	55.6%	(4)	44.4%

Percents and totals based on respondents.

(24) Valid cases. (3) Missing cases.

Other significant factors highlighted by gendered ranked response were:

Female Responses

- In schools with a strong external examination focus there is a fear of Physical Education as a soft option.
- The internal assessment and national moderation aspects result in a scaling down of marks which devalue the course.
- Careers in sport and recreation have become more abundant, sport has a higher marketable profile and jobs associated with the fitness industry pay well.
- Physical education is for everyone not just the 'sport sillys'.

Male Responses

- Attracts the generally less motivated or less academic students.
- Communities are rapidly realising the importance that Physical Education plays in leisure and society.
- There is a difficulty in competing against the traditional academic subjects that are seen to give lucrative careers eg. medicine and law.
- Attitude of employers who are more likely to look for success in the traditional subject areas.
- Assessment procedures will always be difficult.
- Physical Education is an academic subject.

What is your view of University Bursaries Physical Education as an academic mainstream subject in the senior school curriculum? A gendered and ranked breakdown of responses reveals:

Female Response

- Key learning area with very positive benefits. An essential learning area.
- Legitimate area of study.
- Knowledge must not be withheld categorised or labelled as more or less important than other knowledge.
- Important area of study in the understanding of the physical nature of the human body and associated themes.
- Positive experiences are provided.
- Selected as any other subject by students because of its enjoyment and the opportunity to do well.
- Valuable subject that incorporates a wide range of varying components.
- Provides a balance to the general curriculum.
- A lifestyle related subject.
- Allows students with special abilities in sport to pursue their interests at a high level.
- Leads to sports related career paths.

Male Response

- A subject of equal academic importance.
- Eclectic subject that incorporates the elements of science, arts, mathematics and the social sciences.
- High level of commitment is required.
- High costs associated with the course have influenced students' choices.
- Caters for students with unique interests and abilities in sport.
- A valuable and worthwhile subject.
- Motivating subject.
- Useful range of skill learning and building activities.
- Many transferable skills learned such as organising, planning, and communicating.
- Provides a sound basis for career opportunities in the health and fitness industry.
- Students are highly motivated.

- A worthwhile subject.
- An academic course that combines the intellect with practical aspects of Physical Education and sport.
- As equally as challenging as other subjects.
- A well balanced course because of the theory and practical combinations.
- Adds depth to senior class subjects.
- The course requires a high level of work which is not always at a high academic level.
- Requires a high level of sporting ability and intelligence.
- Enables students to extend their interest and understanding of Sixth Form Certificate Physical Education.
- Not a 'soft option'.
- Important part of the school curriculum.
- Facilitates a range of verbal, written and physical communication skills.

- Good course for a career in the emerging field of Sports Medicine.
- Studies in sport, recreation and leisure have made an impact on tertiary education. This course provides valuable basic understanding for future study.
- Very academic subject.
- Difficult to obtain high grades.
- Valuable lifestyle subject in preparing students for their future health and fitness.
- Relevant lifestyle and knowledge subject.
- Not happy with the internal assessment.
- Schools are often too vocationally orientated, this subject provides essential lifeskills.
- Students opt for the course with false expectations.
- Many aspects of the course are beyond Form Seven level.
- Shouldn't be there a subject of no value.

Teachers ranked the importance of the ten following reasons they thought students gave for participating in University Bursaries Physical Education. 1=main reason; 10=least reason. The Mann-Whitney nonparametric test was used to compare these scores. The lower the rank, the more importance there was. If the probability of the test is less than 0.05 then there is a significant difference.

Question	Female	Male	s. f
The subject is seen as a non-academic subject.	Cases (10) Mean 12.60 Sum 126.0	Cases (14) Mean 12.43 Sum 174.0	n.sf
The subject is of high personal interest.	Cases (10) Mean 12.70 Sum 127.0	Cases (16) Mean 14.0 Sum 224.0	n.sf
Students regard the subject as a 'fill-in' subject.	Cases (10) Mean 10.85 Sum 108.5	Cases (14) Mean 13.68 Sum 191.5	n.sf
Students feel they can achieve a better mark in Physical Education than in other subjects.	Cases (10) Mean 15.40 Sum 154.0	Cases (14) Mean 10.43 Sum 146.0	s.f
Students intend to work in a related field such as physiotherapy.	Cases (10) Mean 13.10 Sum 131.0	Cases (14) Mean 12.07 Sum 169.0	n.sf
The subject is viewed as challenging.	Cases (10) Mean 11.80 Sum 118.0	Cases (15) Mean 13.80 Sum 207.0	n.sf
Students gain credit for activities not acknowledged in a final examination.	Cases (10) Mean 10.55 Sum 105.5	Cases (14) Mean 13.89 Sum 194.5	n.sf
Students have completed Sixth Form Certificate Physical Education.	Cases (10) Mean 10.45 Sum 104.5	Cases (14) Mean 13.96 Sum 195.5	n.sf
The subject caters for natural sporting talent.	Cases (10) Mean 14.0 Sum 140.0	Cases (15) Mean 12.33 Sum 185.0	n.sf
The practical component of the course allows students with limited academic abilities a chance to excel.	Cases (10) Mean 12.95 Sum 129.5	Cases (14) Mean 12.18 Sum 170.50	n.sf

What characteristics best describe a talented <u>female</u> participant in University Bursaries Physical Education? Teachers gave the following characteristics.

Female Responses	Male Responses
Enthusiastic, committed, outgoing, leader, self-motivated, confident, conscientious, adventurous, open, active, ambitious, willingness to succeed, driven, determined, communicative, balanced, challenged, cheerful, positive, focused, healthy, athletic, intelligent, high interest, highly motivated, natural sport talent, persevering, successful, independent, well organised, learns new skills quickly, initiative, teamsperson, sociable, involved with children's sports, competent.	Motivated, outgoing, committed, disciplined, intelligent, co-operative, skilful, all round sportsperson, scholar in sciences, physically co-ordinated, hardworking, organised, above average academic ability, pride in work, confident, sporting background/interest, performs well in other subjects, uniquely specific sports interests, physically fit, interest and ability in related subjects, enthusiastic, energetic, decision-maker, decision-taker, desire to do well, participate, co-operate, socially able, unselfconscious, self motivated, studious, thorough, apply theory to practice, apply ideas and produce own concepts based on acquired knowledge, high ability in practical work rather than theory work.

What characteristics best describe a <u>talented male</u> participant in University Bursaries Physical Education? Teachers provided the following characteristics.

Female Responses	Male Responses
Enthusiastic, committed, outgoing, leader, self-motivated, confident, conscientious, open, active, ambitious, willingness to succeed, drive, determined, communicative, balanced, challenged, cheerful, positive, focused, healthy, athletic, intelligent, ability in theory work, high interest, highly motivated, natural sport talent, persevering, successful, independent, well organised, learns new skills quickly, initiative, teamsperson, sociable, involved with children's sports, competent.	Motivated, outgoing, committed, disciplined, intelligent, co-operative, skilful, all round sportsperson, scholar in sciences, physically co-ordinated, hardworking, organised, above average academic ability, pride in work, confident, sporting background/interest, performs well in other subjects, uniquely specific sports interests, physically fit, interest and ability in related subjects, enthusiastic, energetic, decision-maker, decision-taker, desire to do well, participate, co-operate, socially able, unselfconscious, self motivated, studious, thorough, apply theory to practice, apply ideas and produce own concepts based on acquired knowledge strong.

All participants provided identical characteristics to describe both talented females and talented males with four exceptions:

i) A Female participant responded that to be adventurous was a characteristic of a talented female but did not indicate the same characteristic for a male.

ii) A male participant responded that to be strong was a characteristic of a talented male but did not indicate the same characteristic for a talented female.

iii) A female participant responded that a characteristic of a talented male was ability in theory work but did not indicate the same characteristic for a talented female.

iv) A male participant responded high ability in practical work rather than theory work was a characteristic of a talented female but did not indicate the same characteristic for a talented male.

What do you think is the gender distribution in University Bursaries Physical Education?

Gender Distribution in University Bursaries Physical Education.	Female Responses Cases	Male Responses Cases
More males than females	(7)	(6)
More females than males	(0)	(2)
About the same	(2)	(4)
Don't know	(2)	(4)

The reasons given by gendered ranked response were:

Female Responses

- Males see it as a 'soft option'. Females see it as non-academic.
- Females still foster feelings of inadequacy.
- Balance of theory and practical appeals to both gender.
- About the same because in co-educational schools students are encouraged equally.
- Topics are of more interest to males.

Male Responses

- Still perceived as a male dominated subject in which you have to be good at sport.
- Emphasis on competition discourages more females than males.
- Higher percentage of females drop out of Physical Education in schools from approximately fifteen years of age.
- Females that have all the qualities to be successful but are not outstanding in sport are unlikely to participate.
- Emphasis on male contact sport.

How could University Bursaries Physical Education attract more females? The gendered ranked responses were:

Female Responses

- Leadership roles in the outdoors.
- Programes in Physical Education for females commencing at a younger age.
- Better advertising through the Course Prospectus of the prerequisites and expectations.
- Ensure that the curriculum is better understood.
- Health and lifestyle aspects are promoted.
- Use high profile of sport and Physical Education to capitalise on the positive influences.
- Teacher enthusiasm.
- Use of top scholars in the subject to speak at assemblies or at a Course Options Evening to promote the subject.
- Promote the possible range of career avenues and options.
- Change the name of the subject to encourage more females e.g. Seventh form Sports Science
- Emphasise the longterm benefits.
- Promote as a valid academic subject.
- Strong female teacher role models who are highly successful in their sports.
- Games relevant to female interests and needs.
- Improve the facilities to cater for females.
- Introduce elements to the curriculum that will stimulate and

Male Responses

- Female role models.
- Females in Physical Education are on an equal par with those exhibiting talent in all other subject areas.
- Push the subject as well rounded: physical, mental and social aspects.
- Stress the attention given to gender equity issues in Physical Education.
- Increasing the numbers of recreational courses for female only students in senior school Physical Education.
- Use of top scholars in the subject to speak at assemblies or at a Course Options Evening to promote the subject.
- Offer modules in Dance and Movement as alternatives to Sport or Outdoor Modules.
- Teach males to be less competitive by stressing the course is not sport based but has challenging intellectual elements.
- Provide simple breakdowns of the success rates and grades achieved by females in this subject.
- Emphasise the career elements that involve working with people.
- Reduce the course costs.
- Emphasise the value of versatile physical skills rather than the emphasis on strength and power.

- High but multi-varied activity based course content. Shorter modules to provide a range of practical experiences especially in leadership and organisational roles for females.
- Cater for females in the Junior School (3, 4 th Forms).

- Information on the academic and assessment aspects of the theory components that females can excel in.
- Cater for females in the Junior School (3, 4 th Forms). Introduce elements to the curriculum that will stimulate and continue to sustain young females interests so senior Physical Education is a viable option.

How could University Bursaries Physical Education attract more males?

Female Responses

- Teambuilding and individual outdoor challenges to develop practical competencies.
- Dynamic Physical Education Department that campaigns for t their subject and attracts candidates.
- Educate parents that Physical Education is a legitimate academic subject with a range of University Course available.
- Dispel the image that the subject is non-academic.
- Advertise the excellent career opportunities available in Physical education, sport, recreation and leisure.

Male Responses

- Positive role models.
- Push Physical Education as an academic, physical and social development subject.
- Do away with the traditional 'jock image' of Physical Education.
- Proactive, professional and progressive Physical Education Departments.
- Relevant activities to meet the needs and interests of males.
- Emphasise the challenging intellectual components.
- Ensure classes are not dominated by aggressive 'sports stars'.
- Male only Physical Education Classes.

**Would you advise a student to take University Bursaries
Physical Education?**

22 of the 27 (81.5%) participants stated they would advise students to take
University Bursaries Physical Education.

Female Responses

- Definitely if a student wishes to pursue a career in sport.
- Definitely if a student is keen and enthusiastic.
- If students are interested in health, organised and have a knowledge of themselves and their physical capabilities then I would advise this course.
- Yes, especially because the course allows for theory and practical development .
- Opportunities to study new subjects indepthly.
- If students have an interest in Physical Education and talent in sport coupled with a desire to do well, it is an excellent subject.
- A well balanced course.
- Appeals to the 'go getters' in the school.
- Offers a range of topics that are generally of high interest to the physeders.
- Valuable subject for any student particularly when they leave school because they will know how to use their leisure and recreation time productively. Teaches life skills.
- Develops a sound mind and sound body.

Male Responses

- Offers a wide range of skills that can be applied to a possible career but also to students personal life.
- Provides opportunities for community involvement.
- Promotes self learning and the importance of healthy lifestyles.
- Opportunities to study new subjects indepthly.
- Students must be guided by their career aspirations, their abilities and their interests.
- Teaches an excellent range of associated skills such as organisation and communication which is relevant to a career.
- Beneficial in developing a well rounded set of skills.
- Offers opportunities to boost self confidence through achievement of physical tasks.
- Recreation and leisure is a growing industry.
- Excellent subject in conjunction with Business Studies.
- Promotes physical and mental alertness.
- Depends on the individual. I would recommend the course if it matches their abilities, future plans, mental aptitude and their future career options.

- Teaches students about organisation, the importance of keeping physically active and also offers indepth experience of new sports.
- Leads to a range of career options in many associated fields.
- Provides adventure in a safe environment.
- Opens the doors to University qualifications.

- I would recommend the course but have concerns over the demands of the internal assessment. Over assessed!
- Yes, I would strongly recommend the course for any student intent on following work or an interest in a related or direct sport, recreation. Physical Education or leisure field.
- Yes, if the course was organised, structured and professionally administered and assessed.

Chapter Five: Discussion

The purpose of this chapter is to discuss the data presented in the results' chapter and relate it to the literature review and theories underpinning this research.

Discussion centres on the following topics:

A.   **Gender Issues in University Bursaries Physical Education.**

B.   **Participation Factors in University Bursaries Physical Education.**

C.   **Current Perceptions of University Bursaries Physical Education.**

D.   **Benefits of University Bursaries Physical Education.**

E.   **Background Information and Experiences of Physical Education.**

F: **Limitations of the Study.**

G: **Further Research.**

A.   Gender Issues in University Bursaries Physical Education

Several important research findings have emerged in this study to confirm more equitable treatment of females. For years, researchers argued that in co-educational settings, equal learning or equal opportunities were demonstrably insufficient (Scraton, 1990, 1992) and in favour of males (Leaman, 1986). This study has shown students perceive females and males receive the same amount of attention, gain the same amount of satisfaction, and get the same encouragement in University Bursaries Physical Education. Furthermore, females and males were as motivated and equally as successful as one another. The majority of participants surveyed, believed gender was not the issue because everything evolved around the uniqueness of the individual and not what sex they were. These results clearly indicate students perceived neither gender grouping received preferential treatment nor were they disadvantaged as a group in their University Bursaries Physical Education environment .

