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Girls and Outdoor Education

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ABSTRACT

This study set out to investigate the experiences of girls' in school outdoor education programmes. One hundred and sixty-eight fourth form girls from four Dunedin schools (two co-ed and two single-sex) responded to a pre-post questionnaire surveying their self-esteem, attitudes to outdoor education and demographic backgrounds. Participant observations and twenty interviews were also undertaken.

Results from the quantitative data gathered constitute a general vote of confidence in outdoor education for girls. Qualitative analysis revealed that in general girls enjoyed their outdoor education camps, but there were some aspects of outdoor education that could be improved. Lack of self-confidence, scarcity of appropriate role models, poor body image and lack of planning for the menstrual needs of girls are some of the barriers that have been identified to girls' participation in outdoor activities. Recommendations are given for improving school outdoor education programmes for girls.
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Chapter One

Introduction

This study investigates girls' experiences of outdoor education using quantitative survey data, qualitative interviews and participant observations. It attempts to identify what, if any, factors in school outdoor education cause girls to be deterred from participation in outdoor pursuits. As feminist research it is political in intent. Results from this study may contribute to an understanding of girls' experiences of both education and recreation in outdoor environments and may also contribute to improvements in outdoor education programmes offered to girls.

The New Zealand Recreation Survey 1974-75 (Tait, 1984), found that women were involved in fewer active outdoor recreational activities than men, and generally in lower numbers. Of the top forty recreational activities undertaken by men (by percentage involvement) five were distinctly outdoor recreations. Participation rates in these activities ranged from 3.9% for tramping, to 11%, 12.9% and 14.9% respectively for hunting, fresh-water fishing, and camping, to 31.3% for salt-water fishing. The women's top forty activities included only two distinctly outdoor recreations - camping, which attracted participation by 15.5% of the sample, and salt-water fishing (8.6%). Recreational forms such as sports, cultural, and home-based activities were more popular with women than were outdoor recreations.

More recently, Bell et al (1985) listed the leisure interests of 730 New Zealand women. Of the organised activities listed tramping was the only outdoor recreation, while sailing, snow-skiing, tramping, and water-skiing were all mentioned as non-organised outdoor recreations. This would suggest that women had become more involved in outdoor recreation during the decade after the 1974-75 survey. The recent Life in New Zealand Survey (Hopkins, et al., 1991) found that women were active participants in canoeing, orienteering, sailing, snorkelling/scuba diving, snow sports, surfing/sailboarding, and waterskiing. However, only in canoeing and waterskiing did they participate at the same rate as men.

If women make up fifty percent of our population but far less of our active outdoor participants, I believe we ought to be concerned. A lower participation rate than one that is proportional with the general population may mean that women have difficulty participating in outdoor recreation, including
outdoor pursuits. This difficulty may stem from the manner in which outdoor pursuits are perceived, or organised, or undertaken, or any combination of these factors. School-based outdoor education can be a major entry point for young women into a wide range of outdoor pursuits (Ewert, 1989; McRae, 1990). It is therefore necessary to investigate school outdoor education to establish whether or not there are factors operating within it that may cause girls to experience outdoor pursuits negatively.

Overseas literature (Arrowsmith, 1990; Miranda and Yerkes, 1982) concurs with the New Zealand data on female involvement in outdoor pursuits. Adult women are "in a significant minority" in British outdoor pursuits - eight percent of the members of the British Mountaineering Council, 20% of the British Canoe Union, and 30% of the Royal Yachting Association are women. School-age women fare no better. One Scottish outdoor education centre "reveals a bias of over 13% in favour of males" on its courses (Arrowsmith, 1990), and no reasons for this bias are apparent. It is suggested that to

... engage in the more exciting and adventurous outdoor pursuits, a girl may have to overcome a powerful predisposition not to take part, based on a complex web of psychological and societal pressures. (Arrowsmith, 1990:27)

Rigorous research has not yet identified exactly what those psychological and societal pressures are in relation to outdoor pursuits and outdoor education although they are likely to be the same pressures that exist for women in patriarchal societies (Humberstone, 1987b; Henderson et al, 1989; Lenskyj, 1986). Specific data on which women take part in which outdoor activities, why, and what they experience is scarce at present. Such research is necessary if female participation is to be understood and if outdoor programmes are to further develop in extent and effectiveness. (Miranda et al, 1982).

Miranda et al (1982) view outdoor pursuits positively for girls and women. They claim that for women, practices of upbringing, together with social protectionism over motherhood have:

... led to devaluing [of] their own bodies as centers (sic) of action. The constriction of physical expression in young girls at an early age severely limits the exploration of their own world. (p84)
Outdoor pursuits, though, have an empowering and liberating task which may help to explain the surge of interest in women-only outdoor programmes that Miranda et al (1982) have noted. They explain that for -

... girls especially, the loss of a free adventurous physical self has gloomy implications for social and intellectual action. Intellectual functioning, when liberated from dusty academic confines, is itself an important form of action marked by qualities of risk, work and play. To be creative one must be willing to explore, take chances, and occasionally fight. Perhaps women sense that these bases of creative thinking must be secured first at the physical level. Adventure, risk, and social development out of doors may help build a new form of personal security ... (p83).

The term "outdoor education" encompasses more meanings and practices than can be condensed satisfactorily into one definition (McRae, 1990). Outdoor education is used as a vehicle for goals as diverse as "enhancing the learning of traditional academic subjects", developing "environmental and ecological awareness", and building "outdoor living skills such as backpacking, canoeing, and mountain-climbing" (Knapp, 1990:29-30).

It occurs not only in the formal educational institutions such as schools but also through community and commercial outdoor programmes. The goals of outdoor education can be tailored to suit the particular needs of any client group. Outdoor education is primarily educational rather than recreational. It is not just a series of physical activities undertaken for fun or interest as recreation may be. Rather, it is a carefully planned programme of action and reflection aimed at developing particular qualities in participants. The theory from which outdoor education is drawn illuminates what these qualities tend to be and the methods used to foster them.

Outdoor education appears to be successful in developing certain qualities in individuals because of it's multi-dimensional, action-oriented approach. Bachert (1985:24), for example, has established a model of outdoor education in the form of an "outdoor learning matrix" which has three dimensions. The first is philosophical and uses Dewey's two levels of learning experience - primary experience derived through the senses and from direct participation and observation; and reflective or secondary experience which is the process of synthesizing the information gained from primary experiences. The second dimension is methodological. It indicates that outdoor education
occurs in, about, and for the outdoor environment. The third, pedagogical dimension draws from learning theory the three domains of affective, psychomotor and cognitive development. Bachert's matrix, then, provides a structure for planning and evaluating outdoor education programmes. The present study draws on student evaluations of their own direct experiences and their reflective experiences. It also focuses on the methods used in outdoor education and the outcomes of these for girl students.

Potential benefits gained by outdoor education participants can be gained in physical, educational, social, and psychological spheres. Physical benefits include improved physical fitness and co-ordination, skill development and catharsis from usual routines. Educationally, outdoor education may increase awareness of the environment and associated problems; it may help develop problem-solving, decision-making and value-clarification skills in young people. It may also support many other social and academic talents such as improved intra-group co-operation, respect for others, development of communication skills and development of friendships. Psychologically, outdoor education may enhance an individual's self-confidence, self-esteem and sense of well-being and it may fulfil needs for challenge and excitement (Ewert, 1989). Benefits may be accrued by individuals participating fully in outdoor education programmes but the degree to which benefits are obtained by different sectors of outdoor education participant populations has not been studied. The present study begins to address this point by evaluating the degree to which girls may be put off from full participation.

In this study Knapp’s (1990:28) definition of outdoor education as "the use of resources outside the formal school classroom to meet educational goals and objectives" describes the style of outdoor education adopted by the participant schools. Educational goals and objectives met by outdoor education include development of outdoor pursuits skills; environmental awareness and concern; development of recreational interests and personal and social development (New Zealand Department of Education, 1986; Ford, 1989; Law, 1983; Parker & Meldrum, 1973; Smith, 1987) and these are reflected in school charters as the following statements from two Dunedin schools show:-

Our school should encourage pupil-centred learning experiences outside the classroom. This includes Outdoor Education and subject-related field activities. Outdoor Education is a combination of personal and social development through outdoor pursuits and environmental studies ... (School A).
Aims of Education Outside the Classroom: ... To further opportunities for personal and social development through activities outside the classroom ... To help students to appreciate the inter-relationships within the environment and between people and their environments ... To build up experience and competence in the skills required to move with safety and confidence in urban, rural and wilderness settings ... (School B).

Outdoor education, as a broadly based educational form may incorporate elements of outdoor recreation and/or outdoor pursuits within it's structure. However, it is the outdoor pursuits which are of interest in the present study. Outdoor recreations can be defined as recreational activities undertaken in an outdoor setting and kite-flying, camping, bushwalking, picnicking and horse-riding are examples. Outdoor pursuits are a subset of outdoor recreations. They can be distinguished by the centrality of 'adventure'. In outdoor pursuits there is a "deliberate seeking of risk and uncertainty of outcome often referred to as adventure" (Ewert, 1989:8). Mountaineering, parapenting, caving, kayaking and tramping are examples of outdoor pursuits.

In order to identify issues for girls arising out of outdoor education the sport and physical education literature has been reviewed. Sport is defined as a game, or a collection of games, which is governed by rules and characterized by elements of competition, physical skill, strategy, chance, extrinsic reward and institutionalization (Thomson, 1980). Sport is not necessarily educative although individuals may develop particular potentials such as social skills through sport.

Physical education is distinct from sport in that physical education only occurs in educational institutions and like outdoor education, is educational rather than recreational in focus. Physical education (PE) is the study of physical aspects of human life, especially those concerned with human movement. PE programmes may include social and psychological objectives which are fulfilled through experiences with physical movement. PE aims to develop in individuals the knowledge and skills to participate fully in all aspects of physical movement throughout their lives.

Physical education, like sport, has been of interest to feminist studies because it can be a site of entrenchment and contestation of the gender order. Feminism is a social and political movement concerned with securing the liberation of
women from conditions which disadvantage them (Henderson et al., 1989). Feminism, and the form of feminism underlying this study, are discussed more fully in the next chapter.

Justification for the Focus of this Study

McCabe's (1990) study involving a postal questionnaire to 55 Central South Education District and Canterbury Education District schools set out to ascertain what effects the administrative reform of 'Tomorrows Schools' has had on secondary school outdoor education. It did not deal with gender specifically but noted that proportionately more boys' schools (43%) offered outdoor pursuits clubs than co-ed schools (35%) and girls' schools (22%). While the small sample limits generalisability of the results it appears that girls are less likely than boys to be offered outdoor pursuits through school clubs. This is possibly due to stereotyping of activities offered and of expectations for girls (McCabe, 1990). It may also reflect difficulties in staffing outdoor pursuits trips especially in girl-only schools. Outdoor education can be seen as an important alternative platform for girls to experience outdoor pursuits, but little research has been undertaken on how girls experience outdoor education, whether it is a positive experience for them and what difficulties, if any, they encounter. If attitudes persist in schools which limit the availability of outdoor pursuits experiences to girls via clubs it can be asked to what extent these same attitudes afflict outdoor education. The present study provides one interpretation of girls' experiences of outdoor education and the ways in which girls may be deterred from participating in outdoor pursuits.

Most of the New Zealand literature on Outdoor Education comprises programmes and activities, teacher guides and how-to manuals (Bailey, 1989.). Little critical analysis of outdoor education in general has been undertaken and in Bailey's (1989) bibliography, Outdoor Education in New Zealand. A Modern Bibliography, there are no listed studies focussing on gender. The present study begins to rectify a situation in which it seems to have been assumed that outdoor education is experienced the same way by both males and females. Previous studies of outdoor education have been made using samples of boys only (e.g. Harris, 1987; Henderson 1983; Kerr, 1982; Meyes, 1977) but these did not address issues of gender specifically. Anderson (1989) investigated the assumptions underlying outdoor education policy and found that "the wider social context and relationships of power and control that exist regarding gender, race, class and socio-economic status are ignored" (pi). That
there is a lack of regard for these sociological factors in outdoor education policy may explain why there is so little written about them in the New Zealand literature.

The outdoor recreation literature in New Zealand which addresses issues of gender has focussed almost exclusively on the experiences of adult women. Dann and Lynch (1989) used biographical sketches and a group interview to explore meanings of outdoor recreation for women in New Zealand. Craig (1980) investigated the influence of socialization on a selection of leisure activities. Neighbour (1973) provided information on adult gender differences in outdoor recreation demand, and Cara and Mary (1985) analysed factors which led women to reach adulthood with a lack of confidence in themselves and a lack of competence in outdoor activities. Simpson's (1991) bibliography entitled *Women and Recreation in Aotearoa/New Zealand* lists several references to women in outdoor pursuits but includes only one item on girls' thoughts on their outdoor camp experiences (Reddit, 1974). Both the Neighbour and Reddit studies are now quite dated which limits their usefulness to current research.

Most of the literature on gender and outdoor recreation from overseas has also focussed on adult women with little reference to the outdoor experiences of young or teenage girls. Several authors have explored the issues of access to outdoor recreation for women. Some of the difficulties women report in accessing outdoor recreation include lack of self-confidence (Truchanas, 1991), limiting social expectations for women in physical activity (Ridgeway, 1989) and media images of both women and outdoor physical activities (Higgins, 1989). Attitude to oneself, confidence in oneself and expectations for particular groups in society may all be influenced by experiences during childhood and adolescent. The present study focuses on adolescent experiences of school outdoor education which may influence adult participation in outdoor recreation.

Based on the preceding discussion, the outlook for girls in outdoor education as a form of physical activity, is rather gloomy. Humberstone (1986a:29) states that the "particular gender images which are portrayed through traditional sport and conventional PE foster social attitudes about females which help to define and reinforce females (sic) marginal position in society". How girls' outdoor education fares is the topic of the final section of this review.

Educational outcomes in general disadvantage women as a group (Women's Advisory Committee on Education, 1988). School
curricula, both overt and covert, have been held responsible for negative outcomes of girls' education (Sampson, 1989), signalling to feminist educators the need for radical restructuring of learning environments so that they actively support and resource the education of girls, "ensuring the affirmation of their experiences of schooling as positive" (Foster, 1989:27).

Recent New Zealand and Australian feminist research on girls and education (Leder and Sampson, 1989; Middleton, 1988) covers curriculum areas such as maths, science, sex education, physical education and sport. Other topics investigated include Maori girls in school, research methods, single-sex versus co-educational schooling and co-operative enterprises in education. Outdoor education has not been studied from a feminist perspective in the literature available to me. The present study provides a feminist perspective on outdoor education in New Zealand.

The results of this study may go some way toward explaining women's low participation in outdoor pursuit recreation. It should also be useful to outdoor educators operating programmes involving outdoor pursuits for school-age girls.
Chapter Two

Theoretical Framework

Feminism has been defined as "an analysis of women's subordination for the purpose of figuring out how to change it" (Eisenstein, 1984:xii). This is an acceptable definition if the word 'stop' is substituted for the word 'change'. According to Eisenstein, the purpose of feminism is to eliminate the need for feminism - to eradicate the oppression of women. Therefore, feminist theory is necessarily social theory since women are an integral part of human social life. To alter the conditions of women's lives is

... potentially to shift or disrupt much else, from personal identity and sexual mores, to family arrangements, childrearing customs, and educational patterns, and from religious ideology to political and economic structures. (Eisenstein, 1984:xiii-xiv).

Chafetz (1988) suggests that three specific elements are required of feminist theory. The first is that gender must be a central focus of the theory; second, social relations of gender must be considered a problem; and third, gender relations cannot be seen as biologically determined or as immutable. Chafetz states that in feminist theory,

... the gender-related status quo is viewed as the product of sociocultural and historical forces which have been created, and are constantly re-created by humans, and therefore can potentially be changed by human agency. (p5)

Feminist theory seeks to fill in the gaps in knowledge about women and to offer an alternative perspective based on women's experiences. Exactly what perspective is obtained depends on the particular form of feminism that is adopted. Categories of feminist thought are not sharply defined, static, or unrelated but are moving, overlapping and developing. Categories are but convenient 'packages' helpful in understanding the main strands of feminist theory. What follows is a brief review of feminist theory in education and a statement of the theoretical position upon which the current research is based.
Feminist Theory in Education

Middleton's (1988) taxonomy of feminist perspectives in education outlines three main streams of feminist theory which have developed since World War Two. These will be used here as a framework for building a picture of the feminist perspective used in this research.

Liberal feminism, radical feminism and socialist feminism each offer different views of gender relations, the problems involved and possible solutions. Liberal feminism concentrates on attaining formal equality of access for women to all social institutions including education, at all levels. Liberal feminists argue that positive discrimination is necessary to counter the effects of stereotyped socialization which disadvantages women in relation to men. Low self-esteem and lack of assertiveness are seen as some of the results of this socialization. (Middleton, 1988). I see positive discrimination as a necessary short-term measure in the long-term quest for full emancipation. Some positive action is needed to change attitudes - of both women and men - that currently hold women back from fulfilling their potential. This aspect of liberal feminism forms part of the theoretical basis of this study.

Liberal feminists also "... aim to abolish [sex-role] stereotyping largely through education, which can change the attitudes of employers, parents, teachers and students ... " (Middleton, 1988:182) and have campaigned to increase the number of occupations and other activities available to women (e.g. the 'Girls Can Do Anything' campaign).

Critics of the liberal position take to task the assumption that girls and women want the same education as boys/men and the further assumption that the problem of inequality of educational outcome rests with deficiencies in individual girls or women, rather than with the school and/or social system. The "visionary 'good society'" of liberal feminism is one in which "every woman has equal opportunity to be what men are" (Brooking, 1990:30), a blueprint which would result in beneficial change for some women but not for all. Brooking (1990) observes that since liberal feminism does not address the additional issues of class and race, and since access is only required into current institutions, those presently most disadvantaged (women from low socio-economic groups, and from racial minorities) will still be disadvantaged despite equality of access. I, too, find fault with the deficit theory, but acknowledge that it highlights the need for critical
analyses of what constitutes education and the purpose and practice of education. I believe that a great deal of the educational inequalities that exist are the result of 'system' failures rather than the personal faults of individuals.

Another concern of liberal feminists is that of equal representation by men and women in all disciplines and at all levels of educational administration. Equal representation is seen as an end in itself. This view has been criticised for not questioning the nature of "the hierarchies of capitalist society" (Middleton, 1988:183). Promotional and administrative structures in education for example are seen by radical feminists as being based upon 'model' career paths which are male defined. While I use a mainly radical feminist approach to questions of gender relations, I do not agree with all that is claimed by radical feminism. A short discussion of career paths will be used to explain this point. Career paths which do not make substantial allowances for child-bearing and caring and which are hierarchical in nature seem to disadvantage women as a group. I agree with this criticism insofar as it admonishes uncritical acceptance of educational structures. I do not agree with the assumption that there are basic differences between men and women in the way they organize themselves - this suggests differences which are immutable and irreconcilable.

The radical position (outlined below) holds that hierarchical organization is a masculine form and is inimical to women (Kokopeli and Lakey, n.d.). Women, it is suggested, prefer to form 'circles of support with shared leadership'. Clearly, all women do not spurn hierarchical organizational structures (e.g. female business executives, female school principals) but feminist groups (e.g. Women Outdoors New Zealand) do offer alternative strategies. I am not convinced of a general male ownership of 'vertical' hierarchical structures and of female ownership of horizontal or circular structures. However I do think that the relative value accorded men and women is reflected in, and to some extent reproduced by, the form an organization takes. In education for example, a large majority of school principals are men. Principals are socially valued above other teachers as their salaries and the respect they are accorded suggest. This state of affairs is reproduced in two ways, I believe. First, because most principals are men there is a lower expectation that women hold principal positions. Second, the structures which supported the rise of these men to those positions do not necessarily support women in the same way. So, while I do not think that all men support one organizational form and all women another, I
think that the effects of organizational structures on women's lives should be critically assessed. Alternative structures may prove to be more beneficial to women (and to men) than the current predominant form.

As mentioned above, strong opposition to the liberal feminist position has come from radical feminists. Radical feminists believe that women are a structurally oppressed group and that revolutionary change is necessary for their liberation. They argue that the root cause of women's oppression is the ideological structure of patriarchy (male power) and they see capitalism as but one form of patriarchy. Some radical feminists view changes in reproductive technology as the cornerstone to female emancipation - complete liberation will occur when women are no longer tied to reproducing the species. An alternate radical view is that women's mothering capabilities give them special qualities of nurturance, which implicitly, men do not have (Middleton, 1988) and which should be highly socially valued. I do not believe that a biological basis for understanding gender relations is very useful because it focuses on difference and is therefore unlikely to yield mechanisms for creating equal valuing of gender.

However, radical feminism is particularly useful because it has "analysed women's sexuality as socially constructed according to the dominant ideologies of patriarchy" (Middleton 1988:185). Women acquire their knowledge of themselves from a male-dominated view of the world via the mass media, schooling, academic texts, etc. Constructions of femininity, sexuality and appropriate social behaviour are seen to be products of oppressive male power (Middleton, 1988). Radical feminists therefore advocate separatism as a pathway out of oppression. Middleton (1988:185) gives three reasons for building separatist strategies:- first, separatism allows women to "raise their own issues and questions and to develop theories and methods appropriate for studying these"; second, separatism can create 'safe' atmospheres for women to speak openly on subjects of concern, including sexuality; third, a female-only environment can provide strong role-models for other women and especially for young women.

Problems with the radical stance stem from the implied assumption of an immovable patriarchy - one that will not weaken (Brooking, 1990). The only solution for women seeking liberation from patriarchal oppression is to operate outside of the 'system', and organisations such as Rape Crisis and Women's Refuge are given as examples of separatist
feminist initiatives. I do not agree that patriarchy is immovable. It takes different forms in different cultures and the changes that have occurred in gender relations between 1893 when NZ women first voted and the present suggest that the grip of patriarchy on our society has weakened. While separatist strategies are appealing I think it is erroneous to believe that women-only organizations operate totally free of social forces such as patriarchy. They operate within male-centred societies. The fact that they do, and the fact that there is a growing number of women-centred organizations (Dann, 1985), is evidence of a shift in the balance of social power between men and women.

Separatist strategies do not seem to offer much hope for changing the attitudes of men towards women, nor very clearly for constructing foundations upon which equitable relationships between women and men can be based. Separatism, then, in the long run, seems to offer little to a vision of a better society for all. What separatism does offer is a short-term measure aimed at adjusting attitudes of women towards themselves, and building knowledge based on "the female gaze" (Gamman and Marshment, 1988). This knowledge, self-awareness and self-confidence can then be used in meeting the ultimate challenge of a gender-equitable co-existence. I do not believe that separatist strategies have to be all-or-nothing packages. A move toward some girl-only classes and some co-ed classes in schools seems to me to be a useful mixture of positive discrimination and separatism. The radical feminism which informs the present research is tempered with caution. A radical approach is the theoretical position I find most useful for a study because an analysis of beliefs underlying the practice of outdoor education is what is ultimately being attempted. Radical theory will not be used prescriptively, however. Rather, a blend of some radical feminist thought with a smattering of liberalism will probably result, along with a critical view of both stances.

Socialist feminism identifies women's oppressor as "capitalist patriarchy" (Middleton, 1988:189) and seeks to understand the relationships between the social relations of class and the social relations of gender. Socialist feminists see "sex and gender, class, race and nationality as the sources of women's oppression; each one just as fundamental as the next." (Brooking, 1990:32). For the purposes of this thesis, I have adopted the view that issues of class and race are not as important as issues of gender in social relations. The reasons for this view are, first, that gender inequity is seen to affect a larger proportion of the population (all women) than either
class inequity or race inequity alone but this is not to say that class and race are not important. Second, radical feminism, in addressing issues of power, has ideologically taken on board issues of gender, race and class, thus providing a platform for social change in all three spheres. The focus on gender in this research should ultimately benefit a large number of people (all schoolgirls) and provide an impetus for research into race and class in outdoor education. In the research some reference will be made to differences between girls as opposed to treating girls' as an homogenous group, but detailed analyses of the interrelationships between gender, class and race will not be attempted.

As feminist research the methods used in this study should not be oppressive for the young women involved and they should elicit information that can be useful to the women themselves. It should also develop a critical perspective of both the topic under investigation and a self-critical perspective of the research process (Acker, et al., 1991). The results of this study will go some way toward a fuller understanding of women's experiences of physical activities in outdoor environments and as such should be of benefit to those research subjects who will participate in outdoor activities in the future. They will have access to the results of the study through a report which will be lodged with each participant school once the study is complete. The results will be of benefit also to outdoor educators dealing with teenage girls on their programmes, by those teenage girls, and by their teachers, some of whom are women. The study is critical in nature and a reflective stance will be taken of both the methodology and the resulting interpretations made of the data. While considerable debate has occurred over the appropriateness of specific data gathering techniques (i.e. qualitative versus quantitative methods) for feminist research it is now understood that there are no such things as feminist methods - there are good social science techniques that support the aims of feminism. Feminism has been critical of research which fails to reflect the wholeness of women's life experiences (Jayaratne and Stewart, et al., 1991). I have attempted to employ methods in this study which draw on individual experiences and also place these in a wider context. Including both quantitative and qualitative methods in research is increasingly being accepted in feminist academic circles since combinations of methods (also known as triangulation or multi-method research) can capture a richer, more complete and contextualised picture of the topic. Issues which are important to individuals cannot be generalised without the backing of rigourous survey research.
On the other hand the true nature of a topic cannot be captured in statistics alone (Jayaratne and Stewart, 1991). Thus I have employed quantitative survey instruments alongside qualitative observational and interview techniques in order to understand girls' experiences of outdoor education.