To understand the impact of these findings, it is important to take a closer look at what students and teachers believe are the ways in which more

equitable treatments of females were being achieved. Teachers in this study have stated Physical Education is breaking through the conservatism that has for years plagued pedagogical practices to provide an equitable climate where the physicality experiences for both sexes can flourish. In their pursuit of an equitable environment, teachers maintain they continue to navigate their ways through many complex issues and are using inclusive teaching behaviours in co-educational settings with mixed-gender groupings to deliver equitable opportunities. It was reported that effective curriculum management, coupled with non-discriminatory strategies that counter sexism, had performed a vital role in addressing equity issues.

In this study, five areas of traditional gender inequality in Physical Education (Ryan, 1984) were revisited and it was found that there were places where improvements were positively affecting females' participation in University Bursaries Physical Education. These were curriculum content, teacher behaviour, class atmospheres, student self-perceptions and changing societal attitudes towards Physical Education and sport in general. Results in this study show that the University Bursaries Physical Education curriculum delivered in those co-educational environments, has been 'gender-fair' and 'gender-sensitive' to the needs of females. In addition, the curriculum has been skilfully integrated so that females can fully recognise their own potential, especially in encouraging a revisioning of their bodies as self-directed, strong and skilled. The cultural constraints that revolve around the incongruity of being female and being an athlete were being contested. The visible levels of female participation in those co-educational surveyed, is indicative of a welcomed departure from the traditionally upheld expected behaviours underpinning Physical Education and sport participation (Holland & Andre, 1994).

The small sample of females in this study reported a differentiated curriculum diet was catering for their interests and developing their confidence. They highlighted they were competing, excelling, enjoying, thriving and surviving in University Bursaries Physical Education. Specifically, it was perceived as a subject where they could use their abilities, do well and gain high grades. University Bursaries Physical Education was identified by females as a subject where they were on an equal footing with

males and the subject encouraged them to be unafraid of taking risks and using their strengths and skills. Furthermore, it was a subject that strongly interested them. Females maintained they were earning recognition and reward on the basis of merit, rather than what Talbot (1990) and Scraton (1992) would describe as ascriptive, categorical gender indifferences.

Results of this study also show that the curriculum and its physical educators appear to harbour fewer preconceived or discriminatory ideas about the physical abilities of females. Teachers maintain they continue to refute a raft of lingering medical barriers, and furthermore, confront a catalogue of myths and stereotypes that characterise gender. Teachers strived to develop 'gender-fairness' in and out of class and believe they have created a 'gender-sensitive' environment where both genders feel safe to explore and develop their abilities. This safe environment was described by teachers as being respectful of females' abilities and presented females with better chances to learn, develop self-esteem and self-confidence.

Vertinsky (1992) states that beliefs influence teacher expectations for students, and expectations influence teacher interactions. This study demonstrated the changing attitudes and behaviours of physical educators did promote an environment that attracts females to exercise. Teachers identified the following teaching strategies used to promote 'gender-fair' and gender-sensitive' University Bursaries Physical Education classes. First, they were recognising the equal contributions made by females and males. Second, there was an awareness of the gender biases that exist within the school culture. Third, teachers were increasing their awareness and attention to class interaction patterns in order to make a genuine effort to include females in all aspects of activities. Fourth, teachers avoided stereotypical phrases, used inclusive language, interrupted sexist language and other derogatory comments and behaviours by students. Fifth, teachers were understanding their personal beliefs about females and males, and the impact these beliefs have on participation. Sixth, teachers were dividing their time equitably between females and males and observing teacher location during activity time.

Teachers also report they have been challenged in pursuing a 'gender-fair' curriculum. Teachers claim they are reflective and that they continue to

develop, implement and evaluate the Physical Education curriculum so that it is fair. The way in which the relevance of the content was integrated to include the experiences of females was especially commented on by students. The curriculum recognised the athletic achievements of females and the content was integrated in ways that reflected female interests. Special modules were included that displayed the physicality achievements of females in sport. This served as a means of portraying the fact that successful female athletes are becoming the rule and not merely the exception. An additional example of content integration teachers identified as a positive move in a 'gender-fair' curriculum, was to drop controversial male dominated activities and abandon teaching programmes that fostered solely masculine interests. Mixed-gender groupings in those schools surveyed participate in a smorgasbord of activities that focus on non-competitive, lifetime and leisuretime sports such as golf, tennis, badminton, squash, volleyball, distance swimming, walking and jogging.

Gender prejudices have been reduced by confronting directly the students' stereotypes about females in Physical Education and sport and the males in Physical Education and sport. In addition, teachers used 'gender-fair' pedagogy to maximise teacher-time, participation, practice-time, and facility and equipment usage for all students. Teachers felt they were committed, persistent and consistent in their approach to delivering equitable opportunities for females. Furthermore, University Bursaries Physical Education teachers used co-operative strategies for learning to enable each member of the class to get along with students from diverse groups. Generally, all participants surveyed indicated that females and males worked co-operatively. There was minimal agreement in this study indicating females as a group have a preference for co-operative styles of learning as suggested by Scraton (1991) and Vertinsky (1992). Co-operative learning groups were used widely to learn motor skills, practice specific sport skills, learn games and rules and referee student play. Teachers stated it was at the centre of this style of learning that team building and co-operation enhanced the activities where females and males of differing levels of abilities learned to get along and assist one another. This was particularly evident in the Outdoor Education module which often placed the skilled and unskilled students in an

environment where neither had experience, thus making the students equal in their tasks. Teaching social development skills such as honesty, fair play and respect also complemented the team building and co-operation process.

The results of this survey did show that males were more competitive than females. Overall, responses indicated that males were naturally born or conditioned to possess competitive instincts. It was an integral part of their nature. Physical activity was perceived by those students involved in this study to provide opportunities for males to release their competitive drives and instincts. However, it was also highlighted that some females were equally as competitive and in some cases more competitive. Overwhelmingly, males as a group did appear to thrive in sporting experiences that afforded them ample opportunities to be physically expressive, especially in displaying their strength, power, skill ability and general masculinity. Students felt the same competitive urge was not as evident in the theoretical components of the course although there were some exceptions with the top male students. It was remarked that these male students were very competitive and challenged the females in the theoretical aspects of the course.

The atmosphere within University Bursaries Physical Education classes was identified as a significant determinant of positive attitudes by females and males alike. Both females and males sought enjoyment or fun from their Physical Education classes. Classes offered time outside the classroom, recreational fun periods that provided relief from classwork, challenging new experiences, interesting work done in small groups and the co-operation of all the class to get things done.

Sampson (1991) cast doubt about the comprehension and meaningful long term changes and equality for females in Physical Education. However, if we acknowledge that sexist attitudes and practices have traditionally disadvantaged females, and accept the findings of this study that suggests females are experiencing quality outcomes, then as Marsh (1980) believes, it is important to understand how equity issues have been addressed. Females comment on the widening repertoire of new sports, new skills, new knowledge, new experiences, new challenges and new settings offered by

their Bursaries' course participation. Sedgwick (1989) affirms that such changes in the senior Physical Education curriculum are encouraging.

A key to the active and healthy lifestyle concept in University Bursaries Physical Education is the opportunity for females to participate in a balanced programme including a wider variety of activities with the objective of achieving a functional level of motor skills and physical fitness. Central to this active and healthy lifestyle philosophy to improve females' levels of physical activity, and physical fitness has been the emphasis on the promotion and assessment of health-related lifestyles. According to Lenskyj (1987), females attach great importance to certain health and fitness activities especially if these activities are to enhance physical appearance. Today's females continue to be exposed to an increasingly slender standard of attractiveness since they were children and have learned to equate thinness with femininity and attractiveness, hence popularity with their peers. Physical educators in those schools surveyed were anxious to encourage and promote physical activity among females. It appears they have been cautious in not responding too readily in promoting certain activities that will appeal only to females and inevitably reinforce the culture of femininity (Scraton, 1986a, 1986b). Faced with the strength of the media and abundant messages about females' bodies from so many avenues, physical educators stated they continued to face the formidable task in addressing females' self-perceptions of body image.

Teachers responding to recent trends in the fitness industry have proactively communicated in their 'gender-fair', 'gender-sensitive' environments encouraging initiatives whereby females and males talk about their bodies, how they function, about their sizes and shapes and the different ways their bodies move. The compulsory Lifestyle Concepts module in University Bursaries Physical Education has provided numerous opportunities for both genders to discuss the dominant messages that females and males get about their bodies. In particular, physical educators believe they are assisting females to interpret, discuss and sift out useful, healthy and empowering models in the media in an attempt to discard the destructive, anti-woman negative messages that Coakley (1994) says proliferate.

The enhancement of self-esteem integral to the active and healthy lifestyle curriculum, has been commonly expressed as a goal of University Bursaries Physical Education. This goal seeks to enrich all students' self-perceptions of their own worth and body satisfaction through Physical Education experiences and sport. From this study, the concept of student centred learning appears to be a promising step forward in pursuit of this important aim. Females are learning new skills, applying knowledge to practical situations, researching, reporting, presenting information, analysing data, analysing performance and learning to make valid judgements about particular situations in which they may find themselves. Raising females' self esteem has been an important step to improving outcomes for females in those schools investigated. Ryan (1984) has provided strong evidence to suggest that a project which improves females' participation in physical skills development will have beneficial flow-on effects in terms of self image, confidence and achievement in other areas of schooling.

Talbot (1990) questioned what could be gender fairer than treating all individuals the same and offering them the same programme? In those co-educational settings researched, females expressed that their participation was valued. They were accepted, self-fulfilled, independent and challenged. Females comment they are given greater credit for their skill, strength, power, determination, and technique and maintain they are experiencing the appropriate knowledge, skills, insights, attitudes and motivations that have enabled them to develop their abilities. Teachers conveyed they have gleaned increasingly more knowledge of pedagogy that provides strategies for use in mixed-gender groups where there are a wide range of abilities. The assumption behind integrated Physical Education classes explains Scraton (1990), was that they would be more equitable than gender segregated classes. However, the strategy of promoting equal opportunity by removing access barriers has been widely criticised by Vertinsky (1992), as having the effect of bringing about a greater loss of educational opportunities for females by limiting their participation, undermining their values and discounting their concerns. In general, few of the traditional sentiments of opposition expressed to co-educational classes were expressed by the informal group of physical educators interviewed. They were well acquainted with the

proclaimed difficulties in co-educational Physical Education but considered 'gender inclusive' practices had vastly more potential for countersexist practices than segregated programmes. Physical educators were mindful of the many criticisms of co-educational Physical Education stating that it was those very criticisms that informed their knowledge of the anticipated appropriateness of certain co-educational practices.

While these results and the sentiments expressed cannot be interpreted as confirming a nationwide view that all physical educators are adopting a 'gender-fair' and 'gender-sensitive' pedagogy in University Bursaries Physical Education, students' perceptions do suggest that there are equitable opportunities provided in those schools surveyed. Given these current perceptions and the enthusiasm shown among physical educators it appears that a 'teacher-sensitive' intervention is the answer to the traditionally acknowledged problem of sex stereotyping in Physical Education. The results of this study posit teachers' growing awareness of stereotypic assumptions and a conscientious usage of countersexist teaching strategies have influenced the curriculum delivery in a way that provides females with equitable opportunities.

Much hope will continue to be placed on the physical educator as pivotal to this educational and social reform. Kenway and Willis (1990) state that "enlightened and humane educators are to be the vanguard for a movement in which all individuals develop their full potential together in an atmosphere conditional positive regard" (p236). In this changing era of Physical Education both students and physical educators surveyed are looking at their world through new conceptual lenses, probing their own attitudes, beliefs, overt messages, learning and teaching experiences in an attempt to be a part of and create an equitable environment for females and males.

These research findings suggest that University Bursaries Physical Education is discontinuing to reinforce gender differences both overtly, in the activities offered, and covertly through the attitudes and reactions of those involved in policy and practice. Physical educators are reflecting on the changing context of Physical Education and the relevance of University Bursaries Physical Education for female participants. This is clearly a positive and promising step forward. While mixed-gender groupings have

generated a host of problems and criticism, it would appear that mixed classes observe a closer look to further remedy and reduce the gender gap. It is unclear whether as Scraton (1986) believes, contemporary Physical Education remains underpinned by tradition and an ethos informed by sexist ideologies.

Certainly in those schools examined, attention to issues of gender equity in policy, programming and practice has changed the way in which Physical Education and sport in those schools was organised, promoted, played and portrayed. Physical educators have realised that a lack of support for females in Physical Education leads to a lack of interest, and as Lenskji (1987) states, a lack of interest leads to a lack of participation. Females are participating in University Bursaries Physical Education. They are motivated, successful, satisfied and encouraged to take full advantage of a wide range of activities and opportunities.

B. Factors Influencing Participation In University Bursaries Physical Education

The under-representation of females in Physical Education settings and the low status attributed to physical activity by a large percentage of females has been well documented by Sands (1991). Dyer (1986) suggests that while there have been some signs of positive attitude and behaviour change with regard to Physical Education activity and sport, there still appears to be a substantial under-representation of females in most comparative studies with males.

A postal survey was conducted in New Zealand by this researcher to determine the gender distribution of those students undertaking University Bursaries Physical Education in 1996 (Appendix A). The result was significant. In 53.2% of schools surveyed, males outnumbered females; in 21.4% of schools surveyed, females outnumbered males; and in 25.4% of schools surveyed, there were equal numbers of male and female. However, females are participating in University Bursaries Physical Education. Perhaps their visibility can be further highlighted by stating, that although in 53.2% of the schools surveyed, males did outnumber females in 46.8% of the schools surveyed, females either outnumbered males or were represented in equal numbers. This is not a substantial under-representation. This suggests that

female participation in University Bursaries Physical Education is promoted and encouraged.

Females involved in University Bursaries Physical Education in 1996 indicated that there were several indisputable factors related to their continued participation. First, Physical Education must continue to provide them with satisfaction, not only in a variety of activities, but also in their own sport ability, recognise that they prefer active activities to sedentary activities, encourage their independence, self assertiveness and provide them with adequate facilities and the necessary equipment and resources. Second, their continued participation was also influenced by the encouragement from significant others, especially parents. This latter factor was consistent with those outlined by Coakley (1987) and McPherson, Curtis and Loy (1989).

Students in this study ranked the importance of the following motives for their participation University Bursaries Physical Education. They were family influence, release of tension, improved appearance, friendship and health. These participatory motives differed from the findings reported by Gould et al., (1985), and Hester (1990) which rated the participatory motives in Physical Education as fun, getting regular exercise, skill development excitement and personal challenge as the primary reasons for participation. Females in this study ranked the motives of fitness, skill development and fun as the least important factors influencing their participation.

Sporting involvement begins in early childhood and is reinforced by parental encouragement (Snyder & Spreitzer, 1973; Greendorfer & Hasbrook, 1986). From the survey responses it appears that parents of the current generation may be more supportive of their female children than in former years. Females state parents encourage them to hold positive attitudes, have a strong sense of personal identity and value their highly aspiring sporting attitudes.