One of the criticisms of qualitative research methods has been that it is too subjective and left open to researcher bias. Absolute objectivity is not possible in any research as all research is undertaken in a social setting. In this study the subjectivity inherent in the design is made explicit. I am a woman, a feminist, and I have an interest in outdoor education. I have personal knowledge of the issues raised by the research and am therefore a part of a reflective process occurring throughout the observational and interview phases of the study. This is not to say that I have purposely biased the data, but that the relationship between myself as researcher and the students as researched is a subjective one. Part of making this subjectivity explicit involves acknowledging that my personal experience of the topic under study will inevitably inform my interpretations of the data. The reader can better judge my research if my beliefs are plain and not hidden behind a prose which masquerades objectivity. Therefore I have used the first person singular when I wish to inform the reader that what is stated is my own position and not that of someone else nor a generally held view.

The present thesis seeks to address issues of concern for girls in secondary school outdoor education. It utilizes the radical feminist tradition (Middleton, 1988) of focussing on girls only, in order to describe outdoor education from a female perspective. That boys may share some of the concerns raised by girls in the study is acknowledged here but will not be discussed further as the focus of interest in this research is on the concerns as they affect girls. Post-structuralist readers may argue that research based on gender dichotomisation is a stereotyping activity itself. While I respect this viewpoint I consider separatist research to be important in highlighting issues as they affect one gender (not necessarily exclusively), and including those issues exclusive to one gender, for example menstruation in girls.

Underlying the study is an assumption that school outdoor education is male-defined and male-centred and that girls generally are therefore oppressed by this male perspective. The study sets out to test this assumption by identifying the nature of the oppression, utilizing the perspective of girl's
understandings of their own experiences and observations of 'everyday' outdoor education practices.

Summary.

From a feminist standpoint, any factor which prevents or inhibits women from partaking in a legitimate activity of choice is unacceptable. Outdoor education has only recently been subjected to the scrutiny of academic research and there is little material on gender issues in OE. What there is has been written predominantly from various feminist viewpoints. Negative influences on girls and women in sport, recreation and physical education have been discussed from liberal and radical feminist perspectives. Much educational research has sprung from a liberal platform, emphasising inequity of access to learning. Recent studies take a more radical stance, placing at the centre of the debate issues of female-centredness in educational agendas and modes of learning. The review which follows borrows from both positions. Liberal feminism can illuminate the processes and outcomes of inequity in physical activity situations, on an individual level, while the radical approach points to the social structures underlying inequity. At this level the thesis attempts to fill the gap between feminist understandings of education and understandings of outdoor education.
Chapter Three

Review of the Literature

Overview

The central concern of this thesis is the outdoor pursuits segment of outdoor education programmes. Therefore, it is essentially a study of gender issues in physical activities. Leisure participation, which by definition includes physical recreation participation, can be seen as a personal experience as well as a social institution. There are historical links between women's changing social roles and their changing opportunities in recreation (Henderson, et al., 1989). Early nineteenth century feminists demanded equality in legislation, in education, and in recreation, particularly physical activity. To them goes some of the credit for the demise of whalebone corsets and crinolines, and the advent of bicycling for women (Henderson et al., 1989). Contemporary feminists continue to criticise male-domination in recreation. In New Zealand women-only opportunities exist at many public recreation facilities and radical separatist groups such as Women Walk, Women Climbing and Women Outdoors New Zealand have formed supporting female participation in a number of outdoor pursuits including tramping and mountaineering (Women Climbing Newsletter, 1990; WONZ Newsletter, 1991).

Women are active participants in sports and recreations (Wilson, et al., 1990). This does not negate the need to create an issue of women's involvement in sport and recreation, however, as there is evidence indicating that women and girls are oppressed in sport and recreation participation (Bryson, 1983; Graydon, 1983; Lenskyj, 1986). At the same time recreations, including sport, do have revolutionary potential (Birrell, 1988). They can be a means of liberation from restrictive, prescriptive, deterministic life-paths and a form of empowerment. Other facets of sports and physical recreations act to reinforce traditional gender relations (Thompson, 1989) and these will be explored in this review.

The literature surrounding women in the physical activities of sport and recreation, including outdoor pursuits, is perused in order to identify and substantiate main themes in the issues surrounding girls and outdoor education.

The literature on recreational activities in the outdoors is fairly comprehensive, but almost totally gender blind. Very little research has been done on the responses of women to
"environments which have not been 'domesticated'" (Norwood, 1988:155). That which has been done validates the outdoor experiences of women and describes the diversity of those experiences and their interconnections with women's everyday lives (Bell, 1989). The popular press too has witnessed a recent increase in the amount of written material on women's outdoor adventures. Recent biographies of women who live and 'play' in New Zealand's outdoors include Wilderness Women (Dann and Lynch, 1989), and Herstory: the New Zealand women's diary, 1989 (Simpson and Hayes, 1988). North America has produced On Top Of The World, Five Women Explorers in Tibet (Miller, 1984), Women and Wilderness (LaBastille, 1980), Rivers Running Free. Stories of Adventurous Women (Niemi and Wieser, 1987) and Women Climbing (Birkett and Peascod, 1989) in the same vein. Some women adventurers have written their own stories, such as that of bicycling across the Amazon jungle, (Sutherland, 1982), mountaineering in Europe, the Americas and Asia (Blum, 1980; Tullis, 1986) and working in Antarctica (Chipman, 1986). This literary expansion is beginning to make visible women's work and recreational activities in outdoor locations.

Issues peculiar to activities undertaken in outdoor environments need to be illuminated in order to set the scene for the discussion of girls and outdoor education. The literature on women and outdoor pursuits has therefore been included with the main issues arranged thematically.

Outdoor education can be seen as the 'home' for outdoor pursuits in many schools and as such can operate as a gateway for entry to outdoor pursuit participation as recreation. The relationships between school, sport, and recreation develop through participation in school based sporting teams and recreation clubs and are strengthened by the common influence of formal physical education (Coles, 1980; Gray, 1988). Within the school environment there may be influences on girls which affect their participation in physical activities, which do not necessarily occur outside of the school environment. The literature surrounding girls and physical education is therefore also covered. Physical education can act as a springboard for sport and recreation (Willee, 1983) just as outdoor education can act as a springboard for outdoor pursuits recreation.

Physical education literature is important for a number of reasons. Sport, physical activity and schooling are each elements in a process which reproduces and reinforces patriarchal power relations (Scranton, 1986). It comes as no surprise to feminists that sexism in physical education is
common in schools as shown in various forms by a New Zealand study:

The factors working against girls included overt and covert discrimination against girls in particular subject areas, antagonism towards girls by male staff, invisibility of women in language and pictorial matter, lack of understanding by staff of how socialization processes constrain girls, ignorance of the social component of sex differences, ... lack of role models and models of alternative life-styles, bias in school textbooks, ... lack of interest in informing parents of the limitations of the traditional patterns for girls, resistance by staff to concentrating attention on girls, ... and lack of interest in taking any concrete action to raise girls' confidence in their abilities. (Abigail, 1984:19)

Staff at the schools in the above study did acknowledge the disadvantage suffered by girls in formal education, but were unable or unwilling to do anything about it - a measure perhaps, of the importance placed on the destiny of girls in society (Abigail, 1984). A similar situation has also been found in Britain (Scraton, 1986).

Physical education and outdoor education are also closely connected both formally and informally in the school setting in a number of ways. Physical education programmes sometimes include sections of outdoor education and therefore physical education teachers are involved in outdoor education programmes. Further, I would suggest that outdoor education, like physical education tends to be marginalised in schools (McCabe, 1990; Scraton, 1990; Sparkes, 1990). Sparkes (1990:12) notes that physical education "is universally lower rather than higher in the pecking order" and that academic subjects "are clearly given, and actively take, more status than practical ones". Additionally, in secondary schools, the physical activities of outdoor pursuits are often the main focus in an outdoor education programme, rather than environmental education activities or non-physical activities (Anderson, 1989).

Finally, relevant issues are drawn from the small collection of research dealing specifically with girls and outdoor education.

The next section of the review looks at ideological constructions of gender in sport, outdoor recreation, physical education and outdoor education. It will introduce the major ideological debates and complexities surrounding women and physical activity, as a background to the following sections. These will
outline debates of major issues for women in physical activity - barriers to participation; socialisation; body image; segregated or mixed gender groupings; adolescence and puberty issues; self-esteem; and teacher influences.

**Ideology and Physical Activity**

Research into cultural values and an analysis of sports literature suggests that there is an interdependent relationship between the social institution of sport and the dominant ideology in contemporary society (Thomson, 1978; Willis, 1982). Sport participation is seen as one of many methods of enculturation of dominant values and beliefs. Dominant values and beliefs instilled by sport are the high value of competition, aggression, physical stamina and dedication to the game (Cosgriff, 1983). These values are reputed to oppose the values socially expected in women - passivity, submission, weakness and vulnerability (Weiller and Higgs, 1989). Petrie (in Thomson, 1978) established that the values which male adolescents tended to support in physical activity were achievement oriented and closely aligned with their major traditional economic sex-role in adulthood. Females on the other hand, tended to support "motivational and values statements which stressed the intrinsic satisfactions of play and which were in line with the traditional expectations associated with the adult female sex role" (Petrie, in Thomson, 1978:88).

Sex-role research can be criticised for its potential ability to perpetuate distinct sex-roles by focussing on them. I would suggest that while sex-role stereotypes have not been abolished, they have become less distinct. Correspondingly, distinctions between men's and women's sport are becoming blurred, as is the case in that bastion of male athleticism in New Zealand - rugby. The advent of women's rugby union in this country (Hopkins et al., 1991; Nimmo, 1991) seems to suggest that either the values associated with the game may have changed, or more likely that the social construction of femininity is changing.

It is more difficult to detect fundamental shift in the relative position of women vis-a-vis men than it is to see changes in sporting practices. Sport is particularly useful for providing society with knowledge about the relative importance of men and women because it is a highly visible medium and because it is associated with biological difference through the body (Young, 1988).
Simone de Beauvoir (1953) used a psycho-social explanation for differential valuing of men and women. She expressed it as a masculinist symbolization of male as subject and female as Other. Sport in a male dominated society accordingly focuses on an active male body-subject as opposed to the inert, passive qualities of the (female) body-object. Thus,

... sport and woman are mutually exclusive concepts. This suggests that the sense of incompatibility between women and sport which still dominates in our society is not a social accident, but a conceptual and symbolic necessity. To the degree that in our society the female body is objectified, women must be excluded from the concept of sport. It follows that if there is a particular female person participating in sport, then, either she is not "really" a woman, or the sport she engages in is not "really" a sport. These two interpretations of the phenomenon frequently occur in our society, often together. (Young, 1988:336).

While this position seems to accept uncritically a natural duality in gender relations, and also appears to be unable to explain the participation in and enjoyment of sport by many women, there are two points I wish to draw from it. First it serves to link male domination with women's experiences of sport using a social-psychological approach, which can potentially make a stronger case than theories based only on sociology or psychology. Second, it has the power to explain why sport is still regularly defined in male terms. For example most televised sport in New Zealand is still men's sport (Gifford, 1988; Simpson, 1988); men's sport is often referred to as "sport" while women's sport is referred to as "women's sport" - e.g. "the rugby" versus "women's rugby"; "the cricket" versus "women's cricket". It also goes some way to explaining why a great deal of importance is placed on the presentation of the female body in sport (Graydon, 1983). The issue of body image will be taken up again and explored further for its effects on individuals later in this review. The great strength of de Beauvoir's analysis then is its ability to identify the symbolic interpretations of masculinity and femininity in relation to one another. Sandy Barwick, an Auckland ultra-marathon runner provides an illustration of how the paradox of womanhood and sport operate. Symbolically she accepts a masculinist view of women and sport when she divorces physical activity and the bodily processes it entails from her concept of femininity. Described as "a pint-sized paradox", she justifies her involvement in long distance running by "re-gendering" when the road-shoes come off.
After seven punishing days on the road you'd think the last thing an endurance athlete would be worrying about is how she looks. "You leave your pride at the start and pick it up again at the finish," she says. "It's a most ungainly sport. Not pretty at all. At the end I can't wait to be a woman - a whole person - again. I go to the gym made up because I like to feel good. It isn't necessary to lose your femininity just because you're doing such an awful sport." (Wane, 1990)

Women's socialisation into sport can therefore be seen to be contradictory, perhaps even incomplete, giving rise to coping mechanisms such as 'the apologetic approach' which Barwick uses. According to Graydon (1983) this

... takes the form of emphasising aspects of traditional femininity such as dress, make-up etc ... What athletes are obviously trying to communicate is that although they are functioning on male territory it's really alright because they do know, and accept, what being a real women means. (p10).

There are some who would disagree with Barwick's ideology and Cosgriff's (1983) research, which will be dealt with in more detail shortly, provides evidence which contradicts Barwick's view of femininity. It is clear though, that the body is "inscribed with meanings that reflect current social norms" (Wright, 1990) and the type of activities a body does become socially prescribed. Bryson (1983) writes that sport supports male competence and aggression through public exhibitions of physical skill. The female corollary, she claims, is "an inferiorisation of women and their skills" resulting in female isolation from "the ultimate basis of social power - physical force" (p413).

Methany (in Postow, 1988) identified the way in which women have been isolated from practices involving physical force. In 1965 she observed that women were prevented from competing in sports which featured attempts to "subdue the opponent by bodily contact", the application of physical force on a heavy object, the propulsion of the body over long distances, and "co-operative face-to-face competition in situations in which some body contact may occur" (Postow, 1988:360). One might argue that much has changed in the intervening twenty-six years, but perceptions of appropriate activities for women seem to be resistant to change. Crooks et al. (1983) found that for a sample of New Zealand secondary school students, netball (for girls) and rugby union (for boys) were the most desirable sports, and the reverse was true for each gender's least desirable sports.
The other desirable sports reported for females were, (in order of importance after netball) tennis, hockey, and basketball, and the most undesirable (after rugby) were wrestling, boxing, weight-lifting, and soccer. It would be interesting to repeat Crooks' study to see how rugby fares now. This data is drawn from responses to open-ended questions and so is not limited by pre-selection of possible responses - an important point in light of the inclusion of weight-lifting. I would suggest that the image of weight-lifting as gender-specific could have serious implications for the training and development of highly skilled female athletes if it also refers to weight training.

Cosgriff (1983) similarly found that many New Zealand women still believe that the more aesthetic, passive activities are female rather than male appropriate. In spite of this, and in contrast to de Beauvoir, Cosgriff's respondents did not perceive a contradiction between notions of sportswomen and feminine women. Women's views of femininity did include qualities such as being physically active and strong. However, it was also noted that this convergence of ideals may only occur because the activities deemed appropriate for women do not threaten notions of their femininity by sharing the same values as the activities of men.

Sport can militate against girls participation in outdoor activities. "Sport teaches you how to win and lose ..." (Stratford, 1989, p88). To win in sport, by and large, is to be male, since the majority of sports are defined as 'male appropriate' (Csizma et al., 1988). Female appropriate sporting activities are those in which a premium is placed on the aesthetic - rhythm, elegance, form, shape (Cheska, 1980; Graydon, 1983). It is not coincidental that these activities also require participants to be greatly concerned with their appearance.

Outdoor pursuits may provide situations in which traditionally gendered qualities can be seen as valuable attributes for the other gender to possess. Women-centred frameworks in sports turn upside-down "common-sense" definitions of what sport is - they replace emphasis on winning, the hierarchical nature of competition, elitism based on skill and success, the disparagement of opponents and an ethic of endangerment with an emphasis on co-operative competition designed to maximise the enjoyment and success of all (Birrell and Richter, 1987; Theberge, 1987). Likewise outdoor pursuits have been held up as ideal feminist physical activities for their intrinsically co-operative qualities. (Henderson et al., 1989).
There is danger in attributing co-operative activity structures to female endeavours because co-operation then seems to look like a 'natural' trait of femaleness. Feminist discourse needs to be wary of creating over-generalised and unrealistic definitions of women's values and behaviours as these can be as oppressive as any others. At the same time there is a need to identify and validate the experiences women do have in physical activities.

Bell (1989) has begun this work. In her study of women trampers, having fun, being physically challenged and accruing psychological, spiritual and health benefits were attractions to participation in outdoor activities. Learning, gaining knowledge and sharing skills are quoted as important to the building of inner strength and confidence. Breaking away from the hassles of everyday life has also been identified by women as a prime motivator and outdoor experiences have helped put lives into perspective (Bell, 1989).

Miranda and Yerkes (1982) found that women used outdoor adventure recreations to liberate themselves from restrictive gender roles. In the outdoors, women -

... often find they have more physical and inner strength than they thought. The new skills for the outdoor [sic] can provide women with opportunities for personal challenge and increased self-confidence. (Henderson et al., 1989:109).

In the light of these purported benefits, outdoor education would seem to have a lot to offer young women in preparing them for recreation in the outdoors. However, contradictions persist. On the basis of social groupings other than gender, the benefits are not easily gained by all. Women, like Maori people (and other racial minorities in other countries), the aged, people with physical and intellectual disabilities and people from low socio-economic groups are under-represented in outdoor pursuit participation (Bell, 1989; Yerkes and Miranda, 1985). Combinations of these groups - poor women, older women and Maori women, for example - are particularly poorly represented. This is possibly because male middle-class pakeha values underlying outdoor pursuits are incongruent with the values of other groups. Likewise, it may be that equal participation by members of all groups in society at any one time may never be achieved in practice, but this is not an excuse for perpetuation of existing misunderstandings and inequalities. It may well be that the nature of outdoor pursuits activities themselves must change in order to be attractive to various groups of people, and this change may, to some extent, be facilitated by participation
itself. Change of this nature has already occurred in the education system (Anderson, 1989) as schools attempt to hold the interest of diverse groups. Anderson (1989) states that outdoor education reflects the education system as a whole in its bias against the culture and knowledge of minority ethnic and class groups. Even though Taha Maori is included in official policy statements on outdoor education (Dept of Education, 1986) it is on pakeha terms - that is, some aspects of Maori culture are selected for inclusion in outdoor education programmes, such as developing "a feeling for the land" and promoting national identity through "stories of the people", to the exclusion of others such as the use of natural resources and the meaning of outdoor education to Maori people (Anderson, 1989:131).

On another level, institutional sexism is seen to operate in outdoor recreation clubs and national bodies (Ball, 1986) causing some women to steer clear of established clubs because of their male orientation (Bell, 1989). Initiatives to resolve the problem of appropriate collectives for women in outdoor recreations include the separatist groups previously mentioned as well as informal networks (Miranda, 1985; Moore, 1990).

Not only outdoor activities but outdoor spaces can be seen to be gendered negatively for women (Bell, 1989; Norwood, 1988), as Cameron suggests in an example from surfing:-

I am sure that the main factor which keeps girls out of all forms of surfing is socialization. People seem to think that surfing is the total domain of the mighty male. The role of the humble female is to wait on the beach while her boyfriend goes surfing and then be pleasant company when he returns. (Cameron, 1989).

The site of action (male) is the waves and the site in inaction (female) is the beach.

Girls and women are often perceived as not being tough enough or strong enough for outdoor activities (Henderson, 1989). New Zealand's pakeha cultural heritage of pioneering 'toughness' and rigorous exploration outdoors has been male-centred (Phillips, 1987). This is not to say that pioneer women were not tough, nor that there are no examples of female non-conformity in New Zealand's history, but it is to say that the heritage most vividly portrayed and retold is a male one. The image persists through advertising (Dearden and Andressen, 1987) which fails to model women as competent actors in rugged outdoor settings.
Three explanations could be used for this gendered image of 'toughness' associated with outdoor environments and activities. First, it is possible that because women are perceived as not 'tough' enough for a 'tough' environment, they tend not to use that environment. Women do utilize outdoor environments for active and passive forms of recreation (Wilson et al., 1990), from parapenting off volcanoes (Noble, 1988) to canoeing with children (Egarr, 1989). Second, the view that women are not 'tough' depends entirely on one's definition of 'toughness'. When women as well as men climb high altitude mountains (Birkett and Peascod, 1989; Tullis, 1986; Wichtel, 1991) for example, does this not mean they are tough? The scale used to measure toughness is, I suspect, based on a concept of male physical ability and inherently stacked against women. Finally, a serious misrepresentation of outdoor environments can occur when they are portrayed as being 'tough' places. Social constructions of words such as 'tough' can be seen to deter women from outdoor activities when 'toughness' implies maleness. Natural environments are neither 'tough' nor 'un-tough' - rather meanings are attached to those environments by users of them. Women themselves are beginning to create new meanings for outdoor spaces that reflect their experiences in and of them (Norwood, 1988). Norwood's adventurers, for example, value the sense of "submersion and identification" with the environment that they acquire through their travels, rather than notions of "dominance or victory" that have been associated with adventuring (Norwood, 1988:164). It is also suggested that each of these adventurers "walks away from some, but not all, of the roles implicit in her traditional landscape" (Norwood, 1988:164). Their images of themselves as women, and of what outdoor environments mean, therefore can be seen to be altered through participation in outdoor pursuit activities and 'wilderness' lifestyles.

Popular images of outdoor environments and outdoor pursuits may not reflect accurately the attitudes and experiences of outdoor recreationists and as Ball (1986) stated -

... a considerable gap exists between the real and imagined abilities and potential of women in outdoor activities. In society at large, the image abounds that women are "not suited" to the range of potentially dangerous outdoor activities ... within these spheres of activity, both women and men hold a higher image of women's potential (p30).

The physical education literature relevant to this study debates the merits of mixed and segregated groupings, types of physical activities offered, competition versus co-operation and assumptions underlying the physical education curriculum. The
first two issues will be tackled elsewhere in this chapter, while the third and fourth warrant some attention here. Fry (1985:142) in her history of the New Zealand school curriculum for girls concludes her chapter on physical education with the observation that increased "variety in sports activities at school and the opportunities to develop skills have given some girls confidence and opened up areas of satisfaction beyond school". At the same time physical education has been an avenue whereby girls have been reminded that they are different to boys -

... because it involves sport selected on the basis of its suitability for girls, school physical education can be seen as having transmitted socially accepted notions of femininity (Fry, 1985:142-143).

Fry's research covered the period from 1900 to 1975 and its relevance to contemporary physical education is confirmed by more recent research. Formal physical education, it is claimed, does not prepare girls for future involvement in physical recreation since they "leave school with their conceptions of femininity and masculinity acutely developed and thoroughly intact" (Evans, 1984; Scraton, 1986). According to Evans, girls' conceptions of femininity dissonate with images of involvement in sport - "images of muscle, sweat and showers" (Evans, 1984:13). It is further claimed that PE practices continue to reflect the primacy placed on women as mothers, as heterosexual and as 'delicate' (Lenskyj, 1986; Scraton, 1986; Talbot, 1986). In part the blame for this can be laid with an uncritical professional discourse. The "commonsense view" by schools of girls as frivolous, inattentive to serious study, and interested mainly in boyfriends, gossip and socialising not only clashes with research into adolescent attitudes (King, 1989) but also fails to question the beliefs upon which physical education is based.

It is only very recently that a critical sociology of physical education has developed (see for example Anderson, 1989; Kirk and Tinning, 1990; Scraton, 1986) perhaps reflecting a long-held assumption that micro-analyses of physical movement or of physical education lessons were the limits of the discipline. It has been noted that physical educators have tended to react defensively to criticism (Kirk and Tinning, 1990).

The 'hidden curricula' in PE however, teaches students differently according to their gender, body shape, fitness level and class. Bain (1990) defines hidden curricula as "what is taught to students by the institutional regularities, by the routines and rituals of teacher/student lives" (Bain, 1990:23).
One of her main criticisms of PE stems from what she refers to as its ahistorical, apolitical, technocentric ideology. Dewar supports this criticism by identifying the almost exclusive focus on aspects of biology and psychodynamics at the expense of socioeconomic and political structures (Dewar, 1990:73). In Dewar's view, teacher education programmes, by focussing on a new sport pedagogy may have improved how physical education is taught without changing what is being taught. Physical education, then,

... has the power to oppress because in its current form it uses science to blame its 'failures' or victims for their lack of success in programmes ... Physical educators are the new moral philosophers who, armed with their scientific techniques and knowledge, are sent out to bring health, fitness and well-being to the nation's children ... One result of this authorization through science has been the creation and development of a number of physical education programmes in schools and universities that select and reward a relatively small number of individuals who tend to be privileged by, among other things, their bodies, gender, social class position, race and physical abilities (Dewar, 1990:76-77)

Dewar goes on to say that where physical education teacher education courses do include papers devoted to critical sociological analysis there is emancipatory potential for the discipline. However the potential is rarely realised because, in her study at least, students had difficulty seeing it as relevant to the teaching of physical education or sport. What this means, she suggests, is that knowledge is constructed in such a way that the interconnections between pedagogy and gender oppression are not seen by many students (Dewar, 1990).

Physical education teachers themselves can reproduce traditional stereotypes. Dewar showed how female tertiary students of physical education maintained the contradictions between the meaning of sport and the meaning of femininity. In her study, "women jocks", technically excellent in their chosen sports, denigrated the efforts of the less athletic "prissies", "feebs" or "motor morons" (Dewar, 1990: 85-86). "Prissies" played "like girls", wore dresses to class and attached great significance to looking 'feminine'. By defining themselves as superior to other women phys-eders the "women jocks" created for themselves an identity foreign to that of women in general. They could then be seen as exceptional and not as challenging to traditional images of womanhood. The "prissies" on the other hand, viewed the "women jocks" as "butch", and criticised them
for making no effort to maintain their femininity along with their athleticism. The "prissies", while viewing the "women jocks" as women trying to be men, presented no challenge to the status quo in gender relations at all for they "expressed themselves in ways that took on traditional definitions of femininity" (Dewar, 1990:87).

Contradictions between the social constructions of femininity and sport emanated from male students too. The most accepting of the male students were the "ordinary jocks" (as opposed to the more conservative macho "super jocks") who tolerated women who played sport aggressively "like men" but only "as long as they displayed traditional forms of heterosexual femininity when they were not playing" (Dewar, 1990:91). Dewar's study, then provides further evidence that the image of "sport", or, I would argue, almost any vigorous physical activity, is incongruent with the image of "women" (Abigail, 1984). Evans (1984:13) similarly states that conceptions of femininity "vividly contrast the kind of images which girls normally associate with involvement in sport; images of muscle, sweat and showers". Additionally, Kane (1988) has shown that among American adolescent athletes, the more "female-appropriate" the athlete's physical pursuit the higher the status they receive within both their own gender group and their opposite gender group. It seems obvious, then, that common images of women and of femininity are at fault rather than people themselves or particular behaviours. If images of women were more varied, inconsistencies between social constructions of gender and actual behaviours would be reduced. In the meantime current images will continue to influence people and their behaviour. The implications of this research for teacher training in physical education are profound. Not only do tertiary courses in physical education seem to require serious review in terms of their critical content but it would seem that dismantling sexist attitudes among school teachers is of prime importance.

Physical education is based on meritocratic and technocentric ideologies (Bain, 1990). It's goals are taken-for-granted while more efficient means of achieving them are sought. Bain (1990) suggests that because physical education tends to view humans as "machines", measured in terms of physical performance, the body becomes reified and manipulated as an object. As an extension of this mechanistic approach to physical education, the body is seen as "... a commodity to be exchanged for admiration, security or economic gain" (Bain, 1990:29). For women the appearance of the body is the valued commodity while for men it is action and physical performance. Bain has offered here a connection between the discipline and practice of physical
education and female oppression. It is not clear precisely why it is only women's bodies that are commodified and therefore how physical education can be reconstructed so as to alter oppressive gender relations. What does seem to be clear is the conservative influence of physical education on girls' lives.

One reason behind physical education's conservatism may be that most criticism aimed at improving physical education for girls seems to have come from a liberal feminist stance concerned primarily for equality of access and opportunity. More radical approaches would suggest considerable changes to fundamental assumptions in physical education, one of which is the ethic of competitiveness.

Feminist physical educators who challenge the dominant sporting ethos of competition may be communicating to girls the notion that competition is not appropriate for females - exactly the message they should be filtering out (Gray, 1981; Marsh and Peart, 1988). Lichtenstein (1987) points out that it has not been shown that women do not have a desire to win. Concessions to innate co-operativeness in females as distinct from innate competitiveness in males undermine attempts to free women from prescriptive life courses. Some forms of competition are more acceptable that others - individual sports where one competes against time and not another competitor directly are seen as preferable for women compared to team 'contact' sports, for example (Ring, 1987). This is of course an oppressive competitive ideology because it limits female physical activity. Liberal feminism has attacked such oppressive views in their efforts to liberate women from obscurity. For liberal feminism, equality of participation in competitive events is a political focus (Lugones and Spekman, 1987). A more radical position takes the view that any sort of competition involves winning that only occurs at someone else's expense and that this form of achievement is oppressive to the 'losers' (Lugones and Spekman, 1987). Women are seen as the losers in the competitive game of life in Western democracies. Feminist support of competition is therefore claimed to be counterproductive to the struggle for full emancipation because competition between women is viewed as dividing and diminishing the power women can amass as a unified group (Lugones and Spekman, 1987).

Women, it is claimed, gain more from co-operatively based activities than from competitive ones, and there is some evidence for this (Marsh and Peart, 1988). In an Australian study, Marsh and Peart (1988) administered pre-post tests for physical fitness, self-esteem, student perceptions of physical ability, and perceptions of attractiveness. The girls were guided through co-
operative and competitive physical fitness programmes for six weeks and results showed that girls in both fitness programmes improved their fitness compared to the control group. Girls in the co-operative programme, however, improved on the "physical ability self-concept" and the "physical appearance self-concept" measures whereas girls in the competitive programme lowered their scores on these measures. This study suggests that girls benefit from co-operatively based physical activity learning sessions. Perhaps they do but so may boys and care must be taken in explaining why this is so.

Changing the 'rules' in women's activities would not necessarily alter the 'rules' of the dominant ideology of physical activities nor alter the relative social position of women to men. However the benefits of co-operative exercise should not be overlooked. A combination of competition and co-operative physical activities may therefore be the best alternative, especially as it may in the long term have the power to alter the importance currently placed on competition in most sports.

Outdoor pursuits, unlike sports, do not rely on competition as a defining characteristic (Ewert, 1989). They have the potential, therefore, to be especially liberating forms of physical activity from a radical feminist viewpoint. Outdoor education, the 'home' for outdoor pursuits in many schools, places more emphasis on enjoyment than on winning (McRae, 1990). It has the potential to benefit those who are less confident or less physically able. It can also operate as a gateway for entry to participation in outdoor pursuits as recreation (McRae, 1990). So why are there relatively few women involved in outdoor recreations and why are girls often the more reluctant participants in outdoor education programmes? (Menzies, 1982).

It has long been assumed that outdoor adventure activities for boys and girls are a good thing (Anderson, 1989.) Outdoor education has been a popular vehicle for fostering personal and social development in young people, however the form of personal and social development fostered has only recently been questioned (Anderson, 1989; Humberstone,1986a). According to Humberstone (1986a, 1990), it is a powerful medium through which traditional ideologies of gender relations may be challenged.

The teaching process utilized by professional outdoor educators may help bring about a change in how pupils perceive physical 'ability' and what they see as appropriate gender behaviour. Differential attention in OE, in contrast to classroom education, can be beneficial to girls as instructors tend to concentrate
their attention on those displaying less confidence - often girls (Humberstone, 1986b; Jones, 1988; Randall, 1987).

Low teacher-student ratios (e.g. 1:8 or 10 compared to 1:25 or 30 in the classroom) appear to benefit girls considerably in outdoor education as the individual attention they receive serves to bolster confidence and encourage participation. Furthermore, teachers in Humberstone's (1987b:45) study were reported to foster more "collaborative and symmetrical" social contact between girls and boys than was normally encouraged in their other classes. It seems then, that if girls do participate in outdoor education programmes which are appropriately resourced, liberating influences can be experienced.

The activities offered in outdoor education may be considerably different to many physical activities teenagers have previously experienced, and this may be an important reason for the apparent lack of inequality Humberstone (1990) reported in her study. Novel experiences, which require the use of correct technique more than sheer strength or speed, act as effective 'levellers' amongst participants. Previous knowledge cannot be relied upon, fear is expressed by many students of both genders and co-operation rather than competition is an integral requirement for safe accomplishment of a task.

Further, peer group expectations were seen by Humberstone (1987b) to be different to those commonly reported for adolescent students - girls felt that they were encouraged and praised by male and female peers and instructors. Although reluctant to begin with, most were interested and fully involved in the activities. The view that girls do not seek risk activities was therefore not sustained.

Barriers to participation

Barriers to girls and women's participation in physical recreations include economic barriers. Economic dependence on male partners hinders some women from freely participating in desired recreations, especially women who have children (Ridgeway, 1989). Ridgeway, drawing on 1986 Australian data, noted that lack of personal income was cited as a difficulty by 64% of women in their quest for leisure, sport, recreation and outdoor education opportunities. Feelings of guilt were experienced by many women at the thought of spending money on themselves.
Women who are particularly disadvantaged include women of numerically minor races, women with disabilities, rural women, newcomers to an area, older women, women in poverty and female solo parents (Henderson et al., 1989; Ridgeway, 1989; Walker et al., 1981). For outdoor pursuits the situation is compounded by the need for specialised clothing and reliable transport, and the high cost of personal equipment required (Cara and Mary, 1984). For example, basic equipment for rock climbing could cost approximately $1100.00 without preliminary instruction, travel, food and equipment maintenance costs included. Mountaineering could cost up to $3000.00 for basic equipment alone (Cullen, 1991).

Other major barriers to women's participation in sport and recreation are domesticity and violence (Carrington and Leaman, 1986; Thompson, 1990). Domestic responsibilities of housekeeping tend to be shared between men and women now more than they have been previously but the greater share still falls to women, even when women have paid employment outside their homes (Bittman, 1991:3). This impact on women's leisure time is significant (Thompson, 1989). Servicing the recreation of others is an additional barrier -

... transporting children to and from games, washing the sports clothing, continuing childcare during the weekend, providing food, standing enthusiastically on the sidelines, nursing wounded bodies and egos ... (Thompson, 1989:37).

Fear of physical assault is a problem women face in everyday life (Marie, 1988). Leisure is less about "free choice" for women than it is for men, because "there are so many places [women] are afraid to go or dare not go unaccompanied" (Thompson, 1989:37). Girls, too are bound by fear, as Green (1987) illustrated. Few girls attended the Water Adventure Centre in Droylesden, UK, partly because they "are kept in by their parents for fear of them being attacked" (Green, 1987:29).

Insufficient encouragement for girls and women to be involved in physical activities (Hillary Commission, 1988; Lenskyj 1986; Thomas, 1985; Thompson, 1989) has also been identified as a barrier to participation. This will be discussed further in the section on socialisation below. Lack of self-confidence, scarcity of appropriate role-models, and physiological functions such as menstruation are major barriers to women in the outdoors (Cara and Mary, 1984) and these issues will also be taken up separately below.
The factors which affect the participation of women in sport and recreation may operate at the school level, too. Additional influences peculiar to the secondary school situation may include teacher influences and the strong socialization function of formal schooling (Elkin and Handel, 1989). Within gender groupings there may also be inequalities emanating from the ideological basis upon which school in New Zealand is based. Jones (1988) has shown how classroom schooling can denigrate the values held by Maori and Pacific Island girls. Anderson (1989) in a Neo-Marxist analysis of outdoor education, places educational institutions such as schools, and by inference, outdoor education, in context of the larger economic, political and ideological picture. She problematises "not what education does, but how it is related to class, gender, race and power" (Anderson, 1989:26-27). Outdoor education is shown to stem from the liberal philosophical tradition with its emphasis on academic, moral and social development and "beliefs and values based on democratic, liberal, capitalistic and individualistic ideals" (Anderson, 1989:52). Girls who have Maori, Polynesian, Asian or other minority cultural backgrounds may suffer contradictions in schooling which is based on these ideals, because the process of schooling frequently fails to "value, reflect and reinforce their life experience" (Panui, December, 1990:6). The values underlying outdoor education may have the same effect. Concepts of wilderness and pitting oneself in challenge against elements of the environment, along with practices of using the land without reference to it's spiritual meanings, may, for example, dissonate with some Maori students.

Perceptions of outdoor pursuits strongly affect participation. and Humberstone (1989:4) provides evidence that outdoor education activities are generally perceived by boys as being appropriately 'masculine'. One girl, beginning an outdoor education course is reported to have asked "Why don't we do any girls' activities?".

Changing young women's perceptions of outdoor activities may bring about changes in their expectations for their own participation. In a study of secondary school students' expectations on outdoor education trips (Lynch, 1989a) girls had lower expectations for themselves than boys on the same trips. Certain activities, like abseiling for example, appeared to elicit particularly low expectations for participation from girls. The reasons for this are unclear but may be linked to gender-specific pressures in challenging situations.

In a British study Green (1987) raised similar concerns. Low participation rates by girls at The Water Education Centre were
explained in several ways. Girls in Green's study tended to be pressured to maintain a clean, tidy appearance and their clothing was seen to be inappropriate for physical activity and for outdoor pursuits. Intimidation and bullying of girls by boys was noted by both Green (1987) and Abigail (1984) and has lead to the implementation of girl-only activity sessions. Girls' were reported to lack confidence in trying out new activities, especially in kayaking which "is seen by most people as a male sport" (p29). There is evidence that suggests at least some outdoor pursuits have a strongly masculised image (Dearden and Andressen, 1987; Higgins, 1989; Nisbet, 1981). Dearden and Andressen (1987), for example, investigated the use of outdoor recreation in advertising over a twenty-four year period. One of their conclusions was that it seems likely that

... the consistent use of a particular type of recreation activity to promote a particular type of product will lead not only to a certain image of that product, but an image of the activity itself. For example, Hiram Walker and Sons' use of high-thrill activities to reach its young male market may result in the intended outcome of more young males purchasing Canadian Club whisky, but may also have the side-effect of increasing the general public's perception that such activities are primarily dominated by, and suited to, young men. (p55).

I suggest that some, though not all, outdoor pursuits undertaken during school outdoor education programmes also have masculine images associated with them. In particular, I suggest that abseiling, kayaking, and rock-climbing are perceived as 'male' activities, whereas tramping and confidence courses may be seen as less gender specific.

Socialization

Agents of socialization include the family, peers, school and social norms (Elkin and Handel, 1989). Family background may have a significant role in influencing participation in outdoor pursuits in two ways. First, families may socialize individuals into particular activities through family activities (Coles, 1980). Craig (1980) found that family influence accounted for 58% of her sample's participation in tramping. It could be inferred from this that prior experience in specific activities promotes further participation in those activities. Whether or not prior experience in one outdoor activity influences participation in another activity was not mentioned in the literature, but some evidence was given for 'influence-
specificity' in activities. For example, in Craig's (1980) study, canoeists tended to have been most strongly influenced into participation by friends and club members, while orienteers were generally influenced by a spouse. Burrows (1985) similarly found that friends and partners were important forces behind her respondents' initiations into rock climbing.

The other way that family background may influence participation in outdoor pursuits is through socio-economic level. The literature (Craig, 1980; Vaux, 1975; Yerkes and Miranda, 1985) indicates that outdoor pursuits tend to be undertaken by individuals from socio-economically privileged backgrounds. That is, outdoor pursuitists tend to be well-educated and relatively affluent when compared to the general population. In the case of teenagers who are economically dependent on their parents, parental socio-economic level may be a useful indicator of the teenager's outdoor pursuit participation. Certainly, higher income parents are more likely to be able to afford to finance outdoor pursuit experiences for their children.

General societal influences may have important roles in socializing individuals into physical activities, too. Women are reported to place little value on the role of sport in their lives (O'Brien, 1987). While this claim may be true for some women it is clearly not true for many, including nationally and internationally ranked competitors. However, differences between men and women in the importance of sport may stem from gender differences in socialization into sport (Greendorfer and Ewing, 1981), and in expectations for participation (Ostrow et al., 1981). These differences, in turn, may result from sport and recreation stereotypes based on gender (Csizma et al., 1988). Sport can thus be seen as a conservative force in the socialization of young women.

The ideology of gender difference is itself replete with problems. Research methods into gender differences can themselves enhance difference in study results (Wright 1990). Generalisations about what physical activity females as a group do or do not do can mask a larger range of behaviours and competencies than the range of difference claimed. For example, the assertion that women as a group prefer not to participate in risk activities overshadows contradictory evidence that shows that some women do seek risk activities such as rock-climbing (Burrows, 1985), and that some men do not. Another practice is that of using standards for women's participation and success in sport and recreation based on male performances. This emphasises differences between genders and can only be
counter-productive to the struggle for more equitable gender relations. Wright (1989) explains -

For many female participants the pleasure that they derive from sport has very little to do with besting an opponent and very rarely is it about being better (or worse) than men. It has much more to do with feeling powerful and in control of their bodies, as they achieve in ways that they have never experienced before. What is culturally valued about sport, however, is who is better than whom - how do performances differ rather than what do they mean to individual participants. These differences in performance in turn help to confirm or legitimate the dominant version of gender relations (p 40).

Since it is more often men who swim faster, throw further, jump higher and lift heavier weights than women, Wright (1989) suggests it is men who are valued more highly by society thus perpetuating inequity between all men and women.

Rather than bolster the ideology of difference, some feminist critics have concentrated on identifying the structural nature of female oppression through the medium of sport. A socialist feminist view of sport holds that capitalist institutions and patriarchal relations work hand in hand to produce the sport hierarchy and typology which is common in the Western world today (Bray, 1988). Sport, according to Thompson (1989), is a significant cultural artifact in New Zealand and because of this it can be a powerfully persuasive messenger in society. One message it is seen to carry consistently is that women are less physically capable than men, and therefore men deserve to be dominant.

Graydon (1983) analysed women's socialization through sport and found that sport has been traditionally male defined, thus alienating women from deriving congruent meanings from participation. In patriarchal societies it is very convenient for women to be alienated from arenas in which men confirm their masculinity. Women have breached the old male preserves of politics, commerce, business, and the public labour market, forcing men into an increasingly smaller, fiercely protected corner (Wright, 1989). Patriarchal hegemony has long worked to ensure that women did not gain collective power (Lenskyj, 1986). Its grip on women's social action is weakening, aided by female team or group activities. Co-operation and solidarity on the playing field can be transferred to other contexts, challenging male supremacy. Lenskyj (1986) suggests that the advent of lesbian collectives in sport and recreations is particularly
threatening because a basic tenet of patriarchy - control over women's bodies - is lost. Females are seen to be discouraged from active sports participation because "sport encourages non-nurturant, aggressive behaviours, inimical to reproductive labor (sic)" (Bray, 1988:52), which opposes traditional femininity and is therefore threatening to men.

That some men use sport to affirm their masculinity and to capture social power by being associated with highly valued activities has been documented by Phillips (1987), King (1988), and Kimmel (1987). However, only some sports are useful to men in this way. Rhythmic gymnastics, netball and synchronised swimming are not 'masculisers' of men and women's involvement in these sports does not threaten the patriarchal order.

The argument that women are discouraged from participation in sport because of sports incongruence with the concept of femininity, and because men actively discourage them seems weak in the light of the numbers of women tennis, squash, soccer and volleyball players, to name just a few sports. Women may receive encouragement for participation from family and friends, including their menfolk. For some women it is men who are instrumental in their adoption of physical activities, as Burrows (1985) found in her study of women rock-climbers. It may not necessarily be all individual men, then, who discourage women's sport participation, but the patriarchal basis of our society which tends to be conservative, favouring men at the expense of women. On the other hand, women's active involvement in the most prized of sports (rugby in New Zealand) has resulted in discomfort for some men, as recent radio talk-back on the subject indicates (91FM, June, 1991). Those men who criticised women rugby players stated that it wasn't "natural" for women to play "men's sports" and that it "didn't make them better women". It was important to these men that gender difference was maintained and illuminated through sport.

One of the stumbling blocks in the process of deconstructing patriarchal meanings of outdoor environments has been the high degree of socialisation of women to the belief that wilderness should be feared and avoided, according to Henderson (1989). The very word 'wilderness' denotes 'wild-ness', something society strives to control and from which it attempts to protect it's citizens, particularly women. Norwood (1988) claims that wilderness is seen by society to threaten women both because of the nature of its terrain, it's natural weather processes and because in it a woman is isolated from the 'protective' veneer of society. The "male protection racket" (Eisenstein, 1984) which served to affirm male dominance by encouraging female
passivity, physical weakness, and therefore vulnerability had thwarted much female independence and confidence, but is presently on the wane. Women-only outdoor groups provide support and co-operative protection where it is needed, thus empowering women (Dann and Lynch, 1989; LaBastille, 1980, Mitten, 1985).

Hand-in-hand with the concept of female vulnerability goes the notion that personal risk-taking is not appropriate for women. Women tend to be reminded of the social consequences of personal risk-taking. For example, Arlene Blum, leader of the 1978 women's expedition to Annapurna in the Himalayas, was informed of the "bad publicity" that would follow "if things didn't go well" (Blum, 1980:8). Robyn Davidson who trekked for six months across the Australian outback by camel, was accused of deliberately undertaking a journey that may have inconvenienced the police and outback station folk, because "even men have died out there" (Norwood, 1988:158-159).

Risk and protection may be related in the following way. There are certain risks usually associated with outdoor activities that exist for all outdoor pursuit participants. Additionally, women take risks associated with their social functions as nurturers and care-givers. Men also nurture and give care but it appears to be less acceptable for a mother to risk her life in outdoor pursuits, because her children would suffer. Therefore women should be protected from taking risks. On the other hand, women themselves tend to acknowledge their inter-relatedness with other members of society, an awareness not usually mentioned in men's adventure commentaries (Norwood, 1988). Men may also be conscious of distant repercussions of their actions and choices but this consciousness is not overt in their adventure literature, as it has been in women' writing (Blum, 1980). Women, then, tend to participate in outdoor activities in a way that is conscious of all the risks being taken, including risks to parents, lovers, husbands, children and society. The issue of personal risk-taking among outdoors women has not been fully explored and begs further research and interpretation.

The physical education literature further illuminates issues surrounding women's behaviour in physical activities. In a New Zealand study into sex-role stereotyping in physical education programmes for girls, Robson (1979) found that overall girls had favourable attitudes towards physical activities. Teacher respondents in the study generally thought that girls should have the opportunity to participate in any physical activity they chose but this was not reflected in the programmes offered. Some teachers had defeatist attitudes to girls participation in co-
educational physical education reasoning that girls were reluctant participants with lower skills and less motivation than boys. Girls were offered activities such as team games (e.g. netball, softball, hockey, volleyball), individual sports (e.g. badminton, tennis, athletics), aesthetics (e.g. dance, gymnastics), aquatics (e.g. swimming, diving), and outdoor pursuits (e.g. kayaking, tramping, confidence courses). Outdoor pursuits had the lowest participation rate of all the activity groups. These findings have been substantiated by more recent research (King, 1988). Williams and Coldicott (1982) similarly found that New Zealand's school-girls generally have positive attitudes toward physical activity, however, the accent in this study was on aesthetic experiences, health, fitness, and social experiences, rather than a wider range of physical activity qualities. Why many school-girls readily drop out of physical activity (Gray, 1981) was not explained.

In analysing the activities offered students in her study Robson (1979) found that contact sports were absent from most programmes. Girls, it seemed, were prevented by patronising institutional gallantry from taking physical risks in sports. Standards of behaviour for girls in physical education contribute to the shaping of adolescent expectations for themselves. Encouraging girls to "Walk - leave the gym like Miss World", and "Walk in like young ladies", implies notions of behaviour and discipline expected of girls as females rather than of young people regardless of sex. It centres on "restraint, quietness, and orderliness" (Scraton, 1986:85-86) with emphasis placed on posture and appearance, hygiene, cleanliness and attention to detail. The implications for participation in activities in which appearance is not highly valued, cannot be understated.

Scraton's (1986) British research highlights the problems of having different physical education programmes for girls and boys. New Zealand research has shown that some 'gendering' of physical education occurs in this country too. Through gendering of specific exercises and activities in PE girls are taught to limit themselves in their physical accomplishments. Doing 'girls' push-ups from the knees rather than trying to do full push-ups, not being offered strength training and running distances shorter than those expected for same-age male counterparts are some of the ways in which girls receive messages about their expected abilities (Abigail, 1984). Similarly, intimidation and derision from male students during co-ed activities reinforces both girls socialization and responses of boys to their own socialization. Girls internalise assumptions by others that they are not capable, physically weak, and thus themselves perpetuate the "myth of inferiority" (Coles, 1980:9). Exclusion of certain
activity qualities (strength, power, stamina, daring) can exclude girls from activities dependent on those qualities and may hinder girls participation in higher levels of physical activity. Additionally, by being denied opportunities to take risks, make decisions and be self-reliant in physical activity contexts, girls (and women) will be ill-prepared for physical and psychological independence, especially from men (Jones, 1981).