Focus group interviews found no evidence to support the belief that there are negative attitudes towards females who participate in what was previously termed a traditionally masculine pursuit. Females' participation in University Bursaries Physical Education has involved sacrifice and self-discipline due to the time consuming nature of the course, and was product-orientated. However, females talk about the joy of effort, the thrill of

competition and opportunities for recreation, relaxation and activities that release tension. The irony of previous times in Physical Education and sport, is that females have not had courses that help them experience the vitality and potential of their bodies. Fortunately, today's courses offer different approaches and activities that take on a different character promoting excellence and opportunity. This resurgence in females' participation in Physical Education and sport indicate that contemporary changes in the broadening of social acceptance of physicality experiences have emerged.

Health reasons, which are frequently thought to be deterrents in Physical Education and sport participation by females, were regarded as a relatively significant motive for participation in this study. This affirmation is supported by Avery and Lumpkin's (1987) research, which documented getting regular exercise, and keeping good health and physical condition as the most important values gained by females in Physical Education programmes not too dissimilar from the University Bursaries' programme. The importance of physical activity as a health related behaviour is being recognised (Kunesh et al., 1992) and this is promoted throughout the Bursaries' course where students accept responsibility for their own well-being which encompasses facets of physical, mental, emotional and social health. At the core of the programme is the requirement for students to develop and implement a 'Personalised Exercise Programme'. Exercise has been identified as a factor that may significantly influence health outcomes (Reeder et al., 1990). Females studied, accepted that exercise is essential to good health and perceive the sedentary lifestyle is as a potential health hazard. Females' participation in University Bursaries Physical Education was identified as promoting a sense of healthy well-being.

The fact that students identified the release of tension as a significant factor influencing their participation is interesting, particularly because in the literature examined it is a factor that receives sparse attention. The stressors of senior school females identified were family problems, personal problems, the pressures of schoolwork, pressures of afterschool work, no money, long periods without relaxation, prolonged periods of tedious school work, strenuous efforts without rest and diversion, needless restriction, meaningless obsolete rules and repressive disciplinary measures. Females expressed that

there must be a balance between what one person referred to as work, rest, relaxation and recreation. Females stated they experienced worthwhile involvement in Physical Education programmes when there was provision to learn recreation skills. In addition, a knowledge of relaxation techniques which make use of leisure moments coupled with a knowledge of restoration and reward of the body, mind and spirit were valued. Fun, enjoyment and laughter were the necessary ingredients of a recreation and leisure programme. The warmth and friendliness, feeling of camaraderie involved in shared expressions of physical activity were important factors influencing females' participation. What does appear strongly evident however, is that the by product of releasing tension, the fun aspect was the result of participation and not the reason.

Students indicated in this study, self-discovery and satisfaction through health and fitness provided opportunities to release tension. The energy, enthusiasm, courage and zest for living assisted in enhancing self confidence. Students advocate recreation type programmes must provide opportunities to release tension in physicality pursuits or relaxation endeavours that provide them with time out to explore, to run the hazard, to excite the chance, experience action, test one's courage, to run the risk, overcome fear, revitalise, meditate, relax and rest.

Blinde, (1989) has shown that there is usually a combination of factors that influence an individual's decision to participate in a particular Physical Education programme. Several areas will be used to summarise findings in this study and to delineate some tentative generalisations about those factors influencing females' participation in University Bursaries Physical Education.

From an early age many females surveyed believed they were born with sporting abilities and physical attributes. These special physical, intellectual, or other relevant characteristics seemed always to come easily to them. Early sporting success was not restricted to one activity. Indeed, all those females interviewed seemed to be proficient in many sports in their early years. Students' reaction time, co-ordination, hand-eye skills, strength, agility and speed were all there at an early age and these athletic females realised their superiority over non-sporting peers. Therefore, sport and

activity definitely dominated the early years and childhood experiences were unanimously described as very, very happy times. Physical Education was a favourite school subject, something in which these females were very, very, good. It was an activity where they enjoyed competing against and often beating males.

The role of the home in the guidance, support and nurturing of their abilities from the early years to later stages in development was emphasised as a significant factor contributing to females' participation. This support of others, such as relatives, friends of the family and neighbours were also significant but parents received special mention. The involvement of parents went beyond taxi-service status. Parents took an active interest in the females' activities. They watched and monitored progress and gave encouragement throughout. The emotional contribution cannot be overemphasised. Female students in this study revealed the approval and encouragement they received promoted their participation and any opportunity for involvement in sporting activities was worth trying and valued. The majority of females' families had strong or very strong sporting backgrounds. Parents made sporting opportunities accessible and desirable. Parents, however, did emphasise and promote self-discipline, the importance of doing one's best and the satisfaction of accomplishment in all activities. This satisfaction of accomplishment was not only restricted to sport, but directed to other activities such as domestic tasks and school work.

It is interesting that many of the females reported playing sport mostly with boys when younger. Few, played mostly with girls. This data supports the evidence of Dyer (1986). The games and physical activities females enjoyed were largely improvised from the facilities available. They commented on practising for hours. Rules were made up or invented and skill development, which became increasingly more sophisticated, was fun. Ironically, these females state that they were evidently not born with convictions of practising hard or working hard, but they seemed to develop these habits in a context of supporting and encouraging parents who exuded a confidence in them both as athletes and as individuals.

The amount of active learning time, practice and other learning effort invested by the individual increased exponentially over time, the playful

activity and adventurousness of their childhood became less evident. The sporting life of these females as they advanced in years became less like play and more a vocation. The type and quality of instruction and guidance they received was commented upon at different stages of females' sporting development. In particular, Physical Education teachers and coaches were mentioned as significant others in their development. In the childhood years, teachers and coaches mothered. In late childhood and early adolescence the teachers taught discipline and devotion to drills. As the child matured the teachers were stricter and less tolerant of poor performances. They appeared relentless and rigorous in their demands. Well into adolescence and early adulthood, females stated that the teachers must know more and must teach more and be knowledgeable about everything.

The ways in which females developed their interests, habits and values that committed them to their Physical Education and sporting participation, brought them to recognise and value their sporting ability. Greendorfer's (1974) research claims that the influence of male athletes as role models was a prominent factor influencing females' participation in Physical Education and sport. Consistent with the findings of Greendorfer, this research recognised that sporting role models were predominantly male. Females were determined to emulate someone who was generally admired for their will to win or who had determination, even killer instinct. In addition, sporting stars that displayed tremendous self discipline and perseverance were admired. Females further commented that they had an inner drive. They yearned to achieve and emulate their male heroes. This characteristic was something they felt was constantly developing over time. It has only been most recently, with the increased level of media exposure that those females surveyed have begun to identify strongly with female sporting role models.

Focus group interviews reveal that females were satisfied and content with themselves, what they looked like, who they were and who they represented. They commented that at no stage did they worry about their self-image or body image. It was apparent that any preoccupation with self-image appeared to be a problem for many of the females' friends, but not them. This would not support the contentions of Butcher (1985) or Costa and Gutherie (1994) who believed self image or body image was a primary

detriment of Physical Education and sporting participation. However, those females surveyed were conscious of the importance of a healthy body and maintained a regular fitness regime. Furthermore, they did not see their interest in health and fitness as a preoccupation.

Regardless of the specific subject area determining participation of females in Physical Education and sport, previous research and current studies (Boutilier & San Giovanni, 1983; Lenskyj, 1987 and Messner & Sabo, 1994) appear to be descriptive, perhaps analytical, but almost never truly prescriptive in a meaningful way to suggest ways in which females disengagement from Physical Education and sport can be addressed. Clearly, there are some aspects of Physical Education and sport which make it unattractive to females.

What then are the reasons for certain females choosing to temporarily disassociate themselves from any involvement in physicality and sportive experiences? When students were asked why there were not more female students participating in University Bursaries Physical Education, two significant factors emerged. Furthermore, it is noteworthy that these very same significant factors that discourage participation, are stated by females in this study, are the very same reasons that encourage participation. One is health reasons and the other peer group influences. It was not significant that students felt females lacked encouragement from parents, lacked time, lacked skill, lacked interest, were interested in non-sporting activities, felt intimidated by males or felt the curriculum was designed to encourage males more than females. So why were health reasons and a lack of peer support perceived as being significant factors in determining why there are not more females involved in University Bursaries Physical Education?

Focus group interviews were useful in providing some insights. It was also obvious that both health reasons and lack of peer support were inextricably linked in this study. It is often argued that the limitations placed on females, and males who wish to become actively involved in Physical education and sport, are a result of biological and psychological factors. Both sexes are affected by assumptions made about the capabilities of each to participate in particular sports and physical activities, but generally as Coles (1979) points out, these are primarily assumed to influence females who are

seen to be less able to successfully compete in sport than their male counterparts. Consistent with the findings of Boutilier and San Giovanni (1983) and Chamers (1992) physical and psychological differences, where they do occur, were perceived by students as inhibiting participation. This was how the significance of a health reason was defined. Lack of peer support was defined in terms of what students considered to be a positive concept of self and a culturally acceptable female image.

What emerged in focus group discussions was that health reasons were translated into the limitations placed on females because of 'others perceptions' of the female physiology. Lack of peer support was translated also into 'others perceptions' because culture-bound views of femininity and masculinity placed the female athlete in a role conflict situation. Females were perceived to still have to assume the socially acceptable role for women in society. If a female desires to be successful in Physical Education and sport, then she must demonstrate those characteristics which are most often used to describe males.

With regard to health related reasons that deter participation several specific areas were identified. Jones (1981) and Pennington and Collins (1981) mention it and Sands (1991) documented the biosocial impact of menstruation and maturity which play a significant part in their activity embarrassment for females. The sample of students in this study state certain assumptions are still made about the incapababilities of females competing in strenuous physical activities. They believed there exists to some degree a general attitude of over-protectiveness that serves to discourage rather than encourage female involvement. Also identified in this study was the popular assumption associated with female sporting involvement and the belief that regular participation will lead to masculinity and masculinization. Other deterrents highlighted were the harmful effect of vigorous exercise on females' reproductive system, the onset of menstrual disorders as a result of strenuous exercise, the advisability of activity during menstruation and the effects of competition and strenuous exercise on pregnancy and childbirth.

One of the most common reasons given by the sample of students in this study for females for not participating in Physical Education and sport was that females were menstruating and were therefore unable to participate.

While it is clear, that in some cases this may be given as an excuse, it is still obvious that many female students are still unaware of the basic functioning of the reproductive system and simply succumb to the many myths surrounding this issue. The clarification of physiological and biological considerations and misconceptions relating to sporting involvement appear as Coles (1979) would attest, have been based on 'taken-for-granted' assumptions about the abilities of females, rather than on hard evidence. As Drinkwater (1984) has pointed out, others perceptions of the female physiology have lacked factual basis, particularly in respect to limiting active females' participation and further serve to severely restrict those who otherwise would be actively involved and healthful as a consequence.

The importance to the peer group of Physical Education or sport, Kenyon (1974) and Kunesh et al., (1992) comment, might well be assumed to explain the quantity and quality of sporting involvement a female experiences. This study identified that if the female's peer group places a high value on sporting participation, then it would be expected that the female becomes more actively involved than the individual whose peer group rates Physical Education and sport as a low status activity. For those athletic females the acquisition and maintenance of those attributes necessary for sporting success, did place her in a conflict situation. Females in this research stated that in order for them to compete successfully in sport, they had to possess a degree of aggressiveness, competitiveness and be achievement orientated. They must demonstrate endurance and take risks. It was these very qualities in our society which are used to describe and evaluate males in our society, not females. It was stated by many females, that the possession and display of such qualities may not be considered compatible with either a personally or culturally appropriate concept of femininity.

There is no single blueprint for femininity that can be followed, but rather an ever changing code concerning dress, appearance, conduct and manner. It is a code which Scraton (1990) reports varies over time, and from one place to the next, and is modified by the influence of the peer group. Students surveyed believed that being sporty may in itself be detrimental to the peer group's image of femininity. In general, they thought that an interest in Physical Education and sport, especially in traditional male games, and a

liking for rough and violent pastimes, characterised the unfeminine girl. She was depicted as boyish and butch. Demonstrating traditionally masculine traits of aggression, dominance, competitiveness, strength and speed and the enjoyment of physical contact was perceived to be unfeminine, uncool and geekish in certain peer groups. In other cases, females surveyed felt that if a peer group valued modesty and self-conscious attitudes and non-aggressive behaviour, then taking part in certain aesthetic and individual activities such as dance, swimming, badminton may enhance the supposedly natural grace and charm of the female performer and therefore prove highly acceptable to the peer group. These perceptions would appear to support Metheny's (1965) seminal study and Kane's (1988) findings that gender stereotyping persists today.

This study identified, where exercise was aimed at weight control, developing a good figure and general well-being, then the peer groups perception of the feminine image in health and fitness activities such as aerobics, was positive. Furthermore, there was not a perceived loss of femininity. Focus group discussions highlighted that although females have infiltrated the once exclusively male domain of sport, full integration and acceptance is still impeded by a number of sex-related attitudes which are perpetuated by both females and males. The sample group in this study stated clearly, the peer group's attitudes and prejudices towards the involvement of females in Physical Education and sport continue to transmit to its members specific messages about acceptable physical attributes, personality and behavioural traits that differentiate between femininity and unfemininity. This would support Boutilier and San Giovanni (1983) who report that the peer group not only influences the skill development of females, but also the nature of the games and informal sports they will play with their friends as they mature.

Students in this survey described two reasons why females do not participate in University Bursaries Physical Education. One was health reasons the other the peer group which exerted significant influences. To say these reasons appear to indicate in the sphere of sport, its structures and the dynamics that it is a reflection of the society in which prejudices and attitudes still exists. Social conditions are important, but within some limitations set by

those conditions it is possible for people to change their perceptions of Physical Education and sport or to keep them the way they are. In fact, it is possible, as we have seen earlier for students to define and create Physical Education and sport that are uniquely different from the dominant forms of social life in a particular society. This is a helpful way of thinking about the contributions certain individual's perceptions and intentions make as parts of our social life. It was recognised in those schools involved in this research that Physical Education and sport, can have both positive and negative effects on participants. However, females surveyed have identified that there is a possibility for people to define and create Physical Education and sport that is appropriate and valued in their individual lives.

Students' perceptions and discussions illuminated a number of University Bursaries Physical Education modifications to the curriculum that they felt might attract more females. Students stated the current interest in fitness goes well beyond the rational view of fitness. Because, the term wellness is often used in conjunction with fitness it encompasses concepts such as stress management, nutrition, body image, emotional well-being as well as physical performance. The well-ness concept is also concerned with a link between work, play, leisure activities and social relationships. Students perceived that encouraging the health aspects of the course, modules on healthy body maintenance and on topics that interested females was a step in the right direction. This also required the curriculum to deliver shorter and more interesting and indeed more relevant health related topics as part of the Bursaries' course of study. Students in this study stated that any modification to the curriculum to increase participation and interest needed to be based on the programme's potential appeal to females (e.g. health and fitness).