On the other hand doing the same activities as boys may be detrimental to girls too. American research (Knoppers, 1988) suggests that alienation of girls via the PE curriculum occurs. Girls, it is stated -

... experience a curriculum which was designed for boys and may see no continuity between the skills inherent in this curriculum and their lives as adult women ... They may hesitate to endorse activities which emphasise the "I win, you lose" ethic because it may damage their connections and relationships with others ... Since more girls than boys tend to endorse an ethic of care, ... the domination of competitive activities in the curriculum would have more impact on them than it would boys ... It is no wonder then that many girls are bored in physical education, ... that their fitness levels have declined, ... and that there has been little or no improvement in their movement skills ... (Knoppers, 1988:55).

Both alienation and gendering may occur in New Zealand physical education programmes. However this is not reflected in the research that reports girls' enjoyment of physical education (Cosgriff, 1983). Explanations for conflicting views of girls physical education may be that girls do not mind limitations in the physical activities offered them, or that the theoretical processes of female psychology such as that stated above, are not applied in practice.

One further complexity needs to be aired here. Roberts (1981) suggests that many girls dislike school physical education and drop it from their timetable as soon as it becomes an elective subject. According to Carrington and Leaman (1986) by rejecting physical education girls indirectly support the reproduction of patriarchal gender relations by not exposing themselves to the liberating effects of sporting activities. In this way, women are both victims and perpetrators of oppression. On the other hand, girls who do enjoy PE and participate in sports can be seen to be supporting an oppressive socialization medium, and at the same time are faced with the task of dealing with some masculist and some feminist criticism for their participation.
The apparent catch-22 may be resolved by individuals in a number of ways. First, girls may opt for non-participation and reject the notion that liberation can be secured through physical activity and sport. Second, girls may participate and refuse to acknowledge oppression in physical activity and sport. Supporting this stand, recent feminist scholarship (Thompson, 1989; Wearing 1990) has shown that sport can be a site for radical reconstruction of gender relations. A third option is to participate and in doing so act to change the oppressive nature of sport. Susan Devoy, for example, has publicly criticised squash administrators and sponsors for unfair allocation of prizemoney (Romanos, 1991). This sort of action directly counters some feminist theories which view women as passive victims in society. Women, instead, are seen as active initiators of social change.

Self-confidence

I have argued above that there are barriers to women's participation in sports and recreation, one of which is lack of self-confidence. In a recent survey, 43% of the New Zealand women respondents identified insufficient self-confidence as a barrier to their participation in physical activity (Hopkins, et al., 1991). Corbin (1984) views this lack of self-confidence as one outcome of women's alienation in sport and other physical activity settings.

Becoming physically active, developing fitness, endurance, strength, and skill as a means of taking personal control of one's body, are positive products of sport participation experienced by women (Thompson, 1989). Alienating factors include being viewed as 'pseudo-men', as in playing "like a man", and in the case of one female sports reporter, being complimented on writing "just like a man"! (Graydon, 1983:9). Having one's gender and/or sexuality questioned when successful further alienates women, and in some cases is used to excuse powerful athletic performance. Sensationalisation of Billie Jean King's affair with her secretary last decade suggests that, as Graydon (1983:9) sarcastically notes, lesbianism is used to explain athletic prowess "because everyone knows that lesbians aren't 'real' women". Sport history has also alienated women by ignoring their achievements and performances (Wright, 1989).

Despite some recent weakening of activity stereotypes, vigorous physical activities remain more positively identified with males than females (Corbin, 1984; Lirgg and Feltz, 1989). It follows
then that these are the activities in which women are most likely to experience least self-confidence.

Not all women lack self-confidence of course - different levels of confidence are found to varying degrees in both genders (Lirgg and Feltz, 1989). Self-confidence is very specific, and

...females seem to be vulnerable in physical achievement situations in which the task is perceived to be sex-role inappropriate, in which social evaluation or comparison is present, or when feedback about performance is not immediate and clear (Corbin, 1984:896).

For example, Corbin (1984) reports lower self-confidence in female subjects when performing a bicycle task that required strength and speed and was perceived as relatively "masculine" compared to a video game task that was perceived as relatively female-appropriate. Social evaluation is explained by Corbin in terms of the comparative evaluation necessitated by competition in sports. He fails to provide an adequate explanation, however, of the connection between gender-appropriateness of an activity and the competition element. I suspect that his definition of 'competition' relied on face to face physical encounters with other athletes and did not include other forms of competition such as against time. Finally, Corbin reports that females tend to "berate their own performance in the absence of meaningful feedback" (p899). His explanation for this suggests that early socialisation of females and males affects how each views the worth of their performance, and this is reflected in self-confidence. Once again, no account is given of how or why this happens.

Performance feedback is reported to increase self-confidence in females who have low self-confidence (Petruzello and Corbin, 1988) and may be used to help break "negative feedback" cycles in physical activity (Corbin, 1984). Self-confidence among accomplished female athletes is not reported. Despite the limited explanatory power of Corbin's research, I believe the original hypothesis of situational self-confidence is useful.

Corbin's hypothesis can be applied to outdoor pursuits such as white-water kayaking, mountaineering, rock-climbing, and hang-gliding, all of which have been shown to be male-stereotyped (Dearden and Andressen, 1987) and therefore female-inappropriate. The relatively small numbers of women participants actively involved in such pursuits (Henderson et al, 1989; Kelly, 1987) may be explained in this way. On the other hand, the remote sites in which outdoor pursuit activity takes
place may limit social comparison. Competition is not a necessary ingredient in outdoor pursuits, and women can participate independent of men. This would suggest that outdoor pursuits are potentially arenas in which women can gain self-confidence. Physical activities that incur greater public visibility (e.g. sports) may be more intense sites for female vulnerability than outdoor pursuits. I would also suggest that Corbin's three criteria for female vulnerability in physical activities affect different groups of females in different ways. Teenage girls, for example, may have greater needs for identifying with gender-appropriate physical activities, due to their developing gender-role identity (Elkin and Handel, 1989), than do older women who have clearer gender-role identities.

**Body Image**

According to Dukes (1990:34) body image "... refers to the satisfaction or otherwise that a person has in his or her appearance and physique". This definition is adopted in the present research. Body image is problematic because although actual body shape is involved in it's construction,

... it is essentially affective, and includes attitudes, emotions and values ... such as masculinity/femininity, sexuality, age, and "ideal" shape. As a psychological construct it is formed as a result of socialization; family, peers, school, sports, commerce, media and religion can all contribute in an interactive way (Dukes, 1990:34).

A strong relationship has been found between body image, sex role stereotype, and physical activity participation (Henderson et al., 1988). Reports conclude that women, especially during adolescence, are concerned with their body size and shape, regardless of what their body shape actually is (Dukes, 1991; King, 1989; Stanton, 1990).

Kirk and Tinning (1990) explain that -

... the slender body [has] achieved widespread prominence as a metaphor for health, well-being and affluence in the print and electronic media. Fatness, on the other hand, particularly in women, elicits moral reproof ... These representations of the body in advertising and other media forms can have such a powerful impact on people precisely because they go beyond rational descriptions of desirable weight and shape to become moral imperatives (p6).
Bain (1990:30) similarly reports research into exercise classes for adults which showed that females made up a high proportion of the participants and that their participation was motivated more by physical appearance benefits than by health benefits. Fitness was often judged by appearance alone. Bain claims that a slender, toned body is viewed as a valuable object, and that self-esteem is closely related to physical attractiveness, especially for women.

Dukes (1990) similarly critiques media, health and fitness industry influences on the body images of females. He sees emphasis placed on those physical activities (or 'form' activities) which allow females to accentuate their 'femininity' in a framework of apparent non-exertion. The high value placed on leanness and on wearing revealing costumes in form activities (Dukes, 1991) may create a serious dilemma for young women whose bodies are taking the fuller shape of the adult female. Whatever shape they are, many girls feel that it just isn't right - they feel they have "lumps and bumps everywhere" and are self-conscious of this (Kelly, 1987).

The problem of body image is particularly relevant to women because the 'ideal' female body shape is further from the reality of most women's actual body shapes than the 'ideal' male shape is from most men's (Ritchie, 1989). Further, the range of body shapes perceived as acceptable for females is narrower than the range for males. Ritchie (1989) adds that greater emphasis is placed on physical attractiveness for women than for men, and that a 1986 survey reported women being more dissatisfied with their bodies than men, and younger women more dissatisfied than older women.

What constitutes physical attractiveness is socially constructed and changes with the times (Ritchie, 1989). Contemporary 'ideals' for women's bodies do include images of physical activity and the advertising industry has responded to this by using athletic-looking women to model and sell products (Levin, 1990). It could be claimed that this helps to encourage women into physical activity, and to some extent it probably has. However, the contemporary 'ideal' may be even harder to achieve than previous "ideals". Although -

... the 'all-bones' look has gone, it has been replaced by ... skinny muscular legs, the taut abdomen of a thirteen year old, and arms with the muscle definition that comes from daily workouts ... looking like an underdeveloped adolescent girl is out. What's very much the rage is looking like a well-developed adolescent boy ... (Ritchie, 1989:104).
For teenage girls, then, trying to establish a female gender identity and a physically active lifestyle in a social climate valuing an athletic ideal body image could be particularly difficult. This may go some way to explain the drop-off in physical activity among teenage girls (Gray, 1981). Muscularity seems to be particularly problematic for adolescent girls. Physical activity is seen by some girls to develop muscle bulk (as distinct from muscle definition) which they say looks "unfeminine on a woman" (Kelly, 1987), a view which effectively limits the type of physical activities they are prepared to do. It seems then, that activities which encourage athletic slimness are seen as acceptable but those which are believed to develop muscle bulk such as weight lifting are not as acceptable. Since weight lifting is often used to train strength and power (Davis et al., 1986), gender specificity in physical activity can be seen to operate against the development of strong, powerful women in physical activities.

Dewar (1990) provides some evidence that the case is not quite so clear-cut, however. Not all the women in her study of tertiary physical education teacher-trainees valued muscularity negatively. Her "women jocks" valued technical excellence and obvious physical power more highly than conformity to conventional images of femininity as the following passage illustrates -

Chris: I wish I played tennis like Martina (Navratilova).  
Ann: She's my idol she's awesome ... I know people call her butch because she's awesome ... they assume she was a dyke because she was such a good tennis player, because she has such good muscles and has low body fat.  
AD: No one would say that about Chris Evert.  
Chris: She doesn't look like Martina at all. I would think I could walk on to the court and drill her into the ground. She looks like a prissie (p93).

"Women jocks" were a minority group though, compared to the relatively numerous "non-jocks" or "prissies". The majority of women students in Dewar's study then, valued athletic ability but criticised female athletes who did not conform to their [non-jocks and prissies] view of femininity. Mary and Dawn were typical "non-jocks" -

Mary: Well Martina and Billie Jean King you can easily point a finger at them ... they don't look feminine.  
AD: No one would say that about Chris Evert.
Mary: Because of her looks, she looks feminine, I like Chrissie as a tennis player she does have the feminine part about her.

Dawn: And I identify more with her than Martina ... I'd like to play like Martina and look like Chris (p93-94).

The conflicts surrounding body image and physical activity in women are contradictory and shift with changes in the nature of social gender relations. It would seem that most women will be affected by both the problem of body image and the contradictions it produces, at least until such time as body image is no longer an issue. Body image conflicts for women in physical activity - to play like Martina Navratilova but look like Chris Evert - may also extend to outdoor pursuits and therefore outdoor education. Alternatively, outdoor pursuits may provide opportunities for valuing female muscularity, or for unconditionally valuing every individual's physicality, or for challenging the conventions that make body image a problem in the first place.

Segregation and Integration

There is considerable debate among educationalists about the relative merits of single-sex and co-educational schooling for both girls and boys.

Some argue that co-education provides "a more natural social environment to prepare adolescents to take their place in a society of men and women..." while others challenge it as detrimental to the academic and social development of girls (Marsh et al., 1989:144). In a five year study of a transition from single-sex to co-educational secondary schooling, Marsh et al (1989) found that boys in particular were seen to gain advantages from co-education through personal growth, social development and academic achievement. Advantages for girls were not as clear. Some personal and social benefits occurred of which both teachers and students approved. Girls' schools, however, were still seen to be better for girls in terms of assertiveness and academic performance in subjects historically male-dominated (maths, science, computer sciences).

Turvey and Laws (1988) scrutinized the effects of co-educational physical education on girls. Their results showed that girls lost out in terms of performance when in mixed-sex groups but that the degree of this effect depended on the nature of the activity. Ability was found to be a determining issue rather than gender alone. Thus, the less athletic girls lost out
more than girls who were more accomplished physically. Losing out meant gaining less teacher attention, harassment from male class-mates ("Miss, its not fair they are stopping us from continuing with this" p254), and being ignored. Both girls and boys were reported to feel that girls participation was not sought in sports played during physical education because it was believed that " ... girls are no good ..." (p254).

Being good, or better than boys, at physical activities may be seen by girls as a major threat to friendships with boys (Carrington and Leaman, 1986). Adolescent girls' perceptions of codes of femininity affect their desire to participate in physical activities:-

It may be that some girls do not believe that enthusiastic participation in PE lessons promotes attractiveness to the opposite sex. Moreover, a commitment to school teams and clubs, especially single-sex team games, demands time away from alternative activities which could provide the opportunity to mix socially with members of the opposite sex (Cockerill and Hardy, 1988:70).

The practicalities of mixing the physical abilities of girls and boys have been criticised for not recognizing unequal skills development between the two groups of students. Abigail (1984), for example, indicated that teachers who saw difficulties in integrating secondary school physical education identified boys' larger size and greater strength as a main reason. They identified boys' personal histories from early infancy of participation in the sort of physical exercise that develops strength and musculature as making much of the difference.

The virtues of integrating PE classes may be age dependent. According to Carrington and Leaman (1986) mixing the genders in PE at adolescent level will serve only to maintain conventional gender relations as boys and girls attempt to establish their masculinity/femininity in the presence of the opposite gender.

Segregated PE has been suggested as a remedy for the problems associated with mixed gender PE (MacDonald, 1989) and single-sex classes in other subjects are being implemented in some New Zealand schools (Cropp, 1989). Segregation is seen to give girls educational opportunities without being dominated or subjugated by boys. This argument I believe is valid. However, another argument that segregation within co-educational schools is for the purpose of helping girls overcome some 'deficit' in their characters or abilities is antithetical to feminist models of
education because it assumes that there is something wrong with girls, and that girls should be like boys. Physical education needs to serve the needs and aspirations of girls (Roberts, 1981) as well as boys. Segregation may instead of being emancipatory reinforce the exclusivity of traditionally male-appropriate sports and contribute to the diluting of girls' PE syllabus thereby restricting girls' choices in physical activity (Carrington and Leaman, 1986). Segregated PE may also disadvantage female students in their social learning process if it reduces their opportunities to refer new concepts of gender relations to their usual social medium (Evans, 1984). Scraton (1986) argues conversely that advantages exist in segregation if the syllabus is girl-centred in organization, structure, methodology and management. She states that important objectives for girls are valuing the enjoyment of playing together, group membership and building of a sense of solidarity amongst young women.

Jones (1988) argues that research on co-ed versus single-sex schooling is too simplistic because it fails to address non-gendered inequalities in education. Maori and Polynesian girls, as well as girls from underprivileged backgrounds, continue to be disadvantaged in segregated settings, according to Jones. Second, segregated classes may have the power to alter the visions of girl students but without correspondingly radical efforts made with male students, the net effect on girls lives may be limited.

**Puberty Issues**

Adolescence has been defined as a specific stage in the maturation process (Hurrelmann and Engel, 1989) characterised by transition, intermediacy and lack of clarity about social roles (Berger and Shechter, 1989). The ambiguities of the transition phase between childhood and adulthood are expressed socially, interpersonally and psychologically (Berger and Shechter, 1989). Socially the rights and obligations of adulthood are delayed while childhood behaviour is simultaneously deterred. Rates of development during adolescence vary between individuals, thus "14 year old girls can be very different in terms of physical, emotional, social and intellectual maturity ..." (Berger and Shechter, 1989:360). This variability complicates the task of identity formation, seen as the major task of the adolescent period (Hurrelmann and Engel, 1989). The rate of development within an individual adolescent also varies with discrepancies in cognitive, social, and biological levels which can at times "result in uncertainty about themselves and their environment" (Berger and Shechter, 1989:360).
For adolescent girls, the inconsistencies of puberty and the teen years are overlain by inconsistencies in the social treatment of women. Two major views of women currently abound: one, that women are individuals with equal rights and privileges as men and the other that women are still to some extent the property of men (Berger, 1989).

Gray (1988) investigated the leisure pursuits of teenagers in New Zealand to find that "having a good time" (p3) socially was a priority for many. Going to parties, staying at friend's places, hanging around, going to the beach or to movies or any place free of adults are popular pastimes. Physical activities such as sports were important to some, but not all, and dependent on the availability of alternative activities, levels of competence, facilities and support available. School offerings in both physical education and in sport were seen to be enjoyed by some adolescents but sexism was still apparent.

For adolescent girls many factors combine to deter them from being physically active. Physical activity occurs in a social atmosphere. "What we think of our bodies and how we behave in the light of that appraisal reflects to a large extent, social processes" (Dukes, 1990:35). The normal developmental process of puberty is reported to be viewed negatively by females (Dukes, 1990).

Menstruation is one aspect of puberty that can markedly affect girls in physical activity (Gray, 1981; Kelly, 1987; Prendergast, 1989). Menarche happens at a time when many other changes are occurring for teenage girls - adjusting to new schools, new subjects, structures and routines; physical maturation; changing body shape and adolescent difficulties in relationships with adults.

It is in this context that girls must first learn to 'manage' the experience of menstruation outside of home, and outside of the familiar resources and privacy that home might offer (Prendergast, 1989:86).

Physical education has been identified as the school activity giving girls the most anxiety about menstruation (Prendergast, 1989). Of the forty-two girls Prendergast interviewed about their experiences of menstruation, more than thirty stated that swimming and showering caused concern or embarrassment. Fourteen more volunteered opinions about the difficulties they experienced in "games" - physical inconveniences, difficulties expressing these inconveniences, and difficulties explaining
absences from "games". In this context refer to physical activities in classes such as PE. The difficulties mentioned by Prendergast's subjects led her to conclude that such embarrassment and anxiety are significant elements in early secondary schooling for girls.

Difficulties with menstruation at school may spring from a lack of information because menstruation, unlike sex, contraception, pregnancy and sexually transmitted diseases, tends to be left out of school health and biology lessons (Prendergast, 1989). However, girls' experiences of menstruation and the difficulties they encounter vary widely (Morris, 1985) and not all girls will encounter difficulties, or if they do they may find methods of overcoming them reasonably readily.

Prendergast (1989) outlined some of the potentially embarrassing encounters that have occurred at school. One important source of embarrassment experienced by girls is having to explain to teachers (especially male teachers), either in order to be excused to go to the toilet or to be excused from particular activities, that they are menstruating. Acute embarrassment may occur if explanations cannot be given privately. The logistics of carrying sanitary supplies in one's school-bag and keeping them out of sight presents teenage girls with another dilemma. For many teenagers, periods can be irregular and often heavy, so 'the school-bag' problem has two focuses. One is carrying enough supplies (Prendergast's subjects referred to it as 'stuff') at the appropriate times so that the embarrassment of having to ask for emergency pads or tampons from the school nurse or receptionist is minimised. The other was keeping 'stuff' easily accessible but out of the sight of boys, who taunt girls known to be menstruating. Spilling the contents of girls bags on the floor is one way boys embarrass and denigrate menstruating girls, along with verbal taunts when girls take their schoolbags with them from class to visit the toilet. Fear of "leaking" onto outside clothes was a major distress for the girls in Prendergast's study. Inadequate or non-functional facilities for disposing of menstrual waste was a further difficulty (Prendergast, 1989).

Girls commonly mention anxiety about other people knowing they are menstruating (Kelly, 1987; Prendergast, 1989). In physical education the problem could be compounded, especially for girls using pads, when students are required to wear shorts or other close-fitting garments. For girls who already dislike physical education, menstruating can be both an extra burden and a 'reliable' ally (Gray, 1981). Some girls use it as a means of opting out of physical activity and teachers, particularly males,
have few options but to let them. Gray (1981) sees this as a circular pattern.

Teachers who insist that a girl who is active during menstruation are sometimes insensitive to the fact that she may not have adequate protection, resulting in embarrassment for all concerned, or that she may be in pain. Yet those teachers who allow a girl to not participate during menstruation, just in case, help perpetuate the myths that abound ... (p100).

Not all teachers are unsympathetic (Prendergast, 1989) and not all girls use menstruation as an excuse for inactivity. Some girls do want to participate and dislike missing the activities they usually enjoy. Others feel ill while menstruating and miss school completely (Prendergast, 1989).

Anxiety reported to be associated with menstruation suggests that there is strong social pressure to hide what is a normal physiological event. Laws (1990) explains this as an expression of ideological male dominance. From social theory she draws the notion that the ideas of the dominant group in society will be the dominating ideas and from feminism she accepts the premise that in patriarchal societies such as Western democracies, men act collectively to maintain their dominance in all valued spheres. Our ideas about menstruation, then, she suggests, both as individual women and on a social level, are based on the ideas of men.

As a result, Laws (1990) claims, women are exhorted to behave as though menstruation does not occur - to hide it away and act 'normally' despite it. The social 'etiquette' which surrounds menstruation can then be seen to serve the interests of men and oppress women. Interviews with men indicate that many men are repulsed by menstrual blood and Laws suggests that pollution beliefs are maintained so that women will hide their menstruation from men. Advertising is seen to perpetuate the pollution theme "as it tries to key in to women's assumed anxieties about 'safety' and hygiene" (Laws, 1990:35). Pollution beliefs associated with menstruation "can be read as statements about power relations in society" (Laws, 1990:36). A pollutant is seen as something dirty or out of place, which is a relational definition. Laws observes that a persistent feature of racial and class oppression is the concept of pollution, as for example, in the distinction made between the "respectable poor" and "the great unwashed". This can be seen as an expectation of compliance by the oppressed with the values of the oppressors.
Women's anxiety about hiding their 'polluting' menses is seen therefore as collusion with patriarchy. For adolescents, the process of learning about menstruation and how to live with it at school helps establish patterns of relating to and managing their bodies as women (Laws, 1990). It is therefore an important issue in women's lives. Cara and Mary (1984), as previously mentioned, have identified menstruation as one of the barriers to women's involvement in outdoor pursuits.

Adolescent, junior secondary school girls are at a difficult cross-roads in their physical activity socialization. Their changing bodies create new needs and meanings in their lives (Elkin and Handel, 1989) and they can be involved in physical activities new to them, including outdoor pursuits. Hendry (1989) states that the central concern for adolescents is the balance between

... 'playing appropriate roles' and 'selfhood' ... It is the interplay of internal and external forces that contributes to the success or failure of progress toward adulthood ...
(p245-246).

The emphasis placed on personal and social development by outdoor education (Anderson, 1989; McRae, 1990;) then, makes it a particularly relevant educational form for adolescents.

Self Esteem

The term 'self-esteem' denotes self-worth, a dynamic process of self-evaluation (Burns, 1979). Self-esteem is a personal judgement of approval or disapproval in oneself and is expressed as an attitude of belief in one's own capability, significance, success, and worth (Burns, 1979). Rosenberg (1965) defined self-esteem as "a positive or negative attitude toward a particular object, namely, the Self" (p30). A person with high self-esteem respects themselves for who they are and does not condemn themselves for who they are not. A person with low self-esteem indulges in self-rejection and self-derogation (Burns, 1979).

Kolb (1988) concurs in reporting that -

Self-esteem includes a sense of self-love and acceptance, as well as a sense of competence ... and is generally referred to as high, moderate, or low. A "high" self esteem corresponds to positive self-regard and "low" to negative self regard. Self-esteem may be divided into experience
categories: school, peer relationships, family relationships, emotional well-being, and physical self-perception ... Adventure based education provides an experience which has the potential to influence all of the aforementioned experience categories (p32).

Burns (1979) measured self-esteem on three indices. The first was a comparison between one's ideal self-image and one's actual self; the second was based on the internalisation of what one believes to be other people's judgements of one's self; and the third index was a self-reference based on success or failure in what one does. Deaux and Wrightsman (1988), in contrast to Burns, cite two standards by which we evaluate ourselves. One is the ideal self, an image of who we would like to be and the other is "an ought self", which is who we think we should be. Negative self esteem is said to be an outcome of a conflict between actual self and either one of these standards.

Burns and Deaux and Wrightsman agree that self-esteem tends to increase with success and decrease with failure and that positive self-esteem is a good thing, a sign of a healthy person. Further, because "reflected appraisal" (what we think others think of us) is integral to an evaluation of self-worth, self-esteem is at least partly a social construct (Deaux and Wrightsman, 1988).

Offer et al (1988) surveyed adolescent boys and girls in ten countries and found that some patterns of self-image were similar to all. Young people's images of their 'ideal' self were similar despite differences in geographical location, culture and politics. One explanation given for this was the international impact of television, with its images of physical attractiveness and desirable lifestyles. Girls in all countries expressed more anxiety than boys about differences between ideal self and real self, and this may be partly a reflection of media messages about femininity (Offer et al., 1988).