Several new initiatives were suggested in this survey to provide new directions in encouraging females to gain improved confidence and greater assertiveness. Students felt that the availability of self-defence and assertiveness training and female fitness programmes could be geared to developing health, strength and physical well-being. This suggestion is consistent with Scraton (1992) who believes by doing so there could be a qualitative shift in the definitions of the 'physical' rather than the stereotypical

construction of femininity around appearance and body physique. Lenskyj (1982) would describe females in these type of programmes reclaiming the right to physical development and appearance in their own terms, rather than those laid down in the traditions of the feminine culture.

Also suggested in this study was the recommendation that there were more activities that build females' confidence in Physical Education. This was seen as an ideal situation to offer females opportunities for collective support through co-operative and enjoyable physical activity. It was proposed by participants that through certain activities like abseiling, dance or sailing, group membership, teamwork and collective experiences were valued rather than the individually based activities which deny opportunities to develop group confidence and ability. Physical Education was identified as contributing to developing a sense of solidarity between females, thus defining a female-based construct of confidence and motivation.

In addition, female participation levels could be further encouraged in Bursaries Physical Education if the activities presented emphasised human similarities and not dissimilarities. It was emphasised that it should be a priority to consider alternative forms of physicality experiences and sport which not only encourage different values, but which encourage females and males to enjoy sport on equal terms. According to Vertinsky (1992) this may mean that educators develop new games and new activities and or the development of new teaching approaches to traditional games that are appropriate to both female and male.

A very practical change suggested by this research that would encourage females' participation would be allowing females effective choice concerning the clothes worn for Physical Education. While students state there are arguments for and against school uniform, it is clear that within safety guidelines, young females should be able to determine appropriate clothing for physical activity. Primarily students state, because from puberty onwards females come to experience their bodies as public property often defined, compared and often criticised. Within Physical Education females stated they needed to have effective control over the presentation of their physicality in dress and style. Females were on display during Physical Education and therefore it is important that Physical educators develop a

greater sensitivity and awareness to the pressures young females face regarding body shape and appearance.

Some females in this survey stated that negative experiences are associated with Physical Education programmes in which competitive abilities and competitive outcomes are emphasised at the expense of individual's concern for the mastery of sports skills and improvements in personal performances. In essence, this study reveals the emphasis should not be on skill ability but the improvements made in skill development. With females increasing levels of participation in Sports Education modules of the Bursaries' programme, they can feel at ease with their bodies and be made more aware of their skill weaknesses and strengths. This study highlighted the sense of achievement from improved skill development and competency that encourages females to tackle a range of physical challenges and feel mentally much more competent when confronted with situations where they must apply new skills.

It was also felt that the subject should be promoted more widely in the Physical Education and sporting settings. Within schools, Physical Education can contribute to the creation of a positive female atmosphere. This research found that students felt the use of female photographs and female initiated displays in the teaching areas, such as the gymnasium, should replace the posters depicting the typical male type sporting heroes such as All Blacks and Basketball players. Related to this was the need to promote the active teacher, particularly in the promotion of female sporting role models. This required female teachers to be active participants in all aspects of the Bursaries course. Not merely, in those areas where their specialist abilities were obvious.

Furthermore, the Bursaries' programme needed to be advertised to prospective students. Students agreed there were now such a wide range of subjects available at senior level that many students did not really fully understand or appreciate what the Bursaries Physical Education programme was all about. Many students would opt for the programme because of the perceived nature of the practical activities, others would opt for the subject because they envisaged the course was all practical. Generally, it was felt that the Physical Education departments needed to actively promote the subject

and perhaps during a selected week, lunchtimes could be made available to sell the subject to students wishing to know more. Other students surveyed posed the suggestion of using a library display of students' work to stimulate students' interests and inform the schools what was happening in Bursaries Physical Education.

Another reason suggested in focus group interviews for programmes being less attractive to females is that it is during the senior school years that individual's become engrossed in their own uniqueness. At this point in time they are establishing personal autonomy. Since autonomy is based on a combination of a sense of competence (feelings of mastery) and independence, students surveyed felt the female may reject Physical Education and sporting settings that provide few opportunities for making choices and exploring new dimensions of themself. The relevance and importance of such activities as a 16km run was given by students as a classic example of an aspect of the Bursaries' programme that was negatively perceived by many in a particular school. That physicality experience was a non choice activity, of no personal interest except to a few and didn't take into account that alternative forms of aerobic activity were valued and even safer.

Oldenhove (1990) maintains during the latter stages of adolescence, females often become more sensitive to the often restrictive demands of high performance that is often characterised by a high degree of specialisation. In Bursaries Physical Education, certain compulsory activities may not be in their chosen fields of sporting expertise. Females come to the conclusion states Coakley (1994), that their Physical Education and sporting involvement is no longer under their control, and therefore the only way to assume control over their lives is to choose something different from Physical Education and sport. Others report Brown (1985), may temporarily discontinue their interest in Physical Education and pursue a leisuretime activity that is satisfying.

Teachers provided a range of responses on how University Bursaries Physical Education could attract more females. Discussions and perceptions placed first and foremost an emphasis on providing a broadening programme providing for individual differences. The programme they believe should stress creativity and innovation, the need for relevance, the removal of

requirements and be flexible. Psychological and sociological as well as physiological bases have now been accepted as important foundation stones in Physical Education. Fun and joy, sensitivity to the feelings of others, and the development of compassionate and considerate individuals have taken their place as respected objectives. Programmes were therefore favoured that inspire rather than drive and coerce.

The needs of today in our Bursaries Physical Education programmes teachers believed should include more and better ways of motivating students, more effective ways of teaching, more recognition of females' needs, interests and capabilities, and a more empathetic understanding of her problems. Several suggestions in teacher focus groups were made to complement these beliefs. These were leadership and group dynamic roles in the outdoors, leadership and organisational role forums, games and activities more relevant to females' needs, the promotion of health and lifestyle aspects of the course, an emphasis on the value of versatile skills rather than an emphasis on strength and power, a high but multi-varied activity based course, and increasing the number of recreational and leisuretime activities. In addition, it was also felt that there was a need for the curriculum to be better understood and Physical Education departments should promote their subject more (e.g. course evenings and top Bursaries scholars talking at assemblies). There needed to be better advertising through the Course Prospectus of the prerequisites and the expectations. Another significant and commonly mentioned factor was that the course needed to be promoted as a valid academic subject that offered a wide range of career options in Physical Education, sport, recreation and leisure.

The current trend in the relationship between Physical Education and recreation not only provides excellent opportunities for study at tertiary levels and the prospects of employment in a rapidly growing industry, but teachers believed there was a closer relationship between the two. Their reasoning was because the purpose of education is, among other things to help individuals prepare for life and at the same time be a part of that life. Broad and flexible Physical Education programmes were lifetime activities and outdoor activities clearly intended for leisure moments. The important use of

leisure and recreation for everyone was necessary in today's society for a fulfilling lifestyle.

We have to accept the fact expressed by students and teachers surveyed that more females participate in Physical Education in senior school, in more programmes than previously, and have gained admission into sports that previously excluded them. Many factors influence their participation or lack of participation. Participants surveyed maintain Physical Education needs to consistently question fundamental issues around physicality and sexuality. Furthermore, innovative programming, policies and practices can serve to met the diverse needs of females. Physical Education it was believed, was in a unique position whereby it cannot only influence those students and teachers involved in feminist innovations but also in the long term, assist in a re-definition of gender. This study reveals that only the females who are committed who persevere, who exercise and train hard and compete on her own terms will succeed these days. If females are encouraged to role-play the compliant, fragile sportswoman, they will not use their abilities. Given that some will dare greatly and achieve, they should be encouraged to utilise their abilities, thus preventing the continuation of the myth that one is either an athlete or a female!

C. Current Perceptions of University Bursaries Physical Education

University Bursaries Physical Education inclusion in the senior school curriculum is positively affirmed by the perceptions of teachers surveyed. Teachers indicated the following factors have contributed to Physical Education's inclusion in the senior school. These included the need for a wider variety of subjects, the larger numbers returning to secondary school, the subject was as equally as important as other subjects, the subject promotes a positive understanding of the positive value of physical activities, Physical Education is a legitimate activity, Physical Education can be justified in its own right and Physical Education makes a positive statement about the relationship between theory and practice. Participants stated that there appeared to be no doubt that in the future, Physical Education is going to emerge as a subject in demand within the senior school.

Student opinion surveyed on the reasons Universities Bursaries Physical Education was chosen as a subject this year produced several significant findings. Primarily, it was considered a subject where students could obtain high grades. However, it was also noted that because the subject was a relatively new course in some instances, many of the students stated that they were unsure what level of work was required. Students revealed females excelled at a consistently high level in the theory components of the course, and in some cases to a high level in certain practical aspects, but less consistently. Students proposed females were able to explore with enthusiasm areas of high personal interest especially through the theoretical components which developed and were applicable to their social, personal and physical abilities. The importance of an active lifestyle confirmed females' interest in personal fitness, health and diet. Noteworthy, were the comments on ensuring a regular pattern of exercising for life and the importance of leisure time and recreational activities in later life. Females questioned in this study rated Physical Education as difficult and equally as challenging as other Bursaries subjects. Students said that the subject was more time-consuming work than other classes and felt females managed the workload better because of their organisational ability and hardwork.

Students also indicated there was no other subject worth taking. The most frequently cited reason for this was females' high interest plus enjoyment of sport, participation in physical activities and the opportunities for involvement in Outdoor Education. There was no significance attached to the following extent to which students agreed or disagreed with these statements: 'It is an easy subject, there was no final examination, it involved working outside the classroom, it was recommended by other students as a subject worth taking, of the varied programme it offered, of the Physical Education Department taking it, the Physical Education department promoted the subject, I have completed Sixth Form Certificate, I consider the subject important and it has a theory and practical component'.

To fully understand the potential of Universities Bursaries Physical Education curriculum, it was necessary to examine some of the perceived values and concerns expressed by students. The most significant responses indicated were that University Bursaries Physical Education was a subject

where students were stimulated to try new things and it was a subject in which students felt they could demonstrate their talent. It was of somewhat lesser importance that the subject was harder and more varied work than other classes, more fun than other classes, more time-consuming than other classes, or a subject where students learn something new. This study suggested females believed that the way in which the course was implemented and organised involved the learner in a more creative and constructive way. The course students maintained enhanced understanding and mastery not through the teacher transmitting knowledge but actively involved the learner to be independent and self-directed. Consequently, the curriculum promoted an understanding of the value of physical activity that was relevant to the individual and others in a social and cultural context. Grant (1994) also endorses this fact by explaining that the curriculum promotes student learning in a way that positive values, attitudes and behaviours for self were maximised. Females felt the subject promoted a quest for excellence in both understanding and performance.

Coakley (1994) previously noted, that males have been more prominent and more numerous in areas of physicality achievement, but they have been so by reason of differing opportunities rather than differing abilities. George (1995) further explains, the issue is not the relative superiority of men or women, but the neglect of the female population who are in fact athletes or may be found to be so. This research does reveal that females score more like males when students indicated those qualities they felt females must have in order to be successful in University Bursaries Physical Education. These qualities generally correlated to the following shared characteristics. Females needed to be motivated, determined, hardworking, and disciplined. Males by way of similarity needed to be hardworking, motivated, determined and disciplined.

Focus group interviews revealed more specifically that females appeared to be more achievement-orientated, more rebellious against sex role stereotyping (the girls can do anything philosophy) and more rejecting of outside influences that hinder their development. They also appear to be male-like, to have higher self esteem and show a great deal of persistence in the face of adversity. Blaubergs (1978) research reveals the appearance of

psychological androgyny does not imply that females in Physical Education are more masculine than other females, rather they seem to combine the characteristics, values, attitudes, feelings, goals, and expectations of both sexes.

This study reported that like males in Physical Education and sport, females identified as athletic did not find it necessary in their lives to conceal their abilities in order to socially survive. Several factors appear to have contributed to this. Students identified the school-culture's acceptance toward females' visibility and independence in Physical Education and sport. Females were becoming empowered by the educational system and by parents to view themselves as equally as capable as their male counterparts in sport, and are increasingly being socialised to be assertive, to take risks, hold higher expectations of physicality success and eventually benefit from their own skills and achievements. Females in this study considered themselves to be as analytical, original and possess problem-solving abilities commensurate with their male counterparts. Part of the reason for the development of these behaviours, described by Gill (1993) as typically characteristic of males, have been the females' involvement in a wide range of new and challenging outdoor experiences. In those schools surveyed students are encouraged to be decision-makers, analyse and interpret environmental situations, plan and implement safety measures and think logically about alternatives.

Evidence from this study indicates the Bursaries' Physical Education and sporting peer groups are embracing the female athlete who displays a combination of her intellect plus physicality and chooses to be successful. Females in Bursaries' programmes state they do not feel they must choose between developing their sporting abilities and being accepted socially or considered unfeminine. Furthermore, females comment they are encountering less obvious hostility toward their abilities in sporting situations that might otherwise devalue or prove to undermine their performance. Interestingly, this is particularly obvious in settings where students identified there have been tacitly supported traditional sporting aspirations. The positive treatment of females in University Bursaries Physical Education has undoubtedly revealed in some, a freedom to express their sporting ability

while for others, it has heightened their awareness to take their athleticism seriously and cultivate it assiduously.

In University Bursaries Physical Education, the new opportunities, reduction in stereotyping and the weakening of traditional value systems, appears to have unburdened females. Females are now expected to succeed in traditionally male-dominated fields such as Physical Education. Essentially, they are encouraged to undertake this Bursaries subject in the senior school because it is perceived by students and teachers as being an acceptable curriculum choice where favourable results are attainable. The majority of teachers surveyed clearly stated they would advise students to undertake University Bursaries Physical Education. The subject was seen to provide females with opportunities to acquire knowledge, skills and attitudes needed to prepare them for further study, employment and leisure. Females were also seen to be given an increasing number of opportunities where they could explore with enthusiasm areas of special interest and develop their full intellectual, practical, social, personal, creative and physical abilities. It was also felt in those schools surveyed that such opportunities would provide females with deserving recognition for their achievements in every facet of their involvement in school. This factor would support the research undertaken by Fejgin (1994) who believed that Physical Education and sporting participation in high school was positively related to some school related behaviours that enhanced individual academic success.

D. Benefits of University Bursaries Physical Education

Whatever the reasons that originally impelled females to participate in University Bursaries Physical Education, they will remain actively involved only as long as the positive effects and the benefits outweigh the negative. Aside from the enjoyment females derive from their Physical Education and sporting participation, Vertinsky (1992) believes other consequences which are often more difficult to delineate, or anticipate, may also occur. Less is known directly about the benefits of Physical Education participation for females than about those factors influencing their participation.