Canadian literature (King, 1989) reports that although male and female entry to tertiary institutions has equalised, girls are more likely than boys to have low self-esteem and to be worried about their progress in academic subjects, especially maths and science.

The importance of self-esteem for girls in physical activity and in social empowerment has been noted (Oldenhove, 1989; Williams and Coldicott, 1982). Other authors have commented on the relationship between participation in outdoor activities and self-esteem (e.g. Burrows, 1985; Green, 1987; Lirgg and Feltz,
High self-esteem is seen as a determining factor in decisions to participate in physical activities, including outdoor pursuits. Participation in outdoor pursuit activities is claimed to influence a person's perception of themselves (Abbot, 1989; O'Brien, 1990), and to influence "attitudes, beliefs, feelings and personal expectations" (Ewert, 1989:49).

Kolb (1988) concluded from a study of 87 students on a mandatory adventure education programme that the "overall self-esteem of the participants increased as did the personal perceptions of physical self and popularity" (p36). This study is reported to reinforce previous observational research which has produced similar results. Kolb urges caution, however, in reading too much into self-esteem changes measured on adventure education programmes. He states that although "subjects with moderate self-esteem in a mandatory program (sic) could change to low or high self-esteem", participants "who begin with a low self-esteem may show a positive change at the end of a program (sic) because that is the only change possible" (p33). Similarly, students with high self-esteem at the beginning of a programme may not record an increase in self-esteem because they have reached a ceiling imposed by the scaling instrument. Meanings of self-esteem changes therefore must be generated with care.

Teacher Influences

Teacher attitudes in physical education may be pivotal in the development of personal physical activity ethics in girls. While not an enumeration of nationwide attitudes, a study of PE in Wellington schools (Abigail, 1984) revealed a considerable amount of direct sexism by teachers, as the following extracts from interviews show -

I take boys to weight-training classes ... but I don't take girls. Girls wanted to go, but I didn't want a mixed class, it's too much hassle having to work out different patterns. What would I do if they injured themselves? I'm not comfortable with girls in that situation [PE HOD, man].

I run the weight training elective here in the school. I exclude girls, though they would like to do it. I am rather old-fashioned, I don't see women in general usefully participating in such activities. I like slim, trim women, not muscular giants [Guidance Counsellor, man] (Abigail, 1984:20).
These examples illustrate how girls' opportunities can be limited by teacher attitudes. Abigail concluded that differentiation in physical education on the basis of sex is widespread and whether they believed differences sprung from biological or social origins, teachers viewed those differences as being inevitable (Abigail, 1984). Similar results have been obtained from British research (Scraton, 1986). Key issues are those of femininity and control over women's bodies, as the following quotations from PE teachers on the issue of girls playing soccer [football] reveal -

I have yet to see an elegant women footballer ...The pitch is far too big and the ball too hard. No I certainly wouldn't ever want to see girls playing football.

I've been to a woman's (sic) football match and there's nothing sorer to my feminine eyes than a big bust and a big behind and the attracted crowd and spectators ...

I don't think soccer is a girls' sport - physical contact and all that rolling in the mud (Scraton, 1986:82-83).

Both male and female PE teachers have expressed the views above, thus PE in girls' schools and segregated PE in co-ed schools may not necessarily grant girls freedom of choice in physical activities.

Teacher reactions to female students reluctant to be involved in physical activities vary from accommodating girls' interests by offering more of the 'female appropriate' activities, such as aerobics and dance, to ignoring girls' alienation from physical activity altogether (Abigail, 1984). The first strategy, while seeming to be useful, may tend to reinforce stereotypes about appropriate activities for girls, and the second seems to be a result of teacher inability to empathise with reluctant students due to their own enthusiasm for sport and physical recreation. The situation for teachers is a difficult one. Either way, some girls may miss out.

In order to change the pattern of socialization of young women into (or out of) physical activity through teachers, it is necessary to gain the full commitment of teachers as well as some changes to the organizational structure of the school. Ideally teachers should facilitate freedom of choice for all students in physical activities. All else being equal it could then be expected that girls and boys would choose all activities in equal numbers. However, even with the best teachers, teaching methods, physical education syllabi and gender groupings, physical education may not be able to subvert the influences of
socialisation, advertising and family on girls notions of femininity (Evans, 1984).

Appropriate role-modelling is one tactic that can be employed in encouraging girls to be physically active. In physical education, not only numbers of female teachers, but also the physical activities they are concerned with are seen as important issues in modelling positive attitudes to female physical activity (Oldenhove, 1989). Single-sex outdoor education for girls would force the employment of more women instructors (Humberstone, 1986a). The role-modelling effect could be very positive, but this is only a long-term advantage if the quality of girls' outdoor education does not suffer in the short term and female instructors are supported with appropriate professional development. The masculine image of outdoor pursuits described previously is not improved by the numerical advantage males have as outdoor instructors and teachers. Female role-models are not abundant in New Zealand outdoor education. For example there were only 30 females in the list of full members of the New Zealand Outdoor Instructors' Association in October 1990, out of a total of 160 full members (NZOIA Newsletter, 1990). Even the progressive Association for Experiential Education, a North American based organization serving a wide range of education professionals including outdoor educators, has 42-45% women members (Association for Experiential Education Membership Directory and Handbook, 1990/91).

Positive discrimination in favour of women staff has been successfully used to ameliorate the situation (Green, 1987). Positive, accessible, relevant models of women in the outdoors can influence female choices in physical activities. Outdoor "superwomen" may not make suitable role-models, however, as Warren (1985) explains-

As an anomaly the superwoman instructor can be cast aside and made invisible in the minds of her students (p13).

Role models whose lives reflect, at least in part, the potential desired futures of their students would seem to be invaluable. The issue of motherhood in outdoor pursuits and outdoor education, to take one example, has not been explored. Programme design, content, instruction processes and instructor characteristics may be better to reflect a diversity of futures for adolescent students.

Women who are just entering the field of outdoor recreation need active and competent role-models to overcome initial fears of dirt, injury, discomfort, and ridicule, according to LaBastille
Women leaders are also crucial to the further development of a woman's interest in an outdoor pursuit. The role of mentoring seems to be particularly important one in women leaders in this regard and Burrows (1985) alludes to this in her study of women rock-climbers.

From this discussion is seems evident that the role of teachers and leaders in physical activities, including outdoor pursuits, can be influential in the participation of girls.

Summary

It is clear from the literature reviewed that the issue of why women do not participate in outdoor activities in numbers reflecting their percentage of the population is a complex one. Many of the reasons may result from social conditioning while others are peculiar to the activities themselves. The literature available does not explicitly explore the link between schoolgirl outdoor education and adult outdoor pursuit participation and there is very little written about female experiences of school outdoor education in general. Outdoor education may offer girls a unique opportunity to experience equitable cross-gender relations but further research is needed to substantiate this view.
Chapter Four

Methodology

Purpose of the Research

The purpose of this thesis is to investigate girls' responses to school outdoor education. The aims of the research are to measure girl's attitudes towards outdoor education before and after their camp experience; to compare these with associated variables; and to evaluate girls' experiences of outdoor education camp for factors that may influence them negatively toward outdoor education.

Assumptions Underlying the Research

The research is essentially radical feminist in perspective and focus. It assumes a patriarchal foundation in New Zealand society, both produced and echoed through formal educational institutions and practices. It views outdoor education generally as male-centred, thus alienating of girls. Outdoor education, however, is seen as a subject useful and desirable in the education of secondary school girls.

This thesis also assumes that educational institutions and practices can contribute toward social change, in particular change in gender relations. Outdoor education is viewed as a potential vehicle for social change.

Research Design

In order to find out about issues surrounding girls and outdoor education, it was decided to use a multi-method research design. Quantitative and qualitative methods have been combined as appropriate methods for ensuring as complete a picture of the topic as possible is obtained. Ewert's (1989) overview of research in outdoor pursuits concludes as follows.

Given the complexity of the human organism, including the affective, behavioural, and cognitive components of the human experience, the inherently diverse agenda for research ... must encompass as many different sources of information as possible (p110).
The future of "meaningful" research, then, lies in "the arena of methodological pluralism" (Ewert, 1989: 110).

The use of a multiple method approach "adds to the strength of the evidence" on a topic (Brewer and Hunter, 1989:48). Its costs (time, energy, money) are higher than those of single method approaches both to the researcher and to the subjects. The costs are not simple multiples of one method but are incurred at different rates at different times for researcher and subjects. Economising measures can be taken such as doubling research opportunities with activities of everyday life. For example, the use of the researcher's employment as an opportunity for observing and informally interviewing students was one such measure in this study.

If girls are put off outdoor pursuits during outdoor education camps at school, it could be because of something occurring within the outdoor education programme; alternatively it could be because of something about the girls themselves; or it could be a combination of these causes. Quantitative methods were used to measure girls attitudes to their OE experiences before attending camp (pre-camp attitude to OE) and afterwards (post-camp attitude to OE). Self-esteem was also measured pre- and post-camp.

Pre-camp and post-camp attitudes to outdoor education and pre- and post-camp self-esteem were the dependent variables. Independent variables in the study were age, type of school attended, socio-economic background, previous experience of outdoor education.

Qualitative methods - interviews and participant observations - were then used to put the quantitative findings in context and to delve more deeply into the issues raised by the subjects about their outdoor education experiences.

**Research Questions**

There were eight research questions addressed by this study. The first and sixth questions seek information about the representativeness of the sample and relationships between variables. The second and third questions address girls self-esteem. Questions four and five refer to the girls' attitudes toward outdoor education. The final two questions deal with the style and content of outdoor education offered the girls. The questions were:
Qu. 1. Who does the sample represent?

Qu. 2. What was the self-esteem of the girls before they went to camp?

Qu. 3. Has the camp experience changed the self-esteem of the girls and if so, in which direction? What does this suggest about the influence of self-esteem on participation in outdoor pursuit activities?

Qu. 4. What are the attitudes of girls toward outdoor education before they go to camp?

Qu. 5. Has the camp experience changed girls’ attitudes towards outdoor education, and if so, in which direction?

Qu. 6. Are there differences in self-esteem and attitude toward outdoor education between girls from single-sex schools, co-educational schools, different socio-economic groups and different backgrounds of previous experience in outdoor activities?

Qu. 7. Are there aspects of outdoor education that occur before the camp experience that deter girls from outdoor pursuit activities? That is, is there something about the way pre-camp preparation is conducted, or the information female students receive about outdoor pursuit activities before they go to camp that is off-putting?

Qu. 8. Are there aspects of outdoor education which occur during the camp that deter girls from outdoor pursuits activities? That is, is there something about the outdoor pursuits activities offered at camp, the way the camp is run, the situation or the organization, that is off-putting for girls?

Setting

Secondary school outdoor education programmes operating at the Tautuku Outdoor Education Centre (TOEC) in 1990 were targeted for the study for three reasons. TOEC was the OE centre servicing secondary schools closest to my residence; many of the schools using TOEC had similar outdoor education programmes (thus reducing another variable element in the study) and a further reason was that I had previously worked as an outdoor instructor in three of the schools using TOEC. This combination of circumstances allowed me access to school outdoor education camps which were relatively close by, which
had similar features and with which I had already established working relationships.

One, two, or three classes of students go to camp at a time from most schools using TOEC. Camps usually last five days during the working week but one school at least holds two four-day camps consecutively. Students at TOEC participate, in groups of 10-20, in activities including bush/nature walks, abseiling, overnight camps, day tramps, kayaking, bouldering (low-level rock-climbing), confidence courses and initiative courses. Evening activities are commonly games, quizzes, concerts and night walks. TOEC is staffed by one resident teacher and a caretaker. Each school supplies its own staff to run its programme (usually on a ratio of 1:8-10 students). Teachers are usually those who would normally be teaching the classes concerned if they had been at school. The resident teacher is utilized as required by the school to run particular activities or to make up teacher numbers. Other adults, such as parents, tertiary students, or outdoor education specialists are sometimes recruited to assist teachers at the camp. It was as an outdoor education specialist that I joined the staff of the school programmes under study.

TOEC is situated in thick, hilly, bush country, five minutes walk from Tautuku beach, on the South Otago coast. The climate is "temperate to cool, although a fine summer's day can be as warm as anywhere in southern New Zealand" (Dann and Peat, 1989:135). It is often wet and the area is exposed to cold southerly winds. The scenery nearby is spectacular - "curving golden beaches, reefs and rock stacks, cliffs up to 200m high, sea-carved caves, seductive coves, river mouths and expansive estuaries..." (Dann and Peat, 1989:134). Everywhere dense forest meets a rugged, rocky coast. The area lends itself to activities in the bush and often in the mud as well. Sea-based activities are precluded by strong rips and ocean currents.

Both students and staff live in the main building during their five-day stay at Tautuku. Students are accommodated in 16-bunk dormitories, and teachers live either singly or in shared rooms adjacent to the dormitories. A large central room is used as a dining facility and meeting area, games area, and social hub of the centre. It has a large open fireplace, adjacent kitchen, and access doors to each dormitory wing. The main building also houses drying rooms, ablution facilities, and a sick-bay. Other buildings at the centre provide laundry facilities, a classroom-like study area, additional unattached accommodation, two resident staff houses, workshops and garages. A flying-fox, a
rock-climbing wall, a barbeque area, sauna, and initiative problem stations are all located outside the main building.

Meals are provided by the school (out of camp fees) and are usually cooked by students and staff. Most equipment required for outdoor activities is provided by the centre and some schools bring additional items. Some clothing is provided by the centre. Overtrousers and parkas are often borrowed by students for the duration of their stay to protect them from the weather.

Most schools emphasise the element of fun their programmes offer students. There is an expectation that students will attempt all the activities offered, as personal growth through experience is highly valued in most of the outdoor education programmes studied. The social aspects of the group residential week are also emphasised.

A statement should be made here regarding the social setting of the research. Undertaking any study is a social event, influenced by social factors external to the actual methodology of the research. This study is no exception. Conditions of limited time and circumstances outside the researcher's control, influenced the preparation of the research and data collection. Full-time study and half-time work (partly necessitated by the study itself), parenthood and accepting full-time employment during the data collection phase of the research affected the conditions of the research.

Pilot Study

A pilot study for this research was conducted late in 1989. The purpose of the pilot study was to check that the procedures and instruments used in the main study would function adequately. To this end, fifty female fourth-form students from one of the co-ed schools, and fifty female fourth form students from one of the single sex schools were given Questionnaires B and C respectively (see Appendix A) before and after their outdoor education camps. These questionnaires are discussed later in this chapter. The questionnaires were in their raw forms, including the original 36-item measurement scale for attitude to outdoor education, the self-esteem scale, and several open-ended questions. Pilot observations and interviews were also conducted.

Results from the pilot study indicated that minor changes to the observation and interview schedules were warranted; additional practice in interviewing and observing was also warranted but
limited time was available because of the need to begin the main study data collection early the next year. The self-esteem scale retained its original form. The outdoor education scale was reduced to 28 items, after item-total correlations indicated that eight items did not function to differentiate between subjects adequately. Word changes were made where members of the pilot sample had not understood terms used - for example, the word 'kayak' was changed to 'canoe' because students did not know what a kayak was but understood the more common term 'canoe'. Reliabilities for the adjusted scales on the pilot sample (n=55) were as follows:- pre-camp self esteem scale - alpha = 0.86; post-camp self esteem scale - alpha = 0.88; pre-camp attitude to outdoor education scale - alpha = 0.92; post-camp attitude to outdoor education scale - alpha = 0.92. The open-ended questions in the questionnaires were also reduced because in the pilot study little useful information had been gained from them.

Quantitative Methodology

Each method used in research incorporates some strengths and some limitations, and measures some components that are relevant and some that are not (Brewer and Hunter, 1989).

In this study the questionnaires were designed to test students' attitudes toward themselves and their attitudes towards outdoor education. In addition, by nature of the way in which questionnaires are formatted, presented and conducted, they also tested students ability to read and comprehend (an important issue when the presence of recent Asian immigrants is noted), and students willingness to categorize their responses to questions and statements. Student resistance to do the latter resulted in a number of questionnaires being unusable and consequently dropped from the sample.

Research Questions

Six of the research questions were addressed by this part of the methodology. They were:

Qu. 1. Who does the sample represent?

Qu. 2. What was the self-esteem of the girls before they went to camp?
Qu. 3. Has the camp experience changed the self-esteem of the girls and if so, in which direction? What does this suggest about the influence of self-esteem on participation in outdoor pursuit activities?

Qu. 4. What are the attitudes of girls toward outdoor education before they go to camp?

Qu. 5. Has the camp experience changed girls' attitudes towards outdoor education, and if so, in which direction?

Qu. 6. Are there differences in self-esteem and attitude toward outdoor education between girls from single-sex schools, co-educational schools, different socio-economic groups, and different backgrounds of previous experience in outdoor activities?

Sample

The data for this study was collected in 1990. The sample was 200 fourth form girls from Dunedin secondary schools (100 from co-educational schools and 100 from single sex schools) for whom outdoor education was 'compulsory'. The schools were selected for their use of a common site, Tautuku Outdoor Education Centre, and for the heterogeneity of pupils' backgrounds. Fifty girls were selected randomly (every nth) from the rolls of each of four schools (two single sex schools, two co-educational schools). To check that each school's sub-sample group was heterogenous and similar to the other sample groups, age, socio-economic status and previous outdoor experience were compared and analysed.

The sample was not a purely random one because the schools from which a random selection of girls were drawn, were hand-picked. However, apart from the four schools chosen there are only three other secondary schools in Dunedin that enrol girl students. Two of the three are private schools which tend to enrol a select group of students. The other is a state secondary school. The students in this sample then, were drawn randomly from four fifths of the total state (heterogenous) school population and can therefore be said to be representative of state school students in Dunedin. Although given the opportunity to do so, no girl selected to participate withdrew from the study.

The generalisability of the results of this study is enhanced by the randomness of both the survey sample and the formal interview sample. The fact that many schools use the fourth
form year to offer outdoor education (Ministry of Education, New Zealand, 1990) further increases generalisability. While student behaviours and attitudes may have been affected by the process of the research, the qualitative part of the methodology at least called in the main for student generated ideas. While the sample is seen to be representative of fourth form girls it is possible that there are factors peculiar to the sample that differentiate it from other samples of fourth form girls in New Zealand. Possible factors could be the site itself and the availability (or not) of highly skilled outdoor educators. However, it is unlikely that factors such as this would make significant differences to results of repeated studies.

'Compulsory' outdoor education means, in the context of the schools in this study, that all students were expected to attend camp at designated times. The schools have no legislative power to force students to attend but students do not simply have individual choice about attendance. Those girls who may not be able to afford to go to camp are, in most cases, subsidised by the school. Those who are reluctant are counselled and cajoled into going. Those who have other important engagements such as dance exams or sports events that prevent them from attending the whole week often have alternative transport arranged for them so that they can attend part of the camp. It is possible for students to refuse to attend camp by not turning up at school for the week. However, previous experience with secondary school outdoor education suggests that most students look forward to camp if only as a week away from the classroom and academic work.

Permission to undertake the study was gained from each school prior to implementation. An introductory letter was given to each student at the commencement of their involvement in the study. It stated the nature of the study, reasons for the study, details of how the study was to be run and expectations of the students. It also set out the benefits of involvement in the study, a withdrawal clause and statement of confidentiality.

The subjects for the study were selected at the end of 1989. Hence, third formers were selected but only in their fourth form year (1990) were they involved as respondents.

**Independent Variables**

Age. To check for a simple maturational factor, and/or an age complication of the previous experience variable, students were asked to give their age in years. The age range of the sample
was noted and compared with other variables for significant relationships.

Type of School. The literature suggests there are differences in girls' experiences of education between co-educational and single-sex schools. It follows, then, that there may be differences in girls' experiences of outdoor education between single-sex and mixed-sex schools. Type of school attended was noted for each girl so that comparisons of difference could be made.

Socio-economic Status. The literature states outdoor pursuit recreationists generally come from the upper socio-economic groups in society. In order to check the representativeness of the sample, occupations of all adult members of a household were asked for and the highest classification was used to score socio-economic status (SES).

Previous Experience of Outdoor Activities. Family involvement in sport and recreation influences the future involvement in sport and recreation of children (Coles, 1980). Information about previous experience of outdoor activities was elicited so that representativeness of the sample could be checked and correlations carried out with other dependent variables.

Self-Esteem. Many authors have commented on the relationship between participation in outdoor activities and self-esteem (e.g. Burrows, 1985; Green, 1987; Lirgg and Feltz, 1989). In an attempt to measure self-esteem, Rosenberg's (1965) Self-Esteem Scale was administered to the subjects. Permission was obtained from the original publishers of this scale to use it in this study. Self-esteem is a dependent variable in this study but was not measured just so that self-esteem could be reported. It was measured so that relationships between self-esteem and attitudes to outdoor education could be examined and so that a clearer picture of girls' outdoor education experiences could be gained.

Dependent Variables

The dependent variables in this study were pre-camp attitude to outdoor education and post-camp attitude to outdoor education as measured by the attitude to outdoor education scales in Questionnaires B and C.
Instruments.

The strengths of using the questionnaire survey in the research were that it gave access to the views of a larger number of participants than would have been the case without it, and that it was a method which limited the amount of direct influence the researcher had on student responses, compared to the observation method. It was also an experiential education exercise for the researcher in collecting and analysing quantitative survey data and using computer technology. Limitations of this method were that the areas of enquiry were fashioned by the researcher and informed by the researcher's knowledge. There were limits then to the types of information gained. Measurement scales themselves are limited by their fixed response format. They do not necessarily reflect respondents' views but are an estimate of the sort of view a person is likely to have. The risk of reactive measurement effects is high in this method.

Six instruments were utilized in the study. These were a biographical details questionnaire (Questionnaire A); a precamp questionnaire (Questionnaire B); a postcamp questionnaire (Questionnaire C); a non-attendance questionnaire (Questionnaire D); a self esteem scale; and an attitude to outdoor education scale. A copy of each of the questionnaires and each of the scales is attached in Appendix A.

Questionnaire A

This questionnaire was developed to elicit information on type of school attended, age, socio-economic background and previous outdoor experience.

Students were asked to state their age in years. The majority of the students in the sample filled out Questionnaire A while they were in the third form at school. This was necessary because of the timing of camps, administrative difficulties of meeting with large groups of students early in the school year and the need to be fully prepared for the study before the first camp at the beginning of the school year. For most students then, stated age was simply advanced one year to account for the time lapse between administration of questionnaire A and the time that they actually attended camp. For the few students who were not at school on the day questionnaire A was administered to their class-mates and who subsequently filled in the form during the same year as the study took place, their age was not altered. Age was not coded for the analysis but left as a raw figure.
Students were asked to state which school they attended. Each school was given a numerical code (1, 2, 3 or 4) for the purposes of analysis. A note was taken of which school belonged to each code so that analysis could be performed on the basis of school type (single-sex or co-ed).

Socio-economic background (SES) was ascertained by referring to the details each student gave of the occupations of adults living in their home. The socio-economic scale used to code responses to the question regarding employment was the 1985 Elley-Irving scale (Elley and Irving, 1985). Although based on 1981 data, it is still the most recent, most comprehensive scale of its type available. It lists occupations of male workers, but has been used in this research to code occupations of both males and females. A separate scale was published for females in 1977 (cited in Johnston, 1983) but its distribution of SES groups is based on the male scale anyway, and it tends to push female occupations up at the top of the scale and down at the bottom of the scale. This, together with its age, and the fact that men and women now enjoy relatively similar status in the same jobs compared to the 1970s, made it inappropriate for use in this study. For the very few occupations listed by respondents for female workers that were not included in the 1985 edition, the 1977 female scale was used, despite its limitations, in order to maintain the sample.

The fact that the socio-economic indicator scales are not particularly recent in origin is not so important given that the rankings are not being compared to other codings or other data outside of this study. The socio-economic scales are used solely to give an indication of relative socio-economic status, in order to differentiate between groups in the sample.

Where multiple employed adults were listed, the highest socio-economic grouping (1 = highest, 6 = lowest) represented was used in coding except that where parents were identified, parents occupations only were used for coding.

Where all adults in the home were reported to be unemployed, the subject was coded for the lowest SES group (6). It is possible that some of the adults listed as unemployed were, for example, unemployed corporate executives and others, unemployed labourers. The financial situations and educational attainment (the criteria upon which the socio-economic scale used was based) of those listed as unemployed was impossible to establish, however, it was assumed that "unemployed" meant that there was some reliance on a welfare benefit for family
maintenance. It was also assumed that reliance on a benefit indicated a low current income. Financial situation was deemed more important than educational attainment when a family's ability to send a student to camp was considered, so for this reason, those subjects listing their parents/guardians as unemployed were assigned the lowest socio-economic grouping.

Full-time domestic responsibilities were assumed to be non-income earning and treated as such. Therefore students who listed one parent/guardian as employed outside the home and one as working full-time with domestic responsibilities were coded solely on the occupation of the person working outside the home. If they had a sole caregiver who worked full-time in the home their socio-economic status was coded at the lowest level as it was assumed there was some reliance on a welfare benefit.

Where students had failed to list any occupation for an adult in their home, and in cases where the occupation stated was not clearly defined (e.g. "dad - works in hospital"), the subject was omitted from the sample.

The final three questions on the form were designed to elicit information about students' previous experience in outdoor pursuit activities. The first of these questions asked students to list their outdoor activity experiences prior to filling in the questionnaire. This was a focussing question designed to get students thinking about outdoor pursuit activities as distinct from sports and other recreations. Students were encouraged to verbally check their ideas of outdoor pursuits activities when they got to this question and some did so. This question served an important purpose in preparation for the following question.

The next question asked how many times they had participated in an outdoor activity in the last twelve months. Students were instructed to select the participation level (of the three offered) which best described their participation in outdoor activities. Responses to this question were used to code previous experience. The final question asked students to state which activities they were referring to in their previous twelve months experience. This was used as a final check that students were referring to outdoor pursuits activities and not sports. The few students who had referred to sports alone were deleted from the sample.

Previous outdoor experience was categorised according to a simple nominal scale that differentiated between levels of previous experience. Three levels were used and categorised numerically- no previous outdoor experience (1); low experience,
which included those who had participated in outdoor activities three times or less during the past twelve months (2); and high experience which included those students who had participated in outdoor activities four times or more during the past twelve months (3). The three levels were designed to differentiate between those for whom outdoor activities represented a major leisure interest and those for whom outdoor activities were of minor leisure interest or no interest at all. It was not intended that exact information about previous experience be known, as long as an approximate measurement of outdoor activity participation relative to other students was identified.

Questionnaire B

The second questionnaire students filled in (Questionnaire B) consisted of two measurement scales and one open-ended question. The measurement scales are discussed below. The open-ended question was included so that anecdotal impressions of outdoor education could be collected. It also gave students an opportunity to express their feelings about a range of issues in outdoor education and to comment on the study itself. Responses to the open-ended questions were also useful as starting points for the interviews. The questionnaire was administered during the week immediately preceding their outdoor education camp, except in a few cases when it was administered during the fortnight preceding camp. Either the researcher, or the liaison teacher at the school gave each student a questionnaire, asked them to put their names on the small square of paper attached to it (therefore not to write their names on the questionnaire itself for purposes of anonymity), and then allowed the rest of the forty minutes allocated for completing the questionnaire. Where teachers administered the questionnaires, students were each provided with an envelope into which they placed their completed forms. Teachers, therefore, did not handle the students questionnaires directly and confidentiality could be maintained.

Students were asked to ensure that they selected a response for each item in the measurement scales and not to create their own response categories. Students were encouraged to ask for clarification if they did not understand a question or statement. Guidelines had been given to the liaison teachers on how to answer such questions, so that teacher replies would be similar to researcher replies. When questionnaires had been completed they were collected and placed in a box. An OHP overlay was used to aid scoring of the measurement scales. Further details of the scoring procedure are given below.
Questionnaire C

Questionnaire C was administered during the week immediately following the outdoor education camp week or during the fortnight following the camp. In two cases this questionnaire was administered three and four weeks after camp because in one instance a holiday period intervened and in the other, it became administratively and ethically impossible to withdraw students from classes around the time of school examination preparations and examinations. In all other ways this questionnaire was administered in the same way as questionnaire B.

Questionnaire D

This questionnaire was designed to find out from students who were in the sample but who had not attended camp, why they had not attended camp. This information was useful to the study because it could shed light on factors which keep girls from attending outdoor education camps. After an introductory note, students were asked to select as many of the six offered reasons for non-attendance as were appropriate to them. They were also given the chance to express 'other reasons' than those listed, in their own words. Students were assured that this information would be treated confidentially. Envelopes were provided for each student so that when they had completed filling in the questionnaire they could put their folded form into their envelope and seal it. Questionnaire D was administered to individual students by their teachers during school time. These forms, like the other questionnaire forms, had a small square of paper attached to them upon which students wrote their names.

Procedure for Administering Questionnaires

Questionnaire A was administered to most of the students in the sample at the end of their third form year at school. Students were gathered in their respective school halls or in smaller groups in classrooms. The researcher and the research were introduced to them and they were invited to participate in the study. Students who did not wish to participate were asked to either simply refrain from filling in the questionnaire, or to fill it in but speak to myself or their teacher afterwards about their inclusion. This procedure was used so as not to single out any
individuals, nor cause embarrassment to them. No student opted out of participation in the study.

Those students who were not present on the day the majority filled out questionnaire A were asked to fill out the questionnaire at the time of completing questionnaire B. In both cases students were given twenty minutes to complete the questionnaire which proved to be ample time. They were instructed to answer each question on the form and to ask for help if there was something they did not understand or were unsure about. Before they began it was explained to the students that their completed forms would be held in confidence by the researcher. It was also explained that for the purposes of the study 'outdoor activities' meant pursuits such as tramping, camping, caving, sailing, rafting and that it was important that they list all adults living at their homes and alongside each adult, their occupation. Since students were to complete three or four questionnaires during the study at different times, it was necessary to label the forms before they were collected. A small square of paper was attached to each questionnaire on which students wrote their names. It was explained that this paper would be removed when all of an individual's questionnaires had been collated, from which time the individual would be identified by a number. Students were asked to hand in their forms individually, placing them face down in a collection box.

**Self-Esteem Scale**

Outdoor education experiences are reported to increase students' self-esteem (McRae, 1990), which suggests that the experiences are positive for them. While it is difficult to separate and compare feelings towards oneself (self-esteem) and feelings toward other things around oneself (attitude toward outdoor education), it is important to this study to find out if differences between girls attitudes towards outdoor education can be explained by their attitudes towards themselves, and it is also important to find out if outdoor education experiences are positive for girls. If they are positive an increased post-camp self-esteem score may be a reflection of this.

Rosenberg's (1965) Self-Esteem Scale was used to measure self-esteem of students pre- and post-camp. While this scale best measures the self-acceptance factor of self-esteem it was considered to be a useful indicator of overall self-esteem because of the close connection between factors within self-esteem. The scale's brevity, its ease of administration, and its
target population of secondary school students made it suitable for use in this study. The scale has a reported reliability of 0.92 and a test-retest correlation of 0.85 (N=28) (Rosenberg, 1965).

**Attitude to Outdoor Education Scale**

The attitudes of subjects to outdoor education both before and after they had been to their outdoor education camp were the dependent variables in the study. In order to measure attitudes to outdoor education, a measurement scale was developed in the absence of any other available instrument. A comprehensive literature search, personal observations and information generated from pre-pilot studies (Lynch, 1989a; Lynch, 1989b) resulted in the identification of six major indicators of six items each. The six indicators were issues of confidence, comfort, environment, activities, enjoyment and personal factors. Concerns of lack of fitness for activities, lack of skill and of self-confidence and fear of discomfort have been reported by fifth and sixth form girls in outdoor education (Lynch, 1989a). Fifth form pupils also commented on lack of personal time, lack of privacy and limited time for socialising during their outdoor education week (Lynch, 1989a). Femininity, self-confidence, and enjoyment were issues raised by fourth form girls (Lynch, 1989b). Miranda and Yerkes (1982) suggest that risk, adventure and physical work concern women, just as being accepted, being encouraged and having free or personal time during outdoor programmes have been identified by Cara and Mary (1984) as issues concerning women in outdoor pursuit situations. Personal observations have led to the impression that city-dwelling teenage girls are not necessarily at ease in natural environments and that bush, darkness, mud, rain and rivers seem to be particularly worrisome. In addition menstruation and general personal maintenance have been identified as further factors limiting women's outdoor participation (Burrows, 1985).

For each of the six indicators mentioned above, six items were established and included on an original scale which was piloted for use with fourth form outdoor education students before the current study was undertaken. In addition, one tertiary level and two secondary school outdoor educators who are knowledgeable about secondary school girls reviewed the scale and their comments were taken into consideration when the scale was improved. The scale was used in two forms - first, a pre-camp form with items worded in the future tense and second, a post-camp form with items worded in the past tense. Some statements were phrased positively while others were phrased negatively and both types of statements were interspersed...
throughout the scale. After the pilot study items with low item-total score correlations (correlations under 0.30) were eliminated. This left twenty eight items on the scale and reliability co-efficients of (pre-camp) 0.92 and (post camp) 0.92 (N=55).

Respondents were asked to circle the option that was closest to their feeling for each of the items on a four point scale from strongly disagree to strongly agree. No central point was offered in an effort to maximise discrimination between subjects. Responses were scored so that the lowest score (1) represented the most negative attitude toward outdoor education for any item and the highest score (4) represented the most positive attitude toward outdoor education for any item. As examples, the items "Living in the outdoors will be enjoyable" and "I will like getting muddy" were scored so that "SA" (strongly agree) attained the highest score (4) and "SD" (strongly disagree) attained the lowest score (1). The items "Tramping will be too hard for me" and "Rivers and the sea will scare me" were scored so that "SA" (strongly agree) attained the lowest score (1) and "SD" (strongly disagree) attained the highest score (4). The scoring schedules are included with the questionnaires in Appendix G.

Quantitative Data Analysis

Quantitative data was analysed by t-tests and Pearson correlation using the SPSSx statistical package. Open-ended questions from Questionnaires B and C; interview responses and observations were analysed for content and salient themes drawn out. Information from questionnaire A was used to chart frequency distributions and test for significant differences between means. Information from questionnaire D was analysed quantitatively by simply enumerating different categories of responses. Finally, the information gathered was synthesized into a general picture of girls experiences of outdoor duration and compared to the main findings in the literature reviewed.

Qualitative Methodology

Four of the research questions were addressed by this part of the methodology. They were:

Qu. 4. What are the attitudes of girls toward outdoor education before they go to camp?
Qu. 5. Has the camp experience changed girls' attitudes towards outdoor education, and if so, in which direction?

Qu. 7. Are there aspects of outdoor education that occur before the camp experience that deter girls from outdoor pursuit activities? That is, is there something about the way pre-camp preparation is conducted, or the information female students receive about outdoor pursuit activities before they go to camp that is off-putting?

Qu. 8. Are there aspects of outdoor education which occur during the camp that deter girls from outdoor pursuits activities? That is, is there something about the outdoor pursuits activities offered at camp, the way the camp is run, the situation or the organization, that is off-putting for girls?

The qualitative instruments used were participant observation and interviews. The subjects of the interviews were a random selection from the quantitative sample described previously. The subjects of the participant observations were all the girls present at the camps, thus a much larger group than that involved in the quantitative and interview samples. Present within the group of students observed were the students who had completed questionnaires and who would later be interviewed.

Results gained from the qualitative aspects of the study were influenced in a significant way by my acceptance of a full-time teaching position in another part of the country two thirds of the way through the year. Participant observations were particularly affected by this move. Initially I attended camps from beginning to end and so had maximum opportunities to build rapport with students and observe their actions. After September I spent only one day per camp week on site thus reducing both the trust-building and observation periods. Six out of the fourteen camp weeks were affected in this way. By contrast some gain was made by visiting camps for just one day per week. Because I was not available longer term I was not required to attend to organizational details, discipline of students and extra activities to the same extent. This gave me opportunities to observe and talk to students that I had not had previously.

A brief comment in general about fieldwork relationships is necessary here. Fieldwork relationships are affected by who the subjects perceive the researcher to be (Warren, 1988). Because of my close association with what can be perceived as a male-dominated, male-centred set of activities (outdoor pursuits in outdoor education), female students may have perceived a wide
gap between their lives and mine and therefore a communication gap. That is, if they saw me as an "elite" outdoors superwoman operating in a "male-appropriate" context, alien to their own life experiences, they may also have been more reluctant to trust their personal views to me. For this reason I made my personal details accessible to them so that they could get to know me and so that bridges of understanding could be built between us.

I did this by letting it be known that I had been a physical education teacher (a role with which they were all familiar); that I am a mother (thus giving them a connection between me as an instructor and my femininity) and by letting them know that I experience some events in similar ways to them at times, for example feeling scared at the top of an abseil. Divulging this information often opened up channels of communication between myself and the students. Finding out that I have a child led to conversations about the child, about the experience of mothering, about the logistics of working outdoors and being a mother and about the students' own childhoods and families. It also gave them a reference point to me - after all, I was a mother, just as they all had a mother.

My age (30) and role as instructor counted against good field relationships but I countered this somewhat by joining the girls at dinner when invited; adopting my "working with adolescents" mode of speech and behaviour which includes words and terms common to teenagers such as "gross", "bad buzz", and "spare it"; by listening to the girls' critiques of school, family, boys and other topics of interest to them; and by initiating and playing games. I often dressed in denim jeans (though I declined to slash the knees), oversized shirts and wore beads in my hair, all youthful behaviours at the time of the research. This behaviour and language use is not alien to my normal mode of operating so was not incongruent with my persona. I therefore gained a degree of entry to the girls' world by becoming an instructor, a confidante and a "playmate".

Sometimes the research task is facilitated by adopting characteristics of the subjects' culture and sometimes it is not. In order to reassure students that my research work was taken seriously, I dressed in a more formal manner when visiting them at school, usually when conducting questionnaire surveys. This change from the "playful" context and relaxed dress of camp was more fitting with the formal nature of the school situation. During interviews I chose a style of dress between the informal and formal. Dressing casually, but not scruffily, was intended to help the student relax and converse openly.
Warren (1988) states that ethnographers need to attend to perceptions of the body in field research. The value placed on certain bodily characteristics such as hair and skin colour, stature, and facial features can affect the value and amount of acceptance given to the researcher too, by the subject culture. The conflict between the social valuation of the female body and the facts of many adolescent girls' physiques was both problematic and useful in this research. A "well-groomed" appearance, clear youthful skin, straight white teeth and slim body are not characteristics for which young women might truthfully value my presence among them. However the fact that my appearance might gain an overall "average" by most measures, and that I display physical strength and skill in outdoor activities may have gained their acceptance in the context of the field research. My "white" skin and Pakeha features, on the other hand, may have been a disadvantage in communicating with Maori, Polynesian, and Asian students. As Fine and Sandstrom (1988:66-67) put it:

Who the researcher is (in terms of societal categories) tells the informants a lot about this person's attitudes and whether he or she is likely to be a good bet as a friend or confidante.

Numbers of students from these ethnic groups were very small so the overall effect would not have been great.

Participant Observations

Observations become an expression of the researcher's ability to interpret student responses to outdoor education. Observations on the other hand provide a non-reactive methodology where behaviour is viewed as it "naturally" occurs (Brewer and Hunter, 1989). Non-reactive methodology is understood to mean a methodology which does not require subjects to respond to any particular stimuli such as a questionnaire or test instrument. However, since the observations were not done in a covert manner, some reactivity may have occurred. The issue of what is "natural" behaviour and what is generated by the researcher in this study is discussed more fully below.

During each fourth form outdoor education camp week run by a school in the study, observations of the outdoor pursuits activity sessions were made. Students were made aware of the presence and intentions of the researcher/observer and of the dual role I had as instructor at their first gathering at camp. After they had been introduced to the resident teacher, school staff in
attendance, and the general organizational matters that precede all camp weeks at Tautuku, I spent five minutes addressing the students to explain my role and what I would be doing during the time I was present. I gave students the opportunity to ask questions or make comments about my activities on camp at this time. In the cases where I arrived at camp part way through the week, I simply addressed each group assigned to me for an outdoor activity, explaining my dual function and again allowed time for questions and comments. At each camp I also invited the students to ask questions and make comments throughout my stay, so that they had opportunities to understand what my research was about and so that I might gain their respect and trust, thereby increasing the likelihood that they would allow me to explore their understandings of outdoor education.

By giving up some of my adult prerogatives and occasionally "shelving some of my "adult" dignity" (Fine and Sandstrom, 1988:22) I hoped to get closer the my subjects. Students were urged to use my given name when addressing me rather than the more formal use of title and family name common to most teacher/pupil relationships. I was fully involved in the action in any activity session especially if it required participants to become wet, muddy, and otherwise uncomfortable. Students reported to me that they had more commonly experienced teachers who would direct them (students) to go through the mud whilst taking a clear path themselves. A great deal of respect was gained from the students by initiating waltzing competitions through knee-deep bogs, carrying at least as much as they in my pack and having cold showers when all the hot water had been used in the centre. Comments noted which reflect this respect include "You're not like other teachers" (from a student during a rain-soaked bush walk) and "You're as crazy as us" (from a student after a game to get through a muddy track) (Obs. log. 2). In these ways and through game playing, I adopted some of the behaviours and values of the study subjects and to some extent equalised the relationship between myself and the female students.

The power differential between myself and the students could never be eliminated, nor of course would it be ethically sound to attempt it's elimination. It was important, though, to limit the sort of power I held over the students. For example, I explained both to staff and students that anything students said to me in confidence would not be passed on to the school administration, unless it was important to the student's safety. This was a difficult ethical position as only my judgement of what was important to a student's safety was used. In practical terms it did not become a problem of which I was aware.
Since the researcher is an adult it was impossible to enter the teenage student world fully as a participant observer, so the next best alternative was seen to observe from the position of a staff member on the camps. It was felt that this arrangement would afford the observer a relatively "natural" view of the responses of girls to outdoor activities. The sense girls make of their outdoor education experiences becomes the basis upon which they interact with their social and physical environment at camp. The importance of understanding the girls' sense of their outdoor world then, is clear when it is accepted that, erroneous or not, a person's sense of a situation and the meanings they ascribe to it constitute reality for them (Jorgensen, 1989). Young people's understandings and meanings in the social world are not necessarily similar to those of adults (Fine and Sandstrom, 1988). My understanding of the students' sense of their outdoor education experiences depended on observing them and their interactions from as close as possible a viewpoint to their own. Observation guidelines were drawn up in the form of themes around which observations could be focussed at particular times. From the outset it was recognised that I could not "see" everything that happened on camp with even the best possible methodology and that what is "seen" is constructed and interpreted by the observer (Katzer, et al., 1982). Guidelines for observing multiple aspects of outdoor education situations were established in an attempt to "see" as much as possible. The guidelines used are included in Appendix C. Each day, I would use a pencil or pen and a small cut-down 3B1 notebook in which to jot notes and from which fuller notes would be written up most evenings. Interactions which were particularly remarkable for some reason were often recalled largely from memory with jottings to prompt specific incidents or quotations. The full notes were recorded in a 2B8 Lecture Book used as a diary solely for the study. Each observation was written up under a theme heading which defined the main point of the observation. Other notes about the process of the study and my own reflections about the topic of the study were recorded in a separate diary.

Several difficulties were encountered in this part of the research. The dual roles of observer and instructor created logistical problems such as having to concentrate on operating a safe abseil system while overseeing a novice instructor and ensuring the safety of sixteen or so students, whilst at the same time trying to observe what was going on from the students' point of view. Similar difficulties were encountered in other activity sessions, although in all sessions also there were times when focussed observation was possible. For example, despite
the complexity of my role at the abseil site, each student who abseiled on the rope system under my control was necessarily in a communicative relationship with me as instructor. From this vantage point I could observe an individual students' behaviour throughout the activity of abseiling and sometimes discuss with them the meaning of their behaviour. Additionally, because I was conversant with the details of the rope systems used (and therefore not concentrating fully on that aspect of the activity) and because I was often responsible for the safety of the students still waiting for a turn to abseil, there were opportunities to observe interactions beyond the mechanical workings of the system. My familiarity with the other activities offered - kayaking, tramping, bouldering, problem-solving, ropes course, and tyrolean traverse - gave me similar opportunities for observation.

Student responses to being observed are not controlled in this study. However, given that many girls could still say at the end of the week "oh, that's right. I'd forgotten you were doing that study thing" suggests that my role as observer had little impact on their behaviour. Fine and Sandstrom (1988) further suggest that just having an adult or a teacher around changes the behaviour of young people and that therefore no study involving observation of children and adolescents can claim to have observed their "natural" behaviour. Indeed, the question could be asked, is any behaviour "natural"? What was observed in this study was, I suggest, behaviour typical of adolescents in the presence of teachers and other students, and is therefore very meaningful as it sheds light on the meanings female students ascribe to their outdoor education in the context of school based teacher-student relationships and student-student relationships. My adoption of a teacher/participant observer role reduced the presence of an additional variable that would have been present had I simply observed.

Opportunities to informally talk to the students about their experiences were limited by my needs as instructor to attend to other students and to equipment; by the absence of a distinct processing time after each activity session where students reflect on their experiences; by working to fairly busy programme timetables; by my own personal need to escape the noise created by a large group of teenagers, especially in the evenings; and by sensitivity to student needs at particular times. For example, post-activity travel back to the centre provided an excellent opportunity to talk to students and most of the time was a fruitful exercise. Sometimes, however, when the students were 'buzzing' from their experiences it felt inappropriate to interrupt. Others times when students were cold, wet, and
muddy they were not at all interested in talking about their experiences - a hot shower was the sole focus of their attention. During these times I observed what the girls were doing and saying, without trying to draw out from them any further information, and wrote up those observations.

The behaviour I observed, however, was not as 'natural' as it might seem. In my role as instructor, I have a responsibility to encourage girls to participate in the activities offered. My attention to this responsibility did not alter during the research. In effect, then, the results of my observations are to some extent comments on my own behaviour as instructor. Observing myself added to the complexity of the research task. What I did and said during activity sessions must have influenced the female students' behaviour and experiences. This was an intentional outcome of my instructing. While I was aware of the effect my instructing must have been having on my research results I did not alter my methods or approaches. As an instructor, if I observed a girl hesitating, or attempting to opt out of an activity, I directed my energy toward encouraging her to take part. So, while observing the students, I was also affecting their behaviour and observing the results of this.

Recalling what had happened in some activity sessions was frustrated by climatic and logistical practicalities. In each group for any activity there were commonly fourteen to eighteen students on whom to keep a careful eye and often an inexperienced teacher or two as well. The nature of the activities is such that people are constantly moving, challenging themselves. There is much for an instructor to take account of and plan for in the normal course of events, then. Add to this the vagaries of the weather - rain, wind, sleet, snow - and the nature of the environments used - thickly bushed, watery, muddy, inclined, underground. It was impossible to take notes in very wet weather, even if a plastic bag was used, because there was no way to get my hands dry enough to ensure the notebook inside the bag didn't make the transformation to lined sponge within seconds. Even if I could have dried my hands, it was very difficult to keep a notebook dry in my parka pocket and if I had wrapped it carefully and stored it inside my pack where it would keep dry it would have been unacceptably disrupting to the progress of whatever activity I was involved in to stop and get it out each time I wanted to write. On very wet days, therefore, I relied on memory more than on written notes when observations were being written up.

Other obstacles to the process of recording observations came in the form of evening responsibilities. The outdoor education
camps I attended provided very full programmes each day including evening activities after dinner. My presence was required at these times, thus decreasing the amount of 'free' time I had for work on my research. My employment as an instructor during the week therefore conflicted with my role as researcher. On days when I had not been able to write up my notes in the evening, the next evening was used, sometimes requiring me to excuse myself from the evening activities in order to spend enough time on the writing. In this way my research affected my effectiveness as a member of the camp staff.

In general I confined my note-writing to times when I could do so without disrupting an activity, but at the same time as soon after the observed event as possible. I was also careful to note-take so that students did not feel like guinea-pigs in an experiment. Commonly appropriate times were lunch-times and during rest stops along a track. I positioned myself so that I was close enough to the group to see what was happening and to speak to people but also near the periphery of the group so that my note-taking was not a focus of group attention. There was nothing intentionally covert about the field notes - they were written quite openly. When students asked what I was writing I told them and sometimes this initiated new debate.

Taking notes during kayaking sessions was possible by escaping the activity long enough to avoid being splashed by energetic youngsters. My plastic-wrapped notebook was carried in my clothing or equipment where it was readily accessible during these sessions.

Regardless of the limitations to my ability to record the events of activity sessions, the actual observations made are still only my interpretations of what happened. Those interpretations themselves are in part pre-determined, as Shipman (1988) points out:

> Individuals enter situations with maps already established in their minds into which they fit the evidence of their senses. (p68)

In addition, my own impressions of the activities cloud actual events as they happened for the students. For example, if a student said that they were scared during the abseiling because they thought the ropes didn't look strong enough, that information - the fear - didn't tend to strike me at an emotional level because I knew that the ropes were perfectly strong enough. If, on the other hand, I had been sitting with the
students as a participant on the course rather than an instructor, I may have had a more empathetic view of their experiences.

**Interviews**

In interviews students were asked to describe their experiences of outdoor education which relied upon student willingness to express their thoughts and ideas to the researcher. Interviews elicit deeper understandings of girls' perceptions of outdoor education than survey information, so can be used to flesh out bare statistics.

Of the two hundred students in the quantitative sample, twenty were randomly selected (every nth from a list of alphabetised names for each school) for in-depth interviews. Two informal group interviews were also conducted while the respondents were at camp. Opportunities for these in situ unstructured interviews were rare as the discussion of the participant observations will reveal but the quality of information gained was high. Unstructured interviews, as (Burgess, 1984) has noted, are rarely used in isolation to gather information and are of great value in situations like that of this study where the researcher already has a great deal of knowledge about the social situation being investigated. Not only was there common knowledge about experiences of outdoor education but there was common knowledge of experiences of being female.