One of the acknowledged benefits of regular involvement in Physical Education and sport, according to Embrey (1988), is the increased fitness

level and feeling of well-being. Evidence from this study suggests an active lifestyle has been reported to benefit physical and mental well-being as well as being identified as significantly influencing health outcomes (Powell, 1988). Ey (1989) believes as a result females feel encouraged to be more comfortable and take more control over their bodies. Furthermore, students surveyed agreed that a better knowledge of the body and its functions had enhanced their levels of physical fitness and often had a positive effect on body image (Lee & Owen, 1986). Reeder et al., (1990) hypothesised, since a positive relationship generally exists between body image and self-concept, any improvements in females' fitness through Physical Education would increase her positive feelings about her body and enhance her self-concept. 100% of the females surveyed, agreed that participation in University Bursaries Physical Education helped students develop confidence in themselves.

Abigail (1986) and Dyer (1986) document studies of lower self esteem and a lack of confidence displayed by females not only under-rating their physical and academic ability, but under-rating themselves as individuals far more than males. This study revealed the opposite. Furthermore, females did not have lower expectations of success or negative self concepts when compared to similar aged males as reported by Taylor et al., (1978) and Dyer (1989).

Franklin (1993) claims that the youth who participates in regular Physical Education and sporting activity has a more positive attitude, does better in school work and tends to be more successful. Goldberg and Chandler (1989) and Snyder and Spreitzer (1991) emphasise Physical Education participation has the potential to enhance broadly defined non-academic outcomes, educational aspirations and sports quests for future success. It was essential to examine those benefits students derived from University Bursaries participation. Students believed that participation in University Bursaries Physical Education builds character, provides opportunities for students to socially mature, develops students' independence, increases students' involvement in other school activities, benefits students' general academic success, and provides students with opportunities to develop their sporting ability. Participation resulted in

students having high educational aspirations and participation influenced students' occupational aspirations.

It is interesting to note, females disagreed that participation in University Bursaries Physical Education makes students popular with their peers. It was believed that the visibility afforded by sport participation in and out of school would possibly make females more popular with their peers. It would appear that those factors strongly identified as developing students' independence, building character, and developing students' involvement with school were consistent with the findings of Holland and Andre (1994).

In recent years, there has been growing concern with the education of females at the policy level, and various aspects of schooling have been targeted for reform. The development of 'Countering Sexism in Education' (Department of Education, 1989c) and 'Fair Deal in Physical Education' (Department of Education, 1989b) have been an encouraging sign of change. How much real progress has been made in addressing the education of females remains questionable? With some exceptions, when policies have been framed for all students, some have been sensitive to gender and sexism, to relevant issues concerning females, women and males. They have been sensitive by highlighting this area, and by introducing terms like 'inclusive' or 'non-sexist' to address the problem.

Females in this study have elaborated on what the benefits of a gender-inclusive curriculum means to them. They perceive that the curriculum has genuinely empowered them and is directed to meeting their needs in ways that have not negated or minimised their achievements. Females believe teachers are aware of the conflicts and concerns they face. They are encouraged to explore and discuss and express the pressures and contradictions they face of being female and athletic. Females are urged in their Bursaries' programmes to make sense of the issues in terms of their own lives and experiences. By fashioning the feminine highlights, there is a possibility of developing alternative definitions of femininity. This is being addressed by facing the contradictions, gaps and precariousness of the existing definitions.

The issues of health, fitness and skill acquisition were pertinent issues for female participants in this research. Females stated they are adopting a

common-sense perception of Physical Education that centres around physical activity which, is defined by females and is acquiring high status. Physical Education participation was unleashing possibilities for more meaningful female involvement, and was appealing to females in ways that circumvented outmoded issues that were previously seen and believed to reinforce the culture of femininity.

The messages that are transmitted to females surveyed in this study on the beneficial effects of their University Bursaries Physical Education are, that this Bursaries subject is an area of the curriculum that is just as important as English or Mathematics and deserves much attention as being seen as a legitimate and academic area of the curriculum. Females are encouraged to think positively about their bodies, they are encouraged to think about their sexuality and the significance of physical activity to their well-being. Furthermore, they are adopting the attitude that they possess the capacity to assert themselves in any situation or environment in which they may find themselves in. Physical Education, more than any other subject in the curriculum, encourages females to be vigorous, vibrant, and develop good health. Implicitly, evidence from this study suggests this has required a redefinition of the 'physical' for females and males.

Females require both the space and time to develop their abilities. In some instances students have cited cases where selective periods of mixed-teaching have also involved the retention of a 'girls only' skill session. They comment that the sensitive, understanding teaching has provided a forum for increased student awareness of gender issues and has also challenged gender inequalities. Interestingly, a few females commented directly on their own progress which they saw as an outcome of teacher-student relationships and ways in which teachers had related to gender bias. They were beginning to sense that they could work harder, do better, and in some respects were more liberated. They acknowledged that more attention was given to females' needs, their aspirations and their achievements. Clearly, in classes where females self worth was valued fundamental changes in attitudes and practices were bearing fruit in practical ways.

The benefits of University Bursaries Physical Education for females have resulted in them enjoying physical movement on their own terms and

developing confidence in those abilities. They are assertive and have control over their own bodies. Also of importance in those schools surveyed, male peers are receiving Physical Education that is sensitive to, aware of and prepared to challenge gender inequalities. Male responses indicate the benefits females gained by participation were that the programme, encourages students to be outgoing, ambitious, to set and achieve goals. The social aspects, particularly the building of strong friendships were important benefits.

The curriculum of any school might be defined as the totality of learning experiences which that school offers to its students for whom it is responsible. As Weston (1979) has pointed out, such a definition stresses the school's intention towards its students and leads to the curriculum being seen as a programme of advanced benefit for students, taking into account the context of the school and the needs of its students. Females surveyed have identified four modifications to Bursaries' programmes that have had beneficial effects. There is as we have noted previously, the increased emphasis on health related fitness. There is also the move towards developing personal improvement in the form of activities which provide success and enjoyment. At the same time a wider range of curricular activities beyond the traditional sports and the introduction of modules for leisure, or personal and social development is available.

These factors were all perceived to be greatly beneficial because changing attitudes, interpretations and priorities in Physical Education meant students' needs were assumed to be more important than the structured learning experiences and subject matter to be taught. Bursaries Physical Education students stated there is greater flexibility in allowing students to pursue a range of relevant content. Furthermore, physical educators believe they have considerable autonomy to address individual needs. Anderson (1988) and Graham (1988) believe this is crucial if Physical Education programmes are to be effective.

Students surveyed had a number of concerns about University Bursaries Physical Education and highlighted those aspects they would most like changed. Overwhelmingly, the aspect students would most like changed was the assessment system. Four frequently cited responses from students

included: First, the number of assignments reduced. Second, assignment marking schedules needed to be clearer. Third, a national moderation of assignment tasks and fourth, no internal assessment but a final examination.

However, more students were supportive of the achievement based assessment system in this study than those who were not. The system they believed provided a balance between all aspects of the work, something they might not be given credit for in an external examination. Examples of these wide ranging aspects of the work that could not be acknowledged in an external examination are: laboratory experiments, seminar presentations, video presentations that analysed skill development of others, research projects, posters, fitness tests, debates, practical performances of individual skills, practical performances in applied settings and skill teaching. The achievement based assessment system enabled students to set personal goals based on predetermined criteria. This was reported by females to be a motivating factor as it provided a clear instruction for the student. It also provided performance feedback on what was or what was not done for a given task.

There were major concerns voiced about the achievement based assessment system. When criteria were not stated clearly at the beginning of a section of work, students were unsure what to strive for. Similarly, marking schedules were often vague and somewhat confusing to follow. Furthermore, many students felt the weightings for particular assessment tasks were not realistic considering the time-consuming nature of the task and the detailed requirements to be met. Students cited the great number of 5% assessment tasks as an example, many of which individually, were more demanding in nature than any of the 15% assessment tasks. Others still felt the numbers of assessment tasks were too many, for example (10-15) per module and as a result students reported the value of the learning experience deteriorated markedly. Rather than quality, students felt it was quantity that mattered most. Evidence from this study revealed that females were best able to cope with the heavy work demands.

While the students liked the achievement based assessment system in principle, they also wanted to know about the small differences between themselves and their classmates as identified by a percentage system.

Students did not feel confident about that the Bursaries' grades or qualifications they take with them from one school were equivalent to those they might achieve in another school. Clearly, they had little confidence in between-school moderation and were sceptical of the advantage of using achievement based assessment at a national level. Ultimately, achievers could be disadvantaged because students felt there was not any adequate national moderation at the moment. Some students felt instinctively that they were being assessed harshly in comparison to the high grade they could attain at other schools. It was apparent that students regularly compared their grades with others in different schools.

The assessment system used in Physical Education where overall grades were allocated, was not seen to be any fairer than the scaling down of examination marks to satisfy some perceived norm. In fact, the allocation of University Bursaries Physical Education marks was of genuine concern to those participants in this research. It made students mad, because they felt they had worked hard in class and deserved those grades. Inevitably, students commented there would be an overall grade allocation based on adjustments. That was just not fair and did not reflect the amount of effort and high standard of work produced.

From the viewpoints of teachers' surveyed, concern was expressed about the use of achievement based assessment that was bound to too many internal assessment practices. The validity and reliability of using achievement based assessment at a national level also caused numerous concerns. Some of these concerns related to the method of moderation and level of comparability between schools. Related concerns in particular were: the maintenance of educational standards, the teacher's role in the process, the maintaining of control of the learning outcomes, how the subject matter is controlled, and would the system be 'fair' to all students irrespective of the school they attended?

Regardless of the numerous concerns expressed about University Bursaries Physical Education assessment practices, students did single out an important factor influencing females' participation in this subject. Females were outperforming males in the theoretical components of the course. It was also acknowledged that males generally outperformed females in the

practical components, but, females as a special population, continued to sustain top grades, albeit when challenged by adversity in the practicals. This required some explanation. Students were asked in focus group interviews to provide reasons why they felt females received and consistently achieved the top grades in the theoretical components of the course. Females they stated, worked best in situations when they could monitor their own learning and be autonomous. Females were self-motivated and valued the opportunity to work at their own level and pace and enjoyed the choice of topics reflecting their personal interests. Daly (1989) believes that success in any sportive endeavour requires initial ability but consistent with these findings demands as well, commitment, perseverance and competitive motivations to do well. Gordon (1989) maintains the way in which females develop their habits, interests and values increases their commitment to Physical Education and sport. Theoretical components of the course are indeed no exception. Callahan (1981) described females' independence, self-sufficiency, self confidence and higher achievement motivations as taking them to the limits of learning.

Perhaps the most distinguishing characteristics identified by students to describe females' competence in the theory components was that females were organised, committed, used effective time management skills, self-reliant, ambitious, assertive, harder workers, persistent, determined, enthusiastic and possessed a genuine liking for the written aspects of the course. The fact that females appeared to genuinely like the theory components of the course was believed by students to be because females are very confident in the written work and they know what is expected, and were prepared to put lots of effort into the demanding written tasks. Many of these behavioural characteristics have been identified in athletic females by Werner and Bachtold (1969) and Bruch and Morse (1972). Blaubergs (1978) cites similar behavioural characteristics of this group, by explaining in sportive areas they are more self-assured, self-disciplined, venturesome, non-conformist, and enthusiastic and individualistic than their peers of average ability. Males by contrast, were not as confident of their abilities in the theoretical aspects of the course. Or possibly as was often suggested in discussions, males just couldn't be bothered with all that written stuff. Males

preferred the practicals and just didn't enjoy the assignments because of the heavy workload and commitment that was required.

Lee and Owen (1989) maintain females are sufficiently different, socially, physically and psychologically from male participants to warrant the provision of ample Physical Education opportunities to reach their full potential to the fullest extent possible. Passow (1986) makes a similar point, claiming the Physical Education curriculum should contain viable goals, an appropriate curriculum content, specialised teaching strategies and unique learning projects that recognise the needs, abilities and potential of females. It was apparent from the discussions held with females that the written aspects of the course provided them with co-operative learning experiences, individualised learning opportunities, content matter that was of personal interest and relevance, frequent use of practical problems in assignments and many opportunities for divergent, evaluative, problem-solving, and problem-finding and thinking skills.

Females in this study, felt encouraged to present and organise concepts and ideas in a disciplined way as opposed to concentrating on isolated facts, or individual problems. The course encouraged females to look at alternative ways of organising information. Females were also perceived as being unafraid to ask questions. Males by comparison were reticent because they might look or feel foolish and it just was not macho to do so. Indisputably, females sought clarification of expectations, questioned the assessment schedules and were more straightforward when it came to requesting assistance or feedback on assignments. It was also commented upon that it was the females who were renowned for their innovative approaches to assignment work and their rapid application to assignment tasks. They were more resourceful when it came to accessing appropriate reference material and more perceptive when assessing the demands and dimensions of assessment tasks. Females appeared to know where to focus their efforts and where to conserve their energies.

The practical components of the University Bursaries Physical Education course are perceived as being male dominated. This is primarily because it is the male participants, who as a whole, score better than their female counterparts. Perceptions varied among students as to the specific

reasons why males do better. Some believed it was because it comes naturally to males. They excel in many sporty situations, like to get out there, be physical and be competitive. They have been conditioned to be athletic, to enjoy the freedom of movement, to be energetic and aggressive and have the strength and skills. Females they decided sort of shared some of these characteristics, but this study described them differently. Females are as active and physical as males - but they just don't always run as fast, hit as hard, or throw as far, but they can run and jump and throw very proficiently. No sensible person would argue that there are not physical differences between females and males and that those factors do influence physicality performances (Sands, 1991). However, in order for a female to be as successful in the practical components of the course she must be twice as good and work twice as hard than her male classmates if she is to gain recognition for her physicality performance. This study revealed females' basic skill levels were considered to be inferior when compared with males.

It was vitally important if physicality experiences were to be beneficial that females perceived University Bursaries Physical Education classes as exciting and great places to be. The end product of this process, as Gordon (1989) would maintain, was a place where the social and environmental engineering played critical roles in producing an intrinsically motivated high achiever who has a holistic world view of her goals related to her capabilities. The key ingredients outlined by females in physicality settings were her physical attributes, perceived ability, hard work, discipline and motivation. Her University Bursaries Physical Education environments provided, opportunities for wide ranging experiences, access to facilities and equipment, encouragement from significant others, parental interest and support and different types of teaching styles. As a result, females in this study were enthusiastic, goal setters and goal getters.

E. Background Information and Experiences of Physical Education

Malumphy (1970) and Hall (1974) state that socialisation agents have a significant bearing on what a child is to become and reported that the family was a major factor influencing females' participation. This evidence

was borne out in the data collected from participants in this survey which indicated that females nominated their mother then their father as a significant influence. The influence of sisters and brothers was next and ranked similarly. Grandparents ranked next and aunts/uncles lowest when considering family influences. The initial stimulus to become interested in Physical Education and sport was also identified in the focus group interviews as parents. Furthermore, focus groups identified that sporting involvement was reinforced by parental encouragement. This would support the theories postulated by Coakley (1994) based on the research of Kenyon (1974) who found out that the higher sport is placed on the parental value hierarchy, and the greater the parental involvement in sport, the greater the sports' role socialisation in children.

Coles (1977) undertook research to examine which parent exerts the most positive influence on the their child's attitude to sport. Consistent with those findings, female participants in this survey indicated their mother as the most positive parental influence while males indicated their father as the most positive parental influence. In this study, the sex of the sibling played an important role in encouraging an individual's participation in Physical Education. Females indicated a sister/s as more influential than a brother/s. Males indicated a brother/s as influential more influential than a sister/s. This supports evidence of Kenyon and McPherson (1974) who maintain that siblings serve as a powerful role model. In addition, this study reveals that females are more influenced by sisters than brothers which is consistent with the contentions of Greendorfer (1974). These results are specifically determining family influences and must not be confused with the positive influences reported earlier that demonstrated male sport heroes also have a significant influence on female participation.

Also interesting, is to examine the 'like-gender' influences of grandparents and Aunty/Uncles, female/male coaches, female/male teachers and female/male friends. Without exception, in this survey, females aligned with female influences and males aligned with male influences. Such findings suggest a possible correlation between 'like-gender' encouragement and interest in promoting female participation as suggested by Snyder and Spreitzer (1976). Also, well beyond the scope of this study is the question of

the relationship of both the positive and negative factors between opposite-gender influences and in particular, the effects of a lack of encouragement and lack of interest in females' participation. After the family, participants ranked the second major influence of those who have encouraged them in Physical Education as friends, followed by the equal influences of teachers and coaches. These results endorse the contemporary findings of Coakley (1994).

32.8% of all the participants surveyed intend to complete a University or PolyTech course in Physical Education. 41.3% of all the participants surveyed were thinking about a career in Physical Education and sport. Although these results are not significant, they could provide compelling evidence that the changing nature of employment opportunities are in part being addressed by offering a diverse curriculum in the senior school that may serve to meet the specific needs of students. It is also encouraging, in view of the statistics presented in this study, to recognise that 55% of the females compared to 45% intend to pursue tertiary study. 38.5% of the females compared to 61.5% of the males are thinking of a career in Physical Education or sport. This sort of visibility and the obvious inclination of females to pursue Physical Education and sporting interests would as Reynolds (1988) comments, raise the status of females and the status of Physical Education and sport itself. Despite there being usually a combination of factors that influence females allegiance and interest in sporting programme (Coakley & White, 1992), Grant (1991) remarks, the provision of University Bursaries Physical Education has the potential to expand females' involvement. Participation in University Bursaries Physical Education as demonstrated by this study is influencing females' educational aspirations and employment options.

A wealth of information was recounted by participants with regard to their sporting interests and levels of involvement. 82.3% of the students participated regularly (three times a week) in a team sport. Generally there were more males than females, although not significantly so. 68.6% of the students participated regularly (at least three times a week) in an individual sport. There were more males than females, and once again this result was not significant. Comparable levels of roughly 50% female to 40% male non-

participation in both team and individual sports was indicated. The only marked difference was 17.7% of those surveyed did not participate in a team sport compared to 31.4% who did not participate in an individual sport. The small sample size prohibits a satisfactory explanation, although focus groups explained, that these statistics may indicate the small numbers of students who are not involved in physical activity for any number of reasons. Primarily, work commitments after school and at weekends and the demands of their school subjects, or the non participants were simply, not serious, were the main reasons given. However, they did acknowledge that the majority of students undertaking University Bursaries Physical Education were sporty or sportsminded and despite afterschool work or schoolwork, their team and individual sporting interests were accommodated.

The most favoured activity for health and fitness was walking, followed by jogging, gym, then on a par cycling and swimming. Females ranked walking, jogging, cycling and swimming as their most favoured activity. Males ranked jogging, walking, gym and swimming as their most favoured activities for health and fitness reasons. Research data reflects students appeared to choose team sports as a most favoured activity for health and fitness as opposed to aerobic and endurance activities.

The idea of University Bursaries Physical Education as a holistic living programme is gaining increased favourability among those physical educators surveyed. Teachers stated it is a programme which sees each person as a whole body, mind and spirit, with each part inter-related. They maintained a belief in the concept of a healthy mind and a healthy body, and believed University Bursaries Physical Education had a vital part in developing females abilities to be all they are capable of becoming. Of those students surveyed, 12.7% responded that they had outstanding ability in all sports. 25% of these students were female compared to 75% male. By contrast, 75% of the students surveyed perceived they had outstanding ability in a particular sport or sports. 37.8% of those were female compared to 62.2% male.

The highly ranked sport where both females and males indicated outstanding ability was swimming. The second highly ranked sports where females and males jointly indicated outstanding ability were cricket and

soccer. Gender biases in the ratings of the appropriateness of various sporting activities are well documented (Metheny, 1965; Kane & Snyder, 1988) and are believed to flourish in the world of Physical Education and sport. Coasta and Gutherie (1994) have maintained that sports' activities continue to be gender stereotyped, and the sex-typing of sports' activities seems linked with other gender beliefs such as physicality. Females in University Bursaries Physical Education, in some instances, were violating the traditional game play sex-role expectations. Students suggested that females notable participation in previously sex-typed sports such as cricket and soccer provided support and optimism for the continued expansion of 'non-gendered' Physical Education and sporting activities in the senior school. Certainly, these refutations of stereotypical sporting involvement have freed females from traditional role prescriptions. As Scraton (1990) would agree, it redefines the broadening range of behaviour that is available and acceptable to them.

Students' experiences of Physical Education were examined to describe their attitudes. This was a means of determining the validity of some of the negative attitudinal reasons for the under-representation of females in activity settings as outlined by Dyer (1986) and Sands (1991). Consistent with the findings of Bullock and Allen (1983) attitudes towards Physical Education were to a large extent determined by childhood and school experiences of Physical Education. This research reported no significant differences between the attitudes expressed by females and males to their experiences of Physical Education. Females report their attitudes to their experiences of Physical Education was that those experiences were enjoyable, satisfying, interesting, challenging, favourable, fun, educational, stimulating, encouraging, easy and worthwhile. According to the student and teacher sample in this study the environment must offer the opportunity and support for Physical Education and sport development. Females' participation should be recognised and nurtured with the appropriate Physical Education instruction, resources, materials and people support in order that she might achieve and reach her potential.

We are all socialised with the historical backdrop of gender discrimination in society and sport. Physical Education curricula and

experiences must be implemented in ways that convey equitable messages about sport and activity for females and males. A successful University Bursaries Physical Education programme is inconceivable without the inclusion of equal opportunities. Undoubtedly, without gender fairness neither females nor males can fully realise their own potential nor those of the other sex. Only a 'gender-fair' and 'gender-sensitive' programme will give females, along with males, the physical self-confidence to assert themselves in society, to participate fully in leisure facilities and to adopt an active lifestyle throughout their lives.

F: Limitations of the Study

The methodology used in this research incorporated quantitative and qualitative approaches using: focus group interviews (6 groups), a postal survey (193 schools), students' perceptions questionnaires (63 students); teachers' perceptions questionnaires (27 teachers) and an informal discussion group of physical educators (8 teachers). However only a relatively small sample size of participants were surveyed. Because of the small sample size, generaliseable conclusions cannot be made to all University Bursaries Physical Education classes, except for those five schools surveyed. The sample consisted of predominantly pakeha participants and thus may not extend to other ethnic groups. However, the indicators were valuable and may be useful for other educators in other contexts.

It was stated at the onset that research would identify those factors influencing females' participation at selected co-educational schools. A further limitation of this study is that single-sex or 'all girl' schools were not surveyed.

Those factors influencing females' participation in University Bursaries Physical Education have been provided, but these are by no means restrictive, exhaustive or encompassing. They do however, serve as a baseline for physical educators intent on the delivery of a curriculum in University Bursaries Physical Education, that caters for the unique needs and abilities of females.

A further point to consider is that females are clearly not a homogenous group. The factors influencing females' participation will not be

characteristic of all females because of their differing cultural backgrounds, socio-economic status and educational environments. However, this research acknowledges that there are a variety of physiological, psychological, sociological, socio-historical and gender factors that influence females' participation in Physical Education.

G: Further Research

1. This research identified the factors influencing females' participation in University Bursaries Physical Education at five selected co-educational schools. Further research would be invaluable in the identification of the factors influencing females' Physical Education participation at single-sex schools. By way of comparison, a study on the factors influencing females' Physical Education participation in co-educational schools might be compared with the factors influencing Physical Education participation in girls' only schools. Other research might investigate the differences between the factors influencing Physical Education participation in female and male single-sex schools, co-educational schools of higher socio-economic status with those of lower socioeconomic status, and the factors influencing Maori females' participation in Physical Education with the factors influencing Pakeha females' participation in Physical Education. A study on the factors influencing males' participation in University Bursaries Physical Education would also prove invaluable scholarship as a means of contrasting, comparing and complementing this study.

2. While female teachers are no less implicated in the subtle discrimination and lowering of expectations of females towards activity, it is the male teachers who have the greatest responsibility to challenge and examine their views and approaches towards females' participation in Physical Education and sporting settings. Further research could examine, compare and contrast those teaching strategies used by female and male physical educators in promoting gender equity. If the curriculum of Physical Education is to change, we need to begin with the teachers, and teachers in training who are critical and reflective about their practice and commitment to

gender equity in an attempt to create 'gender-fair' and 'gender-sensitive' environments for females and males.

3. Observations and perceptions of 'gender-sensitive' and 'gender-fair' physical activity programmes suggest that the development of new sports, new activities, and non-traditional activities are valued by females. Research that examines the impact of gender-neutral experiences and greater co-operation type activities would question the value of male-orientated team sports and the emphasis on the competition ethos which is still deeply ingrained in school Physical Education programmes.

4. Ways of enhancing participation must be mediated by the realisation that female adolescent peer subcultures have a powerful impact on adolescent girls identities. In occupying membership in particular teen subcultures, they often accept a lot of the unexamined baggage about male domination and female subordination in Physical Education and sport, and in doing so inhibit their development. This is a significant problem to overcome, and much research needs to look more closely into teenage girls' cultural perspectives and the framework in which they make sense of themselves and their bodies.

5. Efforts to promote participation tend to severely underestimate the ways in which females perceived opportunities are already bound by previous socialisation from early childhood and the level of support from parents. This is a crucial area for further research.

6. The influence of 'like-gender' significant others such as sister/s, aunt/s, grandmother/s, female teacher/s and female friend/s require indepth study to analyse the levels of encouragement or discouragement influencing females' participation in Physical Education. Similarly, the influence of 'opposite-gender' significant others such as brother/s, uncle/s, grandfather/s, male teacher/s and male friend/s require research to analyse the levels of encouragement or discouragement influencing females' participation in Physical Education.

7. A better understanding of females' perceived sense of competence, or sense of efficacy in particular activities is an attribute closely linked in research literature to participation levels. Females often blame their own lack of ability or a dislike for certain activities without realising how demanding these are even to the most highly skilled person or specialist. Vigorous attention to researching females' skill development and sporting competence throughout early school life and adolescence could provide information on those factors that enhance females' inclination and ability to participate or not to participate in a wide range of activities.

8. A selection of prescriptive recommendations and activities in Physical Education promoting participation rather than the deficiencies of programmes and practices requires research. Programmes that emphasise the development of personal skill, offer a broader range of optional and learner-centred activities with the prospect of there being long term leisure pursuits which may have potential benefits.

9. Mixed-gender groupings have generated a host of problems and criticism. However, this study indicates that it would appear that mixed-gender groupings deserve a closer look in determining how physical educators can further reduce the gender gap and improve females' levels of participation.

The Female Athlete

You are a female athlete.

Somewhere inside you, that woman has emerged.

Her eyes no longer blinkered with impenetrable blankets of social wool.

"Act like a lady".   "Let him win".   " Don't be a tomboy".

"Physical Education and sports are for boys".   Be careful, that's not for girls". " Stand on the sidelines, cheer".   "Date the first fifteen".

I watch you no longer waiting to be picked for the first teams.

You stand tall with your shoulders erect.

I watch you tower in the outfield when the wide ball is hit.

Your feet so precise and perfectly paced in a rhythmic dance.

That gloved hand explosive as it heads with certainty skywards.

I watch him run from centrefield to knock you down and catch your fly.

I watch everyone applaud as you swerve to snatch and secure a great save.

I see him heave a disgusted sigh and slink solemnly backwards.

I watch you approach the plate relishing ruthlessly the opportunity to bat.

Silence hangs over the field like a morgue.

No-one tells the pitcher to go easy because you're a girl!

Everyone waits in trepidation willing your three swings to be over.

You hold the bat with strong hands and drive the ball deep towards backfield.

You are skilled and strong-willed.

You no longer giggle and guffaw awkwardly when you miss,

Or pamper and primp your hair nervously pretending it doesn't matter.

You are a female athlete!

(Idea adapted from Pat Griffen, 1993).

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Appendix A: Postal Survey.
Gender Distribution of Students
Undertaking University Bursaries Physical
Education in 1996.