While the informal interviews with students were a fruitful source of information there were limitations to the quantity and quality of information gained. My role as teacher/instructor gave me the opportunity to spend time at camp with the students but it also required me to be involved in the organization and discipline of the students. As Fine and Sandstrom (1988) state, this disciplinary function is a threat to high-quality research, especially with adolescents. For this reason some students may not have been as relaxed with me as they might have otherwise been. For example, on two separate occasions I had to isolate individual girls from their dormitories at night because they were disruptive. These two didn't speak to me for the next two days! On the other hand, my position was unique in that the students learned to trust me because I managed the risk component of their activities and encouraged and enabled them to participate safely in activities. I was also an outsider to the school community - not a teacher who would see them again during the normal course of the schooling and not involved in other aspects of their lives. Many students, therefore, told me in confidence about particular problems they had, about their
teachers, school and often about personal and family troubles. In this way I gained their confidence and access to their feelings about outdoor education.

Individual in-depth interviews were conducted as soon as possible after each interviewee's camp experience, usually within a fortnight of returning from camp but in a few cases, after three or four weeks of returning. Interviews were intended to be up to an hour in length, recorded on tape, conducted in an appropriate situation of the interviewee's choice and conversational in style. However, several intervening factors altered the organization and style of the interviews. The complexities of the school time-table, of student's after school hours, and of the researcher's own time-table meant that interviews outside of school hours were not generally possible. Liaison teachers also preferred the interviews to remain school-based in keeping with the nature of the study. Where interviews were conducted outside school hours (one case) the assent of the interviewee, parent and liaison teacher was obtained beforehand. For all other interviews, interviewee and liaison teacher assent was given beforehand. Since it was not always appropriate to withdraw students from class for interviews, most of the other interviews were conducted during lunchtimes. Some were conducted during class time with the approval of the class teacher concerned, the liaison teacher and the student. Given that students have various commitments to sports, clubs, personal organization and a meal at lunchtime, interviews undertaken at that time were confined to twenty to thirty minutes in length. Other interviews lasted thirty to forty minutes.

Most of the interviews were taped. Two students felt uncomfortable being recorded on tape and in these cases notes were taken during the interview and written up immediately afterwards. In all other cases the distraction of note-taking was kept to a minimum by tape recording only. Several students were noticeably shy about being taped. The steps I took to boost their confidence were to encourage them to speak openly about how they were feeling, to tape a short conversation and play it back to them so they could hear themselves on tape and to reassure them that the tapes were confidential. These measures worked well for these students. The tapes were labelled by number and by students' first name, school, and date of interview. Tapes were stored confidentially with the students' questionnaires until transcribed and after the study had been written up the tapes were wiped.
Each interview began with a re-introduction of the researcher, the study, a brief general review of what had happened on camp and what activities had occurred. Issues raised for discussion in the interviews were those identified from the measurement scales in questionnaires B and C, and any other issues raised by the student themselves. The interviews were intended to be informal in structure and setting so that interviewee comfort was maximised and rapport established quickly. A very general interview schedule (see Appendix B) was used to prompt and guide the interviewer if necessary. A conversational style of discussion was intended throughout each interview but was not always achieved. The greatest difficulty encountered with the interviews was getting the students' talking freely about their OE experiences. Many of the students seemed to take most of the interview time just to relax and many also had difficulty expressing why they had responded in particular ways to outdoor experiences or why they felt particular ways about particular events. Two of the interviewees stated that they felt the interview was like a 'test' - perhaps a response to any situation where a teacher or teacher-equivalent seeks to know what it is the student knows. None of the other students reported feeling 'tested' by the interview. All students chose freely to give an interview and most reported enjoying the experience - not least because for some it was an opportunity to miss class!

Oakley (1981) has criticised the interviewing method as a masculist paradigm and asserts that feminist methodology requires that the interview be re-defined so that it does not involve "objectifying your sister" (Oakley, 1981:41). She suggests that interviews should be non-hierarchical, non-exploitative (two-way) and that interviewers should make a personal investment in the interview relationship. The intention in this study was to conduct interviews in this manner but the practical, logistical factors of the situation as outlined above frustrated the intention. Second interviews with each interviewee would have gone a long way toward resolving the dilemma of gaining rapport, building trust and achieving a higher degree of interviewee response. However, the disruption to the students' life, in particular their free time during a school day, was considered to be too great to warrant further intrusion for the purposes of research. That the interviews were hierarchical in nature is indisputable. The interviewer was older than the interviewees and had more knowledge of the subject matter. This difference in life experience did not mean that the interviewer had more information about individual students' opinions but did mean that there was an unequal knowledge base in the context of the interview. Both the students and the interviewer were aware of this. The fact that the interview was
conducted at school by an adult increased the distance between interviewer and interviewee and this was not decreased by the fact that the interviewer had functioned as a member of staff during the outdoor education camp and so was identified as "teacher" (as opposed to "student") by the interviewees. Any teacher-student communication barriers set up by the structured nature of teacher-student interaction within the institution of the school would therefore have carried over into my research. Similarly any communication blocks established by the relationship between myself and the students during our encounters at camp would affect the research interview. Student resistance to teachers in general, then, would be likely to function within the interview decreasing the quantity and quality of information received. Such resistance can be understood as a gesture by the student of maintaining an adolescent identity (Baker, 1983) in the face of adult attempts to dissect adolescent experiences. On the other hand, each interview can also be understood as an instance of adolescent socialization by exposure to the behaviours and values of an adult member of society. These are by-products of the interview process.

Attempts made to reduce the hierarchical nature of the interviews included dressing casually, using informal language, being accepting of criticism of teachers and teaching practices and where possible, highlighting the less "adult" side of my own personality by referring to incidents of playfulness, shared experiences and "youthful" behaviour that occurred at camp. Allowing a two-way flow of information and making personal investments in the interviews also helped to reduce the distance in the interview relationship. In order to actively stimulate conversation, I offered some of my experiences relevant to a particular topic, in each interview. Thus, students learned something about me personally from their interview and having offered them a part of my life they were sometimes motivated to ask further questions of me.

At the beginning of each interview it was clearly stated that interview time was to be used for both interviewer needs and interviewee needs. That is, students were invited to make any comments or personal observations on both the nature of their outdoor education experiences and on the process of being involved in the study at any time. It was pointed out that the interview was a time for them to ask questions of the interviewer about outdoor education and/or about the study. Rather than be simply a forum for withdrawing 'data' from the subjects, interviews were seen as a learning platform for both parties. Most of the girls interviewed did not ask questions of
the interviewer. This may have been because they felt there was not time to do so; because they did not feel confident to do so; because they did not have an interest in either the study or the topic of outdoor education or because the study and outdoor education in general was not perceived as relevant to their lives. A further explanation could be that students perceived that the interview was an "unnatural situation" (Ribbens, 1989) in which it was the task of the interviewer to ask questions and frame meanings and of the respondent to simply answer as best they could. That is, because of the relationship between the researcher and the student and because of the organized nature of the interview encounter, a natural conversation could not take place.

Those girls who did question the interviewer enquired about aspects of the outdoor education camp that they did not understand, or that they wanted the interviewer's opinion on, and often also they enquired about the process of doing the research. In all cases, answers were given honestly and openly. Some students were seeking advice about furthering their involvement in outdoor activities in which case advice was given with enthusiasm!

Other students sought advice or reassurance of the interviewer on a subject related to the study. For example, in one case a student told me of her feelings of insecurity, shame and social rejection because of her body shape and size. The student was so distressed by this aspect of her life that the topic consumed the whole of the interview and in exploring it for the study, I found that I took on the role of counsellor as much as that of interviewer. It was very important to the nature of the research that the student was supported during the telling of her story and that she left the interview having gained from the experience rather than having simply contributed emotionally. My personal involvement in her life then consisted of listening, attempting to understand, empathising with her when I had similar experiences to share with her and offering what advice I could when she sought it.

The interviews, then, reflected as much as possible given the circumstances, a feminist methodology which set out to contribute to women's liberation by producing knowledge that could be used by the girls themselves and by using methods that were not oppressive, or at least that were as non-oppressive as possible. Of course, all interviewers approach interviews with their own pre-determined ideas about what is relevant and what is important information. While efforts were made to limit this influence, the resulting material will necessarily be a mixture
of student perceptions of outdoor education and researcher interpretations of student perceptions. This is the way of qualitative research.

Qualitative Data Analysis

Data collated from observations and interviews was categorised under headings generated by a combination of themes from the literature and themes from the interview responses and the observations themselves. Observation and interview data have been reported separately (see Chapter Six). All data, quantitative and qualitative is then analysed and discussed together to give a multi-dimensional picture of girls experiences of outdoor education.

Limitations of the Study

The limitations noted here are additional to those already discussed in this chapter. Some limitations are best discussed in the context of the aspect of methodology to which they refer, whereas the following may more happily stand alone. This study attempts to identify factors which deter girls from participation in outdoor education and it relies heavily on the researcher's and the students' perceptions of outdoor education for girls to bring these factors to light. It may be that no factors exist which measurably deter girls from outdoor pursuits participation. It may also be that no factors are identified because the methodology limited their appearance. Other agents in outdoor education, such as teachers and parents are not involved in the data collection for this study. They could have been useful sources of information as they spend considerable periods of time with the girls, but because of administrative difficulties and lack of time they were not consulted. This research concentrates on negative aspects of girls' experiences of outdoor education. It is possible that involvement in this study may affect the girls' expectations, experiences and participation in the activities offered at camp, thus biasing the results and detracting from the quality of their week outdoors. Every effort will be made to reduce the study's influence on the girl's and any positive factors identified in outdoor education for girls will be taken into account in the results.
Summary

This study utilises a multi-method design in order to collect data from a variety of sources on the issue of girls' experiences of outdoor education. Written questionnaires are used to elicit information about respondents' backgrounds, attitudes to themselves and to outdoor education. Interviews are used to elicit information on the deeper meanings of the girls' experiences and observations are used to gather information on outdoor pursuit participation and experiences at a group level. Two hundred and forty fourth form girls will be involved in the study and twenty interviews will be undertaken. All respondents are students of schools in Dunedin, New Zealand, and for this and other reasons the results of this study should be extrapolated with caution in other areas of for other ages of students.
Chapter Five

Results and Discussion

The aim of this thesis was to identify factors existing in outdoor education which could deter girls from participating in outdoor activities. In chapter two I hypothesized that outdoor education is male-centred and that therefore it can be oppressive to young women. The research questions posed by the study aimed to draw information about outdoor education that would either support or refute the hypothesis. The eight research questions being addressed by this study are repeated here for ease of reference.

Qu. 1. Who does the sample represent?

Qu. 2. What was the self-esteem of the girls before they went to camp?

Qu. 3. Has the camp experience changed the self-esteem of the girls and if so, in which direction? What does this suggest about the influence of self-esteem on participation in outdoor pursuit activities?

Qu. 4. What are the attitudes of girls toward outdoor education before they go to camp?

Qu. 5. Has the camp experience changed girls' attitudes towards outdoor education, and if so, in which direction?

Qu. 6. Are there differences in self-esteem and attitude toward outdoor education between girls from single-sex schools, co-educational schools, different socio-economic groups, and different backgrounds of previous experience in outdoor activities?

Qu. 7. Are there aspects of outdoor education that occur before the camp experience that deter girls from outdoor pursuit activities? That is, is there something about the way pre-camp preparation is conducted, or the information female students receive about outdoor pursuit activities before they go to camp that is off-putting?

Qu. 8. Are there aspects of outdoor education which occur during the camp that deter girls from outdoor pursuits activities? That is, is there something about the outdoor
pursuits activities offered at camp, the way the camp is run, the situation or the organization, that is off-putting for girls?

Issues of representativeness and relationships between variables have been included in the results rather than in the methodology because it was felt that they provide information about how important the results are, and therefore should not be separated from the results.

This chapter presents the results from the quantitative analysis, the interviews and the observations. They have been drawn together in answer to the research questions and are, where appropriate, discussed under theme headings. Where theme headings are used, interpretations are made in the light of themes raised within the results themselves, or themes raised by the literature previously reviewed. The results are reported in this way because the richness of data promised by a multi-method research design can be realised when the various pieces of evidence about the topic are analysed together. The statistical analysis used, while helpful in collecting information from large numbers of students, did not take account of the girls' personal experiences in outdoor education. There may be some girls, for example, who, despite reporting positively overall on camp, had some negative experiences and critical comments to make. Interview results are an expression of what individuals experienced on camp and observation results give yet another perspective on outdoor education for girls.

The statistical data presented here represents all the results from questionnaires A, B, C and D. The statistics for each of the variables can be found in Appendix F. Students had been asked to complete a series of questionnaires before and after their outdoor education camp. Analysis of the quantitative data divulged two sorts of information - the first is the descriptive information about the sample; the second is information about the variables and about relationships between variables.

Participant observation results are all included. There were two items noted in the observation log which were my thoughts rather than direct observations and since they were not directly relevant to this thesis they have not been included. The observational information is necessarily a product of my own interpretation of what is important to girls and their participation in outdoor activities. The observations selectively represent what goes on in outdoor education and may be criticised as evidence of an abstract concept of
negativity made up in the researcher's mind but not really existing in practice at all. I would argue, however, that a search for negative factors in outdoor education can be useful if, once identified, they can be reduced or eliminated. In order to identify them, I have relied upon both the opinions expressed by individual girls in interviews and during observations, as well as a more personal perspective through observations. Discussion in the methodology has already highlighted the limitations of observations on their own. I maintain that in concert with the other two forms of information collection I have employed, observations can reveal important factors in outdoor education which could deter girls from participating.

All student names used in reports from observations are pseudonyms and bear no relation to any student involved in the study. References used in reporting observations are from my observations log (obs log) with page numbers noted. References to taped conversations I made during the observation period are referenced to the observation tapes (Obs tape) by number. In total fifty-nine separate observations were made which have been organized into twelve categories. The categories used are an amalgamation of categories used in the literature review (barriers to participation, self-confidence, body image, segregation/integration, puberty issues, teacher influences) and additional categories produced by the subject of the observations themselves (programming, environment, peer influences, cultural issues).

Interview transcripts were read through several times before being coded. Coding was done in the following manner. First major themes occurring from the transcripts themselves were identified. Then the themes from the literature review were superimposed on these. Final themes were constructed from combining the two sets. Throughout this chapter, reference is made to interviewees own words or ideas by way of a coded name and a number. The name has been changed to ensure confidentiality. The number refers to the position of the statement in the transcript, as each new theme in any one respondent's transcript was labelled with an initial and a number to identify it for use in analysis. Some of the interview material was either incomprehensible due to the quality of the recording and background noise, or it was irrelevant to the thesis. Irrelevant material included introductory conversation and references to aspects of the student's or my life discussed while establishing rapport. Examples of this sort of material are references to family pets and places visited on holidays. Neither the incomprehensible material nor the irrelevant material appears here. All other
interview data does. Although twenty interviews were conducted some students did not mention some of the themes during their interviews and therefore in some cases the number of responses does not match the number of students interviewed.

The chapter begins by reporting the nature and representativeness of the sample involved in the quantitative aspect of the study. Themes arising from the total results package are then isolated and discussed with cross-referenced comments where relevant. Finally the methodology itself is reflected upon.

Qu. 1. Who does the sample represent?

Of the 240 students originally selected for the study, 168 (70%) were included in the quantitative analysis. Individual respondents were withdrawn from the sample if they had either failed to complete any part of the biographical questionnaire, or their responses to several items on the measurement scales were unclear.

Figure 1 graphically depicts the age distribution of the sample.

![Fig. 1. Frequency distribution of age in sample.](image)

94.9% of the surveyed sample of fourth form girls was fourteen to fifteen years of age and there were 8 older students (Table 1).
Table 1: Age in Years of Sample Population.

<table>
<thead>
<tr>
<th>Age (years)</th>
<th>Frequency (#)</th>
<th>Percent</th>
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<tbody>
<tr>
<td>14</td>
<td>56</td>
<td>33.3%</td>
</tr>
<tr>
<td>15</td>
<td>104</td>
<td>61.9%</td>
</tr>
<tr>
<td>16</td>
<td>6</td>
<td>3.6%</td>
</tr>
<tr>
<td>17</td>
<td>2</td>
<td>1.2%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>168</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

The older girls were all students for whom English was a second language which accounts for their age in the fourth form. Ninety-seven percent of New Zealand's fourth formers in 1990 were 14-15 years of age (Ministry of Education, New Zealand, 1991). The age grouping of this sample is typical of fourth formers in New Zealand.

Four schools contributed to this study. For anonymity, they have been coded as follows:

School 1 is a co-educational school.  
School 2 is a single-sex girls' school  
School 3 is a co-educational school  
School 4 is a single-sex girls' school

The sample was distributed amongst the four contributing schools reasonably evenly, as Figure 2 shows:

Fig. 2. Distribution of sample in each school.
As the Table 2 shows, approximately half of the main sample came from single-sex schools and approximately half from the co-ed schools (44.9% and 50.5% respectively).

### Table 2: Distribution of Sample Among Contributing Schools.

<table>
<thead>
<tr>
<th>School</th>
<th>Frequency (#)</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>49</td>
<td>29.2%</td>
</tr>
<tr>
<td>2</td>
<td>45</td>
<td>26.8%</td>
</tr>
<tr>
<td>3</td>
<td>36</td>
<td>21.4%</td>
</tr>
<tr>
<td>4</td>
<td>38</td>
<td>22.6%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>168</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

The percentage of each school's female fourth formers in this analysis is indicated by Table 3. Overall, 30.6% of fourth form girls were sampled across the four contributing schools.

### Table 3: Percentage of Each School's Fourth Form Girls in Sample.

<table>
<thead>
<tr>
<th>School</th>
<th># Form 4 Girls</th>
<th>Percent in Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>72</td>
<td>68%</td>
</tr>
<tr>
<td>2</td>
<td>164</td>
<td>27%</td>
</tr>
<tr>
<td>3</td>
<td>106</td>
<td>34%</td>
</tr>
<tr>
<td>4</td>
<td>207</td>
<td>18%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>549 Form Four girls</td>
<td></td>
</tr>
</tbody>
</table>

School one had sixty-eight percent of its fourth-form girls in the sample because the school is four to five times smaller than the other schools. In order to sample fifty girls from the school the majority of fourth form girls had to fill in questionnaires. I have previously explained that the schools in the study were all state schools that accept students from a variety of backgrounds. They may therefore be accepted as reasonable representations of fourth form girls. It is felt that because of the numbers involved in this study's sample and because of the even distribution across the two types of school (co-ed and single-sex) the main sample is also representative of fourth form girls.

The socio-economic backgrounds of the student sample were skewed toward the higher socio-economic levels (Figure 3).
Table 4 shows that only 20% of the sample were drawn from the two lowest socio-economic levels where 33% would be expected in a perfectly even spread across the levels.

Table 4: Socio-Economic Distribution of Sample.

<table>
<thead>
<tr>
<th>Socio-Economic Level</th>
<th>Frequency (#)</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>27</td>
<td>16.1%</td>
</tr>
<tr>
<td>2</td>
<td>38</td>
<td>22.6%</td>
</tr>
<tr>
<td>3</td>
<td>36</td>
<td>21.4%</td>
</tr>
<tr>
<td>4</td>
<td>32</td>
<td>19.1%</td>
</tr>
<tr>
<td>5</td>
<td>18</td>
<td>10.7%</td>
</tr>
<tr>
<td>6</td>
<td>17</td>
<td>10.1%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>168</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

This may be due to one of three factors. First, it may be because the socio-economic index used to code adult occupations may not be an accurate reflection of the socio-economic levels of contemporary occupations. Second, and more likely, students from the lower socio-economic levels may be less likely to attend camp, either because outdoor education is not seen as relevant or useful, and/or because outdoor education camps are too expensive. They may also not be as likely to be at school regularly and therefore will not be well represented in the statistics presented here. Third, schools themselves may not adequately represent low socio-
economic status, perhaps for some of the same reasons given in
the second scenario, above.

To check the representativeness of the main sample (i.e. that
used in the statistical analysis), data was collated for those in
the original sample who did not attend camp and from those
questionnaires not sufficiently complete to allow inclusion in
the main sample. Fifteen percent of these respondents were
from socio-economic group 1; 20% from group 2; 23% from
group 3; 19% from group 4; 13% from group 5 and 10% were
from socio-economic group 6. These proportions are similar to
those of the main sample, indicating that the socio-economic
distribution of the original sample is representative of the
main sample.

There is no national or regional distribution on the Elley-Irving
scale available with which these results can be compared.
Scaled census data, unlike my socio-economic level data, would
be independent of the stage in life cycle of the individual
person and therefore not useful for comparison (Easton, 1991).
A scaled sample of the socio-economic levels of parents of
teenage children is what is required for comparison. The
closest data I found to this was that provided by Elley and
Irving (1985) with the scale I used to code socio-economic
level. This data reports percentage of the male labour force
(aged 25-44 years) in each socio-economic group.

Limitations of such a comparison are 1) that the data includes
only male workers (similar data is available for women but it
is based on the 1971 census and is therefore considered to be
too old to be useful (Irving and Elley, 1977); 2) that the data
only includes males in the labour force and therefore does not
include those unemployed; 3) the data is based on the 1981
census data so is now ten years old. The latter point is not
considered as important as the former two because student
socio-economic level was based on a scale generated from the
1981 data anyway. The advantage of the national male labour
data (Elley and Irving, 1985) is that it covers the ages within
which most of my sample's fathers would fall (i.e. 34-44
years).

As the table below shows, my sample of fourth form girls may
not be fully representative of a national socio-economic level
distribution based on the Elley-Irving scale. However it does
include a broad range of subjects including members of all
socio-economic levels.
Table 4a: Percentage of Male Labour Force* compared with Percent of Fourth Form Girls Sampled in Each Socio-Economic Level.

<table>
<thead>
<tr>
<th>Socio-Economic Level</th>
<th>Male Labour Force %</th>
<th>Fourth Form Girls %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7.5%</td>
<td>16.1%</td>
</tr>
<tr>
<td>2</td>
<td>11.0%</td>
<td>22.6%</td>
</tr>
<tr>
<td>3</td>
<td>23.0%</td>
<td>21.4%</td>
</tr>
<tr>
<td>4</td>
<td>33.0%</td>
<td>19.0%</td>
</tr>
<tr>
<td>5</td>
<td>17.0%</td>
<td>10.7%</td>
</tr>
<tr>
<td>6</td>
<td>8.5%</td>
<td>10.1%</td>
</tr>
</tbody>
</table>

*(Elley and Irving, 1985).

Prior experience of outdoor activities was categorised as 1 = "no experience"; 2 = "low experience" including those who had participated in outdoor pursuit activities three times or less during the previous twelve months; 3 = "high experience" including those students who had participated in outdoor pursuit activities four times or more during the previous twelve months. Frequencies (Figure 4) for this parameter indicate that just over half the sample was of "high" outdoor experience.

Fig. 4. Frequency of occurrence of previous experience in each category.

The measure and categories used did differentiate between student experience levels but a more refined instrument may have differentiated between those reporting "high experience"
more clearly. Ninety percent of the sample (Table 5) had some experience of outdoor pursuits prior to going to camp and only ten percent reported "no experience".

Table 5: Distribution of Previous Experience of Outdoor Pursuit Activities in the Sample.

<table>
<thead>
<tr>
<th>Category</th>
<th>Frequency (#)</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: &quot;No experience&quot;</td>
<td>17</td>
<td>10.1%</td>
</tr>
<tr>
<td>2: &quot;Low experience&quot;</td>
<td>55</td>
<td>32.7%</td>
</tr>
<tr>
<td>3: &quot;High experience&quot;</td>
<td>96</td>
<td>57.1%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>168</td>
<td>99.9%</td>
</tr>
</tbody>
</table>

It is difficult to determine the representativeness of the sample with respect to prior experience in outdoor activities on a 'common sense' basis because prior experience in outdoor pursuits is not a parameter normally used to describe or categorise students, as type of school, age and socio-economic background are. However, it would seem sensible to presume that most New Zealand school pupils would have had some exposure to outdoor activities given that most schools run some sort of outdoor education programme (Abbott, 1990). The results indicate that this is so and the inclusion of significant numbers in the three categories suggests that the main sample does represent a wide range of students.

Table 6 indicates that all girls tended to have previous experience in outdoor activities despite differences in socio-economic level.

Table 6: Numbers of girls with each category of previous experience in outdoor activities in each socio-economic level.