(1-3)	(4-5)	(6-7)	(8-9) Code Use Only
School	Males	Females	Total
1	0	0	0
2	4	11	15
3	5	0	5
4	9	6	15
5	7	6	13
6	28	17	43
7	4	6	10
8	0	0	0
9	0	0	0
10	4	5	9
11	8	3	11
12	0	0	0
13	5	1	6
14	11	4	15
15	8	8	16
16	11	6	17
17	10	6	16
18	18	4	22
19	9	12	21
20	11	9	20
21	5	5	10
22	8	6	14
23	0	0	0
24	0	0	0
25	7	3	10
26	0	0	0
27	5	3	8
28	10	17	27
29	21	8	29
30	0	0	0
31	5	3	8
32	11	6	17
33	14	11	25
34	13	9	22
35	4	0	4

36	8	10	18
37	8	5	13
38	8	14	22
39	2	3	5
40	27	18	45
41	6	3	9
42	16	17	33
43	12	8	20
44	0	0	0
45	21	10	31
46	9	3	12
47	12	14	26
48	10	14	24
49	8	7	15
50	22	14	36
51	12	13	25
52	0	0	0
53	0	0	0
54	0	0	0
55	3	4	7
56	9	10	19
57	14	8	22
58	7	10	17
59	0	0	0
60	14	7	21
61	3	5	8
62	0	0	0
63	1	2	3
64	0	0	0
65	10	5	15
66	11	11	22
67	2	4	6
68	6	3	9
69	18	7	25
70	8	1	9
71	5	4	9
72	5	6	11
73	3	3	6
74	0	0	0
75	15	1	16
76	7	12	19
77	27	23	50
78	23	12	35

79	6	3	9
80	5	4	9
81	17	16	33
82	6	7	13
83	3	10	13
84	6	6	12
85	15	10	25
86	3	5	8
87	9	7	16
88	0	0	0
89	9	5	14
90	11	5	16
91	0	0	0
92	0	0	0
93	10	8	18
94	0	0	0
95	10	15	25
96	15	4	19
97	0	0	0
98	14	9	23
99	5	2	7
100	4	5	9
101	0	0	0
102	11	9	20
103	15	15	30
104	22	8	30
105	21	18	39
106	4	6	10
107	21	20	41
108	4	2	6
109	0	0	0
110	12	20	32
111	14	14	28
112	9	7	16
113	8	9	17
114	6	12	18
115	0	0	0
116	8	8	16
117	0	0	0
118	16	8	24
119	29	14	43
120	14	14	28
121	6	5	11

122	13	7	20
123	0	0	0
124	0	0	0
125	8	7	15
126	12	3	15
127	18	8	26
128	3	3	6
129	5	8	13
130	11	6	17
131	10	6	16
131	12	13	25
132	4	3	7
133	10	3	13
134	12	8	20
135	9	0	9
136	6	5	11
137	0	0	0
138	21	18	39
139	6	3	9
140	3	3	6
141	10	4	14
142	11	2	13
143	0	3	3
144	3	2	5
145	5	5	10
146	4	2	6
147	23	17	40
148	4	5	9
150	7	6	13
151	4	11	15
152	9	11	20
153	9	9	18
154	2	1	3
155	5	4	9
156	11	8	19
157	10	5	15
158	0	0	0
159	1	1	2
160	17	5	22
161	6	4	10
162	0	0	0
163	10	4	14
164	8	5	13

165	4	3	7
166	11	7	18
167	7	1	8
168	10	2	12
169	28	0	28
170	9	12	21
171	6	10	16
172	10	5	15
173	15	6	21

Appendix B: Focus Group Interview Questions and Prompts.

University Bursaries Physical Education Focus Group Questions:

1. **I want you to think about your childhood and early adolescence. Can you describe for me your Physical Education and sporting experiences?**

Prompt questions:

What particular Physical Education and sporting experiences are most memorable?

Are Physical Education and sport different?

Who can you recall was influential or significant in your early Physical Education and sporting experiences?

What affect did these people have on you?

2. **What are your reasons for participating in Physical Education and sport?**

Prompt questions:

What aspects of Physical Education and sport do you enjoy?

Are there any benefits to be gained from participating in Physical Education and sport?

How do you feel when you participate in Physical Education and sport?

What aspects of Physical Education and sport do you least enjoy?

3. **How did you choose your University Bursaries subjects for this year?**

Prompt questions:

Describe the process you went through in selecting your course subjects?

Who was part of the decision process?

What role does your intended future play in the decision process?
Were there any other major influences?

4. What were your reasons for choosing to do University Bursaries Physical Education?

Prompt questions:
Where did University Bursaries Physical Education rank with your other course selections?
What was the most significant reason for choosing University Bursaries Physical Education?
How did others react to you choosing to do University Bursaries Physical Education?
Was University Bursaries Physical Education promoted within the school?

5. How would you describe 'athletic ability' in Physical Education and sport?

Prompt questions:
What are the characteristics of an athletic female participant in Physical Education?
Do females and males share the same athletic characteristics?
What are the characteristics of an athletic female and an athletic male?

6. In what ways do you think the University Bursaries Physical Education course caters for your abilities?

Prompt questions:
What benefits have you gained from doing University Bursaries Physical Education?
Describe specific aspects of the course that have developed your interests and Physical Education abilities.
How would you describe the values of participating in this course?

7. **How does the University Bursaries Physical Education course not cater for your abilities?**

Prompt questions:
In what way could this course be improved to cater more meaningfully for you?
What aspects of the course did you find the least valuable for you?
Would you recommend this course to other students? Can you give your reasons?

8. **Can you think of ways females and males are treated differently in sport?**

Prompt questions:
In the media?
The type of sports available?
The availability of facilities?
Desirability of certain sports for females and males?
Societies sporting expectations of females and males?
Funding?
Equipment availability?
Rewards of sport for females and males?

9. **Can you think of ways females and males are treated differently in Physical Education?**

Prompt questions:
With regards to what is expected of them?
Use of equipment and materials?
The language used?
Attention and time teachers give?
Space given?
The subject matter and type of activities?
Reward systems?

Student's Perceptions Questionnaire

Appendix C: Student's Questionnaire

University Bursaries

Physical Education Survey

Please complete the following questions by placing a tick in the appropriate box.

Background Information

1. How old are you?   16 ☐   17 ☐   18 ☐   19 ☐   20+ ☐

2. What is your gender?   Female ☐   Male ☐

(6)

3. Give the number of: Older brothers ☐   Older sisters ☐

   Younger brothers ☐   Younger sisters ☐

   in your family.

4. Are Physical Education and sport different?   (10)

   Yes ☐   No ☐

Reason ....
....
....
....
....

5. Which of your parents or caregivers is interested in Physical Education?   (17)

   Female Parent/Caregiver ☐   Male Parent/Caregiver ☐

   Both ☐   Neither ☐

6. Who of the following have encouraged you in Physical Education?

Mother	☐	Female Coach	☐
Father	☐	Male Coach	☐
Sister	☐	Female Teacher	☐
Brother	☐	Male Teacher	☐
Grandmother	☐	Female Friend/s	☐
Grandfather	☐	Male Friend/s	☐
Aunt	☐	Whanau	☐
Uncle	☐	Iwi	☐

(28) (36)

Other/s ....

....

7. Do you intend to complete University or PolyTech courses in Physical
Education?
Yes ☐   No ☐

8. Are you thinking about a career in Physical Education or sport?
Yes ☐   No ☐

9. Do you participate regularly
(45)
In a team sport?   Yes ☐   No ☐
In an individual sport?   Yes ☐   No ☐

10. Which of the following activities do you participate in at least three times a
week for fitness or health reasons?
(47) (50)

Jog	☐	Cycle	☐
Swim	☐	Walk	☐
Gym	☐	Aerobic Class	☐

(49) (52)

Other/s ....

....

....

11. How would you describe your overall ability in Physical Education?

Excellent ☐   Very Good ☐   Good ☐   (59)

Average ☐   Fair ☐   Poor ☐   ☐

12. Do you think you have outstanding ability in **all** sports?

Yes ☐   No ☐   ☐

13. Do you think that you have outstanding ability in a particular sport or sports?   (61)

Yes ☐   No ☐   ☐

Name the sport or sports ....

....

14. Circle the appropriate number between each pair of adjectives to best indicate how closely the adjective describes your **attitude** towards your **experiences** of Physical Education.

	1	2	3	4	5	6		
Enjoyable	1	2	3	4	5	6	Unpleasant	2/1
Satisfying	1	2	3	4	5	6	Dissatisfying	
Interesting	1	2	3	4	5	6	Uninteresting	
Challenging	1	2	3	4	5	6	Unchallenging	
Favourable	1	2	3	4	5	6	Unfavourable	
Stimulating	1	2	3	4	5	6	Boring	
Encouraging	1	2	3	4	5	6	Discouraging	
Easy	1	2	3	4	5	6	Hard	
Worthwhile	1	2	3	4	5	6	Worthless	(9)

Other adjective/s ....   (10)

....

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....

Current Perceptions of University Bursaries Physical Education

15. For each of the following statements tick the box which **best** indicates the extent to which you **agree** or **disagree**.

University Bursaries Physical Education was chosen as a subject choice this year **because:**

	Strongly Disagree	Disagree	Agree	Strongly Agree	
It is an easy subject.	☐	☐	☐	☐	(16)
There was no final examination.	☐	☐	☐	☐	
There was no other subject I could take.	☐	☐	☐	☐	
It involved working outside the classroom.	☐	☐	☐	☐	
It was recommended by other students as being worthwhile taking.	☐	☐	☐	☐	
Of the varied programme it offered.	☐	☐	☐	☐	
Of the Physical Education Department teaching the subject.	☐	☐	☐	☐	
The Physical Education Department promoted this subject.	☐	☐	☐	☐	
I have completed Sixth Form Certificate Physical Education.	☐	☐	☐	☐	
I consider the subject important.	☐	☐	☐	☐	
It was a subject in which I could obtain a high grade.	☐	☐	☐	☐	
It has a theory and practical component.	☐	☐	☐	☐	(27)

Other (write it down) ....

....

....

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....

16. University Bursaries Physical Education **is?**

	Strongly Disagree	Disagree	Agree	Strongly Agree	
Harder work than other classes.	☐	☐	☐	☐	(34)
More varied work than other classes.	☐	☐	☐	☐	
More time-consuming work than other classes.	☐	☐	☐	☐	
More interesting work than other classes.	☐	☐	☐	☐	
Is more fun than other classes.	☐	☐	☐	☐	
A subject where I learn something new.	☐	☐	☐	☐	
A subject where I am stimulated to try new things.	☐	☐	☐	☐	
A subject where I can demonstrate my talent.	☐	☐	☐	☐	(41)

Other (write it down) .... (42)

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17. To be succesful in University Bursaries Physical Education **females** must be: (Tick the appropriate boxes):

Passive	☐	(48)
Aggressive	☐	
Skilful	☐	
Caring	☐	
Disciplined	☐	
Co-operative	☐	
Achievement-Orientated	☐	
Competitive	☐	
Sensitive	☐	
Athletic	☐	
Intelligent	☐	
Determined	☐	
Passionate	☐	
Emotional	☐	
Physical	☐	
Hardworking	☐	
Creative	☐	
Motivated	☐	
Sociable	☐	
Able to show initiative	☐	
Committed	☐	
Inquisitive	☐	(69)

(70)

☐ ☐
☐ ☐
☐ ☐

Can you think of another characteristic **females** require?

....

18. To be successful in University Bursaries Physical Education **males** must be: (Tick the appropriate boxes).

Passive ☐

Aggressive ☐

Skilful ☐

Caring ☐

Disciplined ☐

Co-operative ☐

Achievement-Orientated ☐

Competitive ☐

Sensitive ☐

Athletic ☐

Intelligent ☐

Determined ☐

Passionate ☐

Emotional ☐

Physical ☐

Hardworking ☐

Creative ☐

Motivated ☐

Sociable ☐

Able to show initiative ☐

Committed ☐

Inquisitive ☐

(22)

(23)

☐ ☐
☐ ☐
☐ ☐

Can you think of another characteristic **males** require?

....

19. Rank the **importance** of the following reasons for participating in University Bursaries Physical Education in **order of preference (1= main reason; 12= least reason). Read all the reasons carefully before ranking.**

Satisfaction	☐	(29, 30)
Fitness	☐	
Fun	☐	
Friendship	☐	
Skill Development	☐	
Personal Challenge	☐	
Release of Tension	☐	
Family Influence	☐	
Improved Appearance	☐	
Health	☐	
Achievement	☐	
New Experiences	☐	(51, 52)

Can you think of another reason not given?

....

☐☐
☐☐
☐☐

20. Why do you think there are not **more female** students participating in University Bursaries Physical Education? Rank the following reasons in order from **(1 = most likely; to 9 = least likely). Read all the reasons carefully before ranking.**

Lack of encouragement from parents/caregivers.	☐	(59)
Lack of time.	☐	
Lack of skill.	☐	
Interest in non-sporting activities.	☐	
Health reasons (e.g. menstruation).	☐	
Lack of interest.	☐	
Lack of support from peers.	☐	
Intimidation by males.	☐	
The curriculum is designed to encourage males more than females.	☐	(67)

21. How could University Bursaries Physical Education attract more **male** students?

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(68)

22. How could University Bursaries Physical Education attract more **female** students?

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(74)

23. What aspects of University Bursaries Physical Education would you most like changed?

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4/1

24. What aspects of University Bursaries Physical Education do you like most?

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The Benefits of Participation in University Bursaries Physical Education.

(Tick the appropriate box).

Participation in University Bursaries Physical Education:

(13)

25. Benefits students' general academic success.

☐ Agree ☐ Disagree ☐ Unsure

26. Helps students to develop confidence in themselves.

☐ Agree ☐ Disagree ☐ Unsure

27. Increases students involvement in other school activities.

☐ Agree ☐ Disagree ☐ Unsure

28. Makes students popular with their peers.

☐ Agree ☐ Disagree ☐ Unsure

29. Results in students having high educational aspirations.

☐ Agree ☐ Disagree ☐ Unsure

30. Provides opportunities for students to socially mature.

☐ Agree ☐ Disagree ☐ Unsure

31. Builds character.

☐ Agree ☐ Disagree ☐ Unsure

32. Develops students' independence.

☐ Agree ☐ Disagree ☐ Unsure

33. Develops students' sporting talent.

☐ Agree ☐ Disagree ☐ Unsure

34. Influences students' occupational aspirations.

☐ Agree ☐ Disagree ☐ Unsure

35. Are there any other benefits to be gained from participation in University Bursaries Physical Education?

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(23)

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....

Gender Issues In University Bursaries Physical Education

Indicate how often you experience the following feelings in University Bursaries Physical Education by circling **1 2 3 4** based on this scale: (**1=not at all; 2=sometimes; 3= a lot; 4= all the time**).

Feeling	How Frequently Felt?				
36. I feel teachers think females are naturally better than males.	1	2	3	4	(29)
37. I feel males are given the same amount of encouragement to succeed as females.	1	2	3	4	
38. I feel the types of activities we do are unsuitable for males.	1	2	3	4	
39. I feel this subject is best suited for females.	1	2	3	4	
40. I feel male achievement is valued in class.	1	2	3	4	
41. I feel teachers have sex-stereotyped ideas on what is appropriate for males and females.	1	2	3	4	
42. I feel males lack role models in this subject.	1	2	3	4	
43. I feel females lack role models in this subject.	1	2	3	4	
44. I feel students perform best in those physical activities they see are appropriate for their sex/gender.	1	2	3	4	
45. I feel males experience less success because females dominate equipment.	1	2	3	4	
46. I feel teaching students in a mixed gender group provides everyone with equal opportunities.	1	2	3	4	
47. I feel teachers have a lower expectation of females' abilities.	1	2	3	4	
48. I feel females are successful because they need more attention.	1	2	3	4	(41)

49. Who requires more time to develop their skills in University Bursaries Physical Education?

☐ Females   ☐ Males   ☐ Both the Same

Why? ....

....

....

....

....

....

50. Who gets most attention in University Bursaries Physical Education?
☐ Females ☐ Males ☐ Both the Same
Why? ....
....
....
....

(50)

51. Who gains the greater satisfaction working co-operatively in University Bursaries Physical Education?
☐ Females ☐ Males ☐ Both the Same
Why?
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....
....

52. Who are more competitive in University Bursaries Physical Education?
☐ Females ☐ Males ☐ Both the Same
Why?
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....
....

53. Who gets the most encouragement in University Bursaries Physical Education?
☐ Females ☐ Males ☐ Both the Same
Why?
....
....
....

6/1

54. Who is more motivated to achieve in University Bursaries Physical Education?
☐ Females ☐ Males ☐ Both the Same
Why?
....
....
....

55. Who are more successful in University Bursaries Physical Education?
☐ Females ☐ Males ☐ Both the Same
Why?
....
....
....

(15)

Thank you for completing this Questionnaire.

Wendi Girven
Wendi Girven
Researcher

August 1996

Teacher's Perceptions Questionnaire

Appendix D: Teacher's Questionnaire

University Bursaries

Physical Education Survey

Consent Information: *Teacher's Questionnaire*

You are invited to take part in a study of the factors influencing participation in University Bursaries Physical Education. This study has been undertaken in partial fulfilment of a M.Ed (Spec Ed) course being carried out through the Department of Educational Psychology at Massey University College of Education, Palmerston North.

You are asked to complete a Teachers' Perceptions Questionnaire which aims to identify those factors influencing participation in University Bursaries Physical Education. This is part of a larger research study where students within a number of co-educational secondary schools have completed questionnaires to assist in the identification of those factors influencing participation in University Bursaries Physical Education.

You will be free to withdraw from the study at any time, or to decline to answer any particular questions in the study. The school, and your responses in the questionnaires will be confidential and your anonymity assured, as the researcher will not and cannot identify any of the teachers taking part. If you would like any further information, please contact me on (06) 343 1277.
Email: Wendi.Girven.1@uni.massey.ac.nz

Yours in research

Wendi Girven
B.Ed., TTC., H.Dip Tch.

Teachers' Perceptions of University Bursaries Physical Education

I am conducting research into the factors influencing participation in University Bursaries Physical Education. A students' perceptions questionnaire has been completed and I am also examining teachers' perceptions. I would appreciate Physical Education Teachers, the Curriculum Co-ordinator and the School Management Team completing the following questionnaire.

Questionnaire

(4)

Gender: Female ☐   Male ☐

1. Are Physical Education and sport different?

                        Yes ☐   No ☐

Reason ....
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2. What is your view of University Bursaries Physical Education as an academic mainstream subject in the senior school curriculum.

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(12)

3. Which of these factors below have contributed towards University Bursaries Physical Education's effort to gain academic recognition in the senior school curriculum? (Tick the appropriate box).

Society has failed to take seriously the learning and teaching of Physical Education. ☐ (18)

Physical Education is viewed as a peripheral subject by many outside the profession. ☐

Physical Education is seen as not providing appropriate knowledge and learning experiences in the senior school. ☐

Physical Education is seen as a non-academic subject. ☐

Physical Education has been a subject of marginal importance in the senior school. ☐

Physical Education is not controlled by examinations. ☐

Physical Education's internal assessment procedures have raised concerns over how educational standards are to be maintained. ☐ (24)

Please add any other factors which you think are significant...

....

....

....

4. Which of the factors below have contributed towards University Bursaries Physical Education's inclusion in the senior school curriculum? (Tick the appropriate box).

	Strongly Disagree	Disagree	Agree	Strongly Agree
				(31)
The need for a wider variety of subjects.	☐	☐	☐	☐
The larger number of students returning to secondary school.	☐	☐	☐	☐
The subject is seen as being as equally as important as other subjects.	☐	☐	☐	☐
The subject promotes an understanding of the positive value of physical activity.	☐	☐	☐	☐
The subject is a legitimate educational activity.	☐	☐	☐	☐
The subject can be justified in its own right.	☐	☐	☐	☐
The subject makes a positive statement about the relationship between theory and practice.	☐	☐	☐	☐

(37)

Please add any other factors which you think may have contributed..................................

....

....

5. Rank the importance of the ten following reasons you think students give for partici-
    pating in University Bursaries Physical Education. Read **all** the reasons below before
    ranking.
    1 = main reason   *10 = least reason*

    The subject is seen as a non-academic subject.   ☐ (44)

    The subject is of high personal interest.   ☐

    Students regard the subject as a 'fill-in' subject.   ☐

    Students feel they can achieve a better mark in Physical Education than
    in other subjects.   ☐

    Students intend to work in a related field such as physiotherapy.   ☐

    The subject is viewed as challenging.   ☐

    Students gain credit for activities not acknowledged in a final examination. ☐

    Students have completed Sixth Form Certificate Physical Education.   ☐

    The subject caters for natural sporting talent.   ☐

    The practical component of the course allows students with limited
    academic abilities a chance to excel.   ☐ (53)

Can you think of any other reason/s not given? ....

....

....

....

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....

....

6. What characteristics best describe a **talented female** participant in University

    Bursaries Physical Education?   (60)

....

....

....

....

....

7. What characteristics best describe a **talented male** participant in University Bursaries Physical Education?

2/1

....

....

....

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....

....

8. What do you think is the gender distribution in University Bursaries Physical Education? (Tick the appropriate box).

More males than females. ☐

More females than males. ☐

About the same gender distribution. ☐

Don't know. ☐

(8)

Reason ....

....

....

....

9. How could University Bursaries Physical Education attract more **talented females**?

....

....

....

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10. How could University Bursaries Physical Education attract more **talented males**?

(20)

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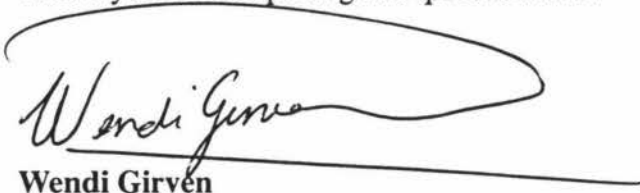
11. Would you advise a student to take University Bursaries Physical Education?

Yes ☐   No ☐

Why? ....
....
....
....
....
....
....

Thank you for completing this questionnaire.

Wendi Girven
Researcher

August 1996

Appendix E: Consent Form: Focus Group Interviews

1995 7th Form University Bursaries Physical Education Focus Group Interview Consent Forms

Consent is given for...to participate in a focus group interview that will enable Wendi Girven to conduct preliminary research on her topic 'The Factors Influencing Females' Participation in University Bursaries Physical Education'. This research is in partial fulfilment for a M.Ed (Spec Ed) in 1996, through the Department of Educational Psychology at Massey University College of Education, Palmerston North.

The focus group interviews will be conducted as an informal discussion with a mixed group of students to survey their perceptions of Physical Education, sporting experiences and University Bursaries Physical Education. The purpose of the focus group interviews is to provide a basis on which to generate a questionnaire to be delivered to consenting University Bursaries Physical Education students in 1996.

The researcher will explore education in practice and therefore it is hoped that the study will be of benefit to the school and all those that took part. Strict ethical standards and confidentiality will be maintained at all times. A tape recorder will be used. I would be happy to discuss any aspects of the project or concerns you might have and can be contacted at 34 31277.

Wendi Girven

B.Ed., TTC., H.Dip Tch.

Please complete the following consent slip.

The student and parent/caregiver consent to...................................... participating in a focus group interview and acknowledge that the research is in partial fulfilment of an M.Ed (Spec Ed) course.

----------------------------------   ----------------------------

           Student   Parent/Caregiver

1995 7th Form University Bursaries Physical Education Focus Group Interview Schedule.

To..

Physical Education Class...

Thank you for accepting my invitation to attend the discussion in

Room J1   on....................................promptly at..........................

Since I am talking to a limited number of people, the success of our discussion is based on the co-operation of the people who attend. I look forward to talking with you and appreciate your anticipated attendance.

The forum will consist of students who have studied University Bursaries Physical Education in 1995.   We will be discussing your perceptions of Physical Education, sporting experiences and University Bursaries Physical Education.

If for some reason you find you are not able to attend, please call me to let me know as soon as possible. My phone number is 34-31277.

Wendi Girven
B.Ed., TTC., H.Dip Tch.

Appendix F: Consent Form: Questionnaire Pilot Testing Focus Group Interviews
Pilot Study Questionnaire Consent Form

You are invited to take part in a study of 'The Factors Influencing Participation in University Bursaries Physical Education'. This study has been undertaken in partial fulfilment of a M.Ed (Spec Ed) course being carried out through the Department of Educational Psychology at Massey University College of Education, Palmerston North.

As part of a sample of University Bursaries Physical Education students you will be asked to complete and comment on a Student's Perceptions Questionnaire which seeks your views during this academic year. You will be free to withdraw from the study at any time, or to decline to answer any particular questions in the study. Your responses in the questionnaires will be confidential.

If you would like any further information, please contact me on (06)3431277.
Email: Wendi.Girven.1@uni.massey.ac.nz

Yours in research

Wendi Girven
B.Ed., TTC., H.Dip Tch.

Please complete the following consent slip.

The student and parent/caregiver consent to the following student participating in the Student's Perceptions Questionnaire.
Signed:

....
               Student   Parent/Caregiver

Appendix G: Consent Form: Student's Questionnaire
Questionnaire Consent Form

You are invited to take part in a study of 'The Factors Influencing Participation in University Bursaries Physical Education'. This study has been undertaken in partial fulfilment of a M.Ed (Spec Ed) course being carried out through the Department of Educational Psychology at Massey University College of Education, Palmerston North.

As part of a sample of University Bursaries Physical Education students you will be asked to complete a Student's Perceptions Questionnaire which seeks your views during this academic year. You will be free to withdraw from the study at any time, or to decline to answer any particular questions in the study. The school you attend will not be identified. The responses you give in the questionnaires will be confidential and your anonymity assured, as the researcher will not and cannot identify any of the students taking part. In addition, it may be the researcher's intention to publish the research findings.

If you would like any further information, please contact me on (06)3431277.
Email: Wendi.Girven.1@uni.massey.ac.nz

Yours in research

Wendi Girven
B.Ed., TTC., H.Dip Tch.

Please complete the following consent slip.

The student and parent/caregiver consent to the following student participating in the Student's Perceptions Questionnaire.
Signed:

....
        Student   Parent/Caregiver

Appendix H: Consent Form: Teacher's Questionnaire

You are invited to take part in a study of 'The Factors Influencing Participation in University Bursaries Physical Education'. This study has been undertaken in partial fulfilment of a M.Ed (Spec Ed) course being carried out through the Department of Educational Psychology at Massey University College of Education, Palmerston North.

You are asked to complete a Teacher's Perceptions Questionnaire which aims to identify those factors influencing participation in University Bursaries Physical Education. This is part of a larger research study where students within a number of co-educational secondary schools have completed questionnaires to assist in the identification of those factors influencing participation in University Bursaries Physical Education.

You will be free to withdraw from the study at any time, or to decline to answer any particular questions in the study. The school and your responses in the questionnaires will be confidential and your anonymity assured, as the researcher will not and cannot identify any of the teachers taking part. If you would like any further information, please contact me on (06)3431277.

Email: Wendi.Girven.1@uni.massey.ac.nz

Yours in research

Wendi Girven
B.Ed., TTC., H.Dip Tch.

Appendix I: Focus Group Interview Questions Following Data Analysis.

Gender Issues

Define perceptions of gender equity.

Describe a 'gender-fair' and 'gender-sensitive' Physical Education environment.

Describe a 'gender-insensitive' and 'gender-unfair' Physical Education environment.

What strategies are used to promote gender equity?

What are the positive effects of a 'gender-fair' and 'gender-sensitive' Physical Education environment?

What are the negative effects of a 'gender-fair' and 'gender-sensitive' Physical

Education environment?

What characteristics describe teachers in a 'gender-fair' and 'gender-sensitive' Physical Education environment?

What are the benefits of a 'gender-fair' and 'gender-sensitive' Physical Education environment?

Background Information

What reasons account for students' lack of regular participation in a team or individual sport/s?

Current Perceptions of University Bursaries Physical Education

Why would students state their was no other subject they could take other than Physical Education for Bursary?

In what ways do students believe they can achieve a high grade in University Bursaries Physical Education?

How can that grade be achieved? In what aspects of the course?

In what ways does University Bursaries Physical Education help students to demonstrate their abilities.

How does the course stimulate students to try new things?

What are the new things students state?

Participation Factors in University Bursaries Physical Education
Why are the results ranked in this particular way?
Explain the reasons accounting for the release of tension factor being
ranked so highly.
Why is fun not ranked more highly?
Define what students would have interpreted as health reasons. How do
health reasons influence a lack of participation?
How influential is the peer group in encouraging or discouraging
participation?

Benefits of Physical Education
Can you think of any other benefits not outlined?

Definition of Athletic Ability
Can you think of any other characteristics to describe an athletic female in
University Bursaries Physical Education?

Appendix J: Female Focus Group Interview Questions Following Data Analysis.

In the previous focus group interview we talked at some length on your perceptions of a 'gender-fair' and 'gender-sensitive' environment. The males however, tended to do most of the talking. I would like to share your thoughts.

Gender Issues:

What does a 'gender-fair' and 'gender-sensitive' University Bursaries PE environment mean to you?

In what ways does a 'gender-fair' and 'gender-sensitive' environment help you to develop and pursue your sporting interests?

Are students working co-operatively? What are the sorts of activities that you are all involved in?

In what behavioural ways do the males seek attention in class?

In what aspects of the course do they require attention?

In what behavioural ways do females seek attention in class?

In what aspects of the course do they require attention?

Parents, Family and Peer Group Influences:

Describe how your parents and family have encouraged your PE and sporting participation.

Describe any instances when you have felt your parents or family have discouraged your participation.

Would you identify the peer group as a significant influence on PE and sporting participation?

How does your peer group encourage your participation?

How does the peer group discourage participation?

Is the peer group more influential now in encouraging or discouraging participation, or was it more influential in your primary and intermediate years?

Health Reasons Influencing Participation:

Are there any myths and misconceptions about females' participation in
.physical activity? What are they if they exist?

What do you feel are the health benefits of Physical Education and sporting
participation?

Can you identify any health hazards of Physical Education and sporting
participation?

Success in University Bursaries Physical Education

Females appear to be successful in the theoretical aspects of the course. How
do females gain good marks?

What methods do females use to excel in the practical components of the
course?

What are your reasons for pursuing or not pursuing a Physical Education and
sporting career?

Appendix K: Informal Discussion Questions With Physical Educators.

Question 1.

Describe your perceptions of mixed-gender groupings in Physical Education and sport.

Question 2.

Is single-sex groupings the answer to addressing gender inequities?

Question 3.

How would you describe a 'gender-sensitive' Physical Education and sporting environment for female participants?

Question 4.

How would you describe a 'gender-insensitive' Physical Education and sporting environment for female participants?

Question 5.

How would you describe a 'gender-fair' Physical Education and sporting environment for female participants?

Question 6.

How would you describe a 'gender-unfair' Physical Education and sporting environment for female participants?

Question 7.

What teaching strategies are used to promote gender equity in Physical Education and sport.

Question 8.

Do female and male physical educators use different strategies in addressing gender equity issues? If so what are they?