<table>
<thead>
<tr>
<th>Prev Exp. (Cat.)</th>
<th>Socio E (S-E)</th>
<th>Socio 2 (S-E)</th>
<th>Socio 3 (S-E)</th>
<th>Socio 4 (S-E)</th>
<th>Socio 5 (S-E)</th>
<th>Socio 6 (S-E)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cat.1</td>
<td>0</td>
<td>2</td>
<td>3</td>
<td>5</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>Cat.2</td>
<td>11</td>
<td>10</td>
<td>9</td>
<td>14</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Cat.3</td>
<td>16</td>
<td>26</td>
<td>24</td>
<td>13</td>
<td>13</td>
<td>4</td>
</tr>
</tbody>
</table>

The literature states that outdoor pursuits tend to be undertaken by women from the higher socio-economic levels (Yerkes and Miranda, 1985). A simple correlation analysis of the data in Table 6 gave a correlation co-efficient of $R = -0.251$ ($p = 0.001$) which indicates that this data supports the literature. Although there is representation of all socio-economic groups at the higher previous experience levels, in
this sample it still more likely that girls' from higher socio-economic levels will have had the greatest previous experience. On this variable, then, the sample is representative of a wider population.

Cross-tabulation analyses revealed no significant relationships between school and socio-economic group (calculated value of 16.65 < 24.99; p=0.05) nor between school and prior experience (calculated value of 5.87 < 12.59; p=0.05). It may be assumed, then, that the schools were similar in composition of students on these variables.

Biographical information analysis revealed that students had an average age of 14 years 8 months, were represented in all socio-economic levels and "previous experience of outdoor pursuits" groups. The four schools contributed between 21% and 29% of the total sample. The sample was therefore fairly representative of fourth form students of diverse socio-economic background and outdoor pursuits experience. Further, each of the schools contributed a similar set of students to the sample.

Qus. 2,3,4 and 5. What was the self-esteem of the girls before they went to camp? Has the camp experience changed the self-esteem of the girls and if so, in which direction? That is, is self-esteem a major factor influencing their participation in outdoor pursuit activities, as the literature suggests. What are the attitudes of girls toward outdoor education before they go to camp? Has the camp experience changed girls' attitudes towards outdoor education, and if so, in which direction?

Responses on the scales of self-esteem and attitude to outdoor education are shown below (Tables 9 and 10). In order to add meaning to the distribution of these responses, categories have been established which identify degree of positive or negative attitude toward outdoor education and the degree of self-esteem (low to high). Categories were constructed so as to reflect all possible scores in three evenly sized groups. In each case the categories reflect a third of the range of possible scores. I felt that this method of category construction would most easily and accurately differentiate between degrees of positive or negative attitude to outdoor education, and levels of self-esteem. For example low self-esteem corresponds to scores falling within the lowest third of the possible responses.
Kolb (1988) mentioned that self-esteem scale results were usually reported as falling into high, medium/moderate or low categories though he did not report how his categories were split. Categories for this analysis were constructed as follows:

Table 7: Construction of Categories of Self-esteem.

<table>
<thead>
<tr>
<th>Category</th>
<th>Range of Possible responses on SE scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Self-esteem</td>
<td>10-19</td>
</tr>
<tr>
<td>Medium self-esteem</td>
<td>20-30</td>
</tr>
<tr>
<td>High self-esteem</td>
<td>31-40</td>
</tr>
</tbody>
</table>

The categories established for the attitude to outdoor education scale are given in Table 8.

Table 8: Construction of Categories of Attitude to Outdoor Education.

<table>
<thead>
<tr>
<th>Category</th>
<th>Range of Possible Responses on OE Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relatively Negative</td>
<td>28-55</td>
</tr>
<tr>
<td>Ambivalent</td>
<td>56-83</td>
</tr>
<tr>
<td>Relatively Positive</td>
<td>84-112</td>
</tr>
</tbody>
</table>

In general, subjects reported medium to high self-esteem before and after going to their outdoor education camp as Figures 5 and 6 show.

Pre-camp self-esteem results (Figure 5) indicate that 75 respondents had high self-esteem and another 90 had medium self-esteem. Fewer than 5 reported low self-esteem.
In Figure 6 the darker, hatched shading indicates the frequency of students gained in or lost from each category of self-esteem score after camp. The only gain was in the high self-esteem group (3 students); the medium self-esteem group lost three students, and the low self-esteem group remained the same.
In Table 9 the actual numbers and percentages of respondents in each category of self-esteem are given.

<table>
<thead>
<tr>
<th>Category of Self-Esteem</th>
<th>Frequency</th>
<th>Percent</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre</td>
<td>Post</td>
<td>Pre</td>
</tr>
<tr>
<td>Low</td>
<td>1</td>
<td>1</td>
<td>0.6%</td>
</tr>
<tr>
<td>Medium</td>
<td>92</td>
<td>89</td>
<td>54.8%</td>
</tr>
<tr>
<td>High</td>
<td>75</td>
<td>78</td>
<td>44.6%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>168</td>
<td>168</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Similarly, students tended to have positive attitudes toward outdoor education before camp and slightly more positive attitude toward outdoor education after camp. Table 10 gives the results and percentages obtained in each category while Figure 7 graphically demonstrates the pre-camp data.

<table>
<thead>
<tr>
<th>Category</th>
<th>Frequency</th>
<th>Percent</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relatively Negative</td>
<td>3</td>
<td>0</td>
<td>1.8%</td>
</tr>
<tr>
<td>Ambiv.</td>
<td>61</td>
<td>46</td>
<td>36.3%</td>
</tr>
<tr>
<td>Relatively Positive</td>
<td>104</td>
<td>122</td>
<td>61.9%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>168</td>
<td>168</td>
<td>100.0%</td>
</tr>
</tbody>
</table>
Changes in the composition of the categories of attitude to outdoor education are depicted by Figure 8. Again, the darker, hatched shading indicates gain or loss in each category.

As Figure 8 shows, there was a gain in the number of respondents in the 'relatively positive' attitude to outdoor education category, and losses in both the 'ambivalent' and 'relatively negative' categories.
There was little evidence from the quantitative results that outdoor education is inherently male-centred. Statistical analysis revealed that the majority of girls were positive about outdoor education before they went to camp and were generally more positive once they returned. This suggests that they were not, in general, put off outdoor activities. Explanations for this could be that girls do not recognise oppression - that is, they lack a "feminist consciousness" (Henderson and Bialeschki, 1991:56) - and therefore do not reflect it in their responses. It may also be that girls do not have anything to compare their experiences with - that is, that they expect outdoor education to be similar to the patriarchal order imposed in general society and so do not respond in ways that reflect patriarchal male-centredness in outdoor education. It may, in contrast, be that outdoor education, rather than being oppressive, offers girls avenues for liberation from patriarchal oppression (Humberstone, 1990) and this is why they do not report negatively about outdoor education. Finally, it may be that the instruments used to measure attitudes to outdoor education did not give an indication of whether or not girls felt oppressed by either the thought of outdoor education or the participation in it. Whichever explanation is most correct, the fact remains that girls reported fairly positively about camp and the case for potential oppression of girls through outdoor education is therefore not supported by the quantitative data.

Interview responses reflected this general positiveness toward outdoor education. When asked for an overall impression of their outdoor education camp, ninety percent of the students interviewed (n=20) responded positively. They "really enjoyed camp" (Ella, 1) and "would've hated to have missed it" (Kae, 1). For one student, camp was unexpectedly enjoyable -

... I don't really like camps and stuff, I mean it was much better than what I thought it would be ... being with all my friends and doing fun things but they weren't boring, like they didn't make us go on five hour hikes and things like that so it was fun being in a big group and the teachers were all good and that ... (Siobhan, 2).

These results echo Robson's (1979) and Cosgriff's (1983) conclusions that girls are generally positive about physical activity experiences in physical education. Two aspects of camp mentioned frequently which were expected to be enjoyable were being with peers and doing activities, as these comments illustrate-
I thought [camp] would be fun ... get to meet lots of people. I was looking forward to doing all the activities like abseiling and that (Rangi, 2).

... I had been on a camp before and I really enjoyed myself. I wanted to get to know my class more and I knew it would be fun trying the activities (Kae, 2).

Asked what they liked best about camp, girls responded in various ways -

Co-operating with other people... I thought camp-out was the best bit ... because we got to know our group really well, and um, everyone sort of worked together, nobody was left out (Petra, 2).

Being away from school. I liked abseiling the best. Cos I'm proud of myself for doing it cos I knew if I didn't do it I'd be disappointed. When I did do it I felt good, cos I'd done something I hadn't done before ... it was just really freaky. I remember telling everyone I would probably cry on the way down, but I didn't. (Odette, 2).

I really liked the whole thing. Some of the activities were really good. I was pleased when I could abseil. I wasn't sure that I could do it. The mud walk was good though (Gaby, 4).

... it was a really excellent camp. Expensive though. That's why a few girls didn't go ... (Josie, 9).

Two students indicated that overall they did not enjoy camp and would not want to go again (Luana, 1; Dara, 2). Dara explained -

Some people probably like camps more than I do cos I'm not really into camps, well I don't mind them but they're not my thing really ... I prefer other things ... (Dara, 2).

Further discussion of girls' camp experiences appears under research questions seven and eight. As shown above, most students in this study valued themselves moderately to highly both before and after the camp experience. It might be expected then, that these girls would be positively inclined toward physical activity, if the relationship between self-esteem and physical activity occurs as the literature suggests (Kelly, 1985; Oldenhove, 1989; Williams and Coldicott, 1982).

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Further to this, a feedback loop from physical activity to self-esteem could tentatively be suggested by an increase in self-esteem responses on the post-camp scale. The mean pre-camp and post-camp scores for self-esteem were 29.97 and 30.73 respectively. This increase in self-esteem scores was statistically significant (t=-3.32, df=167) at the p<0.05 level and the difference between the two scores (0.76) is one fifth of a standard deviation of either score. This data suggests that something about the camp experience may contribute towards girls' increased self-esteem. However, the large sample (n=168) used may be exaggerating the practical significance of this result since the numerical difference between the scores is less than one.

Correlational analysis reveals a weak negative correlation between pre-camp self-esteem and difference in self-esteem (r=-0.25, p=.001). Thus, girls who reported low pre-camp self-esteem tended to report the larger differences in self-esteem, and girls who reported high pre-camp self-esteem tended to report smaller differences in self-esteem from one measure to the other. Camp experiences could therefore be considered to be particularly beneficial to girls who have a less positive opinion of themselves.

Statistics such as these are at best dubious unless qualified by more robust information. At any rate, the value of the change in self-esteem will be indicative of how important the above result is - a frequency distribution (Figure 9) of the difference on self-esteem score illustrates that the majority of students reported a very small change in self-esteem.
In order to establish if self-esteem level was related to participation in outdoor activities at camp, self-esteem was correlated with attitude toward outdoor education. It was assumed that a positive attitude toward outdoor education would indicate a high level of participation. The result from this computation on the pre-camp scales ($r=0.50$, $p=0.00$) indicates that there is a moderate, positive, statistically significant relationship between pre-camp self-esteem and pre-camp attitude to outdoor education. It could be, then, that those students with high self-esteem had positive attitudes towards outdoor education, and were therefore more likely to participate, as the literature suggests (Abbot, 1989; Burrows, 1985; Ewert, 1989; Green, 1987; Lirgg and Feltz, 1989; O'Brien, 1990). It could also be true that students with low self-esteem had more negative attitudes towards outdoor education and were therefore not highly motivated to participate. While this information is hardly new, it is useful to consider the implied potential impact of outdoor education experiences on those with low self-esteem noted above, and the consequent need to increase self-esteem in these individuals before they go to camp in order to increase the likelihood of them participating and deriving benefits from outdoor pursuit activities.

There is a relationship between prior experience and attitude toward outdoor education, as may be expected. A weak positive correlation was obtained ($r=0.25$, $p=0.000$) indicating that girls with high levels of prior experience had more positive
attitudes towards outdoor education, and vice versa. There is therefore good reason for girls to have experience of the outdoors before attending a major camp in order to obtain the full benefit of the camp experiences.

Initial results showed that the girls, in general, had positive attitudes towards outdoor education and that this positiveness increased slightly after the camp experience. The value of this difference in attitude and its significance are important. As can be seen from Figure 10 there is a wide range of differences between pre-and post camp attitudes toward outdoor education.

Figure 10. Frequencies of differences between pre- and post-camp attitude to outdoor education.

On this measure, 79% of the sample varied up to 10 points either way from pre-camp to post-camp, while 3.6% decreased more than ten points and 17.4% increased more than ten points. This difference between the means (pre-camp = 87.27; post-camp = 90.87) is statistically significant (t=−5.14, df=167, p=0.05) indicating that there is a ninety-five percent probability that the difference did not occur by chance. The correlation of the two variables was positive and highly significant (r=0.69, p=0.000). It could be then that the outdoor education experience enhanced attitudes towards outdoor education of girls who had initially reported positive attitudes. Alternatively, it could be that the experience caused more negative attitudes in those girls who initially had somewhat
negative feelings for outdoor education. It could also be that both of these effects occurred simultaneously.

Which girls were affected in which direction can be revealed by correlation of pre-camp attitude to outdoor education and difference in attitude toward outdoor education. Some correlation is, of course, already built in since pre-camp attitude to outdoor education is already embedded in difference in attitude to outdoor education. However, the strength of any relationship that exists may still be of interest. A strong negative correlation was attained for these measures \((r=-0.62, \ p=0.000)\) indicating that students with initial positive attitudes towards outdoor education had the smallest increases changes in attitude (to some extent limited by the scale itself), and that girls who initially had negative attitudes towards outdoor education tended to report the highest positive changes in attitude on the second measurement. Despite the dubious nature of these particular results, I believe they suggest that, in outdoor education, girls are not all alike. It may be, for example, that targeting particular groups of girls for extra outdoor education, and perhaps for specific forms of outdoor education, may increase the benefits gained by those groups.

Open-ended question responses from the quantitative survey indicated that while most girls enjoyed their outdoor education camp, there were some who did not. Examples of the comments are included in Appendix E. Sixty-six percent of the sample (112 students) made a total of 366 comments on their questionnaires. Seventy-two percent of the comments were positive, twenty-six percent were negative, and two percent were categorised as miscellaneous. Comments were categorised as positive if they indicated that a student had enjoyed or benefitted from their camp experience, and negative statements were those that indicated the student had not enjoyed or benefitted from their camp experience. Statements of complaint about aspects of the camps were categorised as negative also. Miscellaneous comments were those that were neither positive or negative. The most common positive comments (percentages of total positive comments are given in parentheses) were those that stated that they enjoyed camp and "it was fun" (30%), that camp will be "heaps of fun" (17%), that they would "love to do it all again" (9%), that camp will be useful in getting to know peers better (8%), and that they would advise others to go to camp (4%). Of the negative comments, 12% stated that students "should be allowed to be with friends" in activities and dormitories; 11% stated that the teachers were too strict; and another 10% indicated that
students thought more choice should be given to them regarding participation in activities. It could be possible that the comments did not represent the sample adequately, if, for example, those who did not comment tended to score low on the measurement scales. Frequency distributions of the scale scores of those who did not comment, however, revealed that these students were reasonably representative of the total sample.

Participant observation data, too, indicates that for some girls at least, camp was a positive, enjoyable experience. During a camp early in the year I observed that the girls with whom I was working were "very positive, keen and co-operative". It was usually girls in this co-ed group who volunteered for activities first and the whole group seemed to enjoy their time at camp (Obs log, p2). It is obvious then, that far from being a totally oppressive experience, outdoor education was enjoyable and positive for many of the girls in my sample. This constitutes a vote of confidence in outdoor education itself and in the teachers involved with the camps.

Qu. 6. Are there differences in self-esteem and attitude toward outdoor education between girls from single-sex schools, co-educational schools, different socio-economic groups, and different backgrounds of previous experience in outdoor activities?

No significant relationships were found between school attended and pre-camp self-esteem (calculated value of 7.03<12.59; p=0.05); school attended and post-camp self-esteem (calculated value of 4.24<12.59; p=0.05); school attended and pre-camp attitude to outdoor education (calculated value of 3.98<12.59; p=0.05); or school attended and post-camp attitude to outdoor education (calculated value of 0.92<7.81; p=0.05). It may be assumed, then, that the schools were similar in composition of students on the variables of attitude to outdoor education and self-esteem. It may also be assumed that girls in the four schools all had similar experiences on camp. This may explain why no significant relationships were found between school and post-camp camp attitude to outdoor education and school and post-camp self-esteem.

Qu. 7. Are there aspects of outdoor education that occur before the camp experience that deter girls from outdoor pursuit activities? That is, is there something about the way pre-camp preparation is
conducted, or the information female students receive about outdoor pursuit activities before they go to camp that is off-putting?

Answers to this question are drawn from results discussed under theme headings. Four themes emerged which are relevant to this question - barriers to participation, programming, peer effects and teacher influences.

**Barriers to participation**

Barriers to participation in outdoor education activities that were observed included some that were 'external' and some that were 'internal'. 'External' barriers were those that occurred because of factors unrelated to the administration, programming, or activities of outdoor education in the school. 'Internal' barriers were those that were the result of administration, programming or activities of outdoor education.

'External' barriers to participation were noted in four separate observations. Non-attendance at camp was the first instance noted, when one girl from the classes assigned to camp stayed at school instead. Another girl had dance exams during the week and so had elected to miss camp in order to prepare for these (Obs log p1).

Injuries received prior to the camp week were the second sort of 'external' barrier observed. One girl who arrived at camp wearing a knee-brace could not participate in all activities but did participate in those she could manage such as kayaking (Obs log p1). Her injury was a partial barrier to participation.

'Internal' barriers were observed on three occasions. Two girls who stayed at school rather than spend a week doing outdoor education stated that they "...can't be bothered" (Obs Log p1) going to camp. When asked why they both stated "I just don't want to" (Obs. Log p1) and were reluctant to be drawn further on the topic. Peer informants suggested to me that the two girls were both menstruating and this was why they did not want to go to camp (Obs log p1).

A second 'internal' barrier noticed was the withdrawal of the opportunity to go to camp as a punishment for 'badly-behaved' students. In one instance three girls were prevented from attending camp because of their behaviour at school (obs log p3). It seems that outdoor education was not seen in this
instance as an integral part of the school curriculum having intrinsic educational merit, but as an extra activity for those who deserved it. This would bear out the claim that outdoor education, like physical education, is marginalised in schools (Sparkes, 1990; McCabe, 1990; Scraton, 1990).

The financial cost of the camps was a barrier to participation by some students as one interviewee suggested -

... it was a really excellent camp. Expensive though. That's why a few girls didn't go ... (Interview, Josie, 9).

This particular barrier prevented six girls, in my observations, from participating (Obs log p3). Girls who could not afford to pay the camp fees were usually subsidised by the schools but in this instance there were so many students who could not find the money for camp that only some could be subsidised. The others were left at school. The literature states that economic barriers operate for women in outdoor recreation (Cara and Mary, 1984; Henderson and Bialeschki, 1991) and it appears that for some girls they operate in outdoor education. However, there is no evidence from this study that this is a gender issue. Girls who are dependent on their parents are more likely to be affected by socio-economic level of the family which, unless evidence exists to the contrary, would affect girls and boys equally. It is important though, for outdoor educators to be aware of the financial constraints affecting some individuals and if full participation by each student is the goal, then outdoor education programmes need to be constructed so that they are accessible to all.

Conflicts with other activities students are involved in can become barriers when students are offered only limited opportunities for outdoor education experiences. Secondary schools tend to be more limited in their use of the outdoors for education than primary schools and so there are usually only limited opportunities in which girls will commonly experience outdoor activities. Where there are multi-level outdoor education programmes, as in some of the studied schools, they are often tagged to specific subjects in the senior school and therefore not available to all (McRae, 1990; Anderson, 1989). In one of the schools studied fourth form camp was the only outdoor education opportunity available to its students as a senior camp had recently been abandoned.

Lenskyj (1986), Thomas (1985), and Thompson (1989) have all pointed out that encouragement in physical activities is crucial to women and girls. Girls in this study intimated that
encouragement was not always forthcoming in the types of activities conducted at camp. They mentioned that girls are not encouraged to participate in outdoor activities because "... everyone expects a guy to be able to do [activities] but they ... don't expect girls to be able to do them ...". This societal pressure on boys but not on girls is, according to my informants, combined with lack of motivation from girls to participate - "girls just don't have the motivation ... or the courage ..." (obs tape, 1). Some girls respond to these internal and external pressures by accepting the challenge and participating anyway ("... to prove them wrong ..."), whereas others opt out ("... they just decide 'I'm not going to do anything.'...") (Obs tape, 1). Outdoor educators need to be able to increase the proportion of girls who will accept the challenge. Appropriate programming, role-modelling, and grouping of students may be important avenues toward this goal and these, among other issues, are reported and discussed below.

Programming

Interviews elicited information about the way outdoor education was approached in the schools and these results I have termed programming issues because they are reflections on the effects of the outdoor education programme before the camp experience. Issues that refer to the way activities are programmed within outdoor education at camp are dealt with later.

Preparation for and information about camp were topics commented on by a number of students. Pre-camp preparation for activities would seem to have been appreciated by some girls, especially as far as kayaking was concerned -

I think it might have been a help if we'd had some time in the swimming pool or something .. because I've been canoeing quite a lot on the Brighton River but they're just sort of ordinary canoes, pretty docile, and [at Tautuku] we were in these kayaks and you have to put your knees against the side and I wasn't doing that. They responded so much more easily to every movement you made and they were all kind of unstable and I just wasn't sort of used to them. But if we'd had goes in the swimming pool where you're wet anyway and it doesn't really matter if you fall out and you're warm .. it might have been better (Henrietta, 4).
I would know what it's like and it's not so scary to begin with ... you can still go to the shallow end and try to start there then you know you're not in much danger ... (Teresa, 4)

Other students reported that the amount of pre-camp information they received was insufficient. Ella (7) thought that a video of camp would be useful as a pre-camp primer and she also suggested using other students to address classes about to attend camp. Prior information may be especially important to those whose camp week is the first for the year and for whom information from peers in other fourth form classes is not available, as Ella and Yvonna suggest-

[I] would've liked a form of what we'd be doing each day ... just to know what I'd be doing, just to know what to expect. My class were the first to go this year (Ella, 2).

We were the first group to go this year. No-one else could tell us what it was like ... our teacher didn't tell us about it much, just gave us the notice that told us what to bring. I would have liked to have known what we were going to be doing ... would have felt different if I'd known before what we were going to be doing. Wouldn't have been worried about it if we'd seen others doing it. Oh there was a girl who came to our class and told us about camp, but it wasn't much good cos she didn't really tell us anything and I think she was embarrassed talking to the class (Yvonna, 3).

Rangi similarly wanted to know more about camp and felt the peer informant who visited her class could have been more informative about "what sort of things they did ... what they felt about it" (Rangi, 6).

Adequate information about clothing was seen as particularly important by Gaby who suggested that clothing needs were not stressed enough to students-

... nobody was really short [of clothes] but they should really outline the parka ... you really do need that. And a decent pair of shoes too. We were doing the mud walk in just gym shoes and there were shoes coming off in the mud ... And you've got to take enough clothes too, because it all gets wet ... (Gaby, 9).

I wasn't going to take a parka but I did and I was so glad I did ... (Gaby, 8).
Girls from one school told me that they had had no information formally given to them about camp and had relied on girls who had previously been to camp to provide them with the information they wanted. These girls went to camp early in the year and did not have same-age friends to consult (obs log, p2). Camp facilities (bathroom and sleeping arrangements) seemed to be their major area of concern. The issue of needing more information about dealing with menstruation and menstrual waste both at the centre and when tramping and camping was agreed to by Henrietta, Josie (9), Michaela (2), Gaby, (6) and Ella (3). Henrietta's comments were typical -

Well we didn't actually get any [information] except that we had to take sanitary gear enough [even] if we weren't expecting it. Otherwise they didn't tell us anything (Henrietta, 2).

Not all students suffered from lack of information, however. Pre-camp information was available to some students, and considered adequate, as Siobhan reported -

We [were told we] would all be in dormitories and we would be with some of our friends ... and we were told some of the activities and were shown how to use the pots and the oven stuff [trangia cookers] and that's about all I think (Siobhan, 6).

One girl acknowledged that she received little information about camp prior to going but, along with another, did not want more pre-camp information -

PL: What information did you get about camp before you went?

Oh we got hardly any, we just got one sheet thing that told us what to take and stuff. They didn't tell us anything really.

PL: Would you like to have known more?

No not necessarily (Gaby, 2).

... its nice not knowing what you are going to do, you sort of get a surprise when you get there (Christa, 7).

Some teachers I spoke to were of the opinion that if more information was given to the girls before camp the 'surprise'
appeal would be lost. Additionally they felt that if the girls were shown exactly what the activities were like before going to camp they would be deterred from participation even more. I suggest that if the activities are presented in such a way that students are deterred from attempting them even before they arrive at camp then a serious review of the camp programme should take place. Surely activities should be arranged so that students are challenged but not deterred. Further comments on activity programming appear later in this chapter. Whether or not most girls prefer camp to be a surprise or an experience they are informed about was not tested in this study. It is sufficient here to say that some girls would prefer more information and felt that this would enable them to participate more fully in activities at camp. Information is power, and I suspect that girls empowered by knowledge would be more confident, more competent and more successful in outdoor pursuits. One solution would be for students to have the option to be more or less informed about camp.

Peer Effects

The ways in which student behaviours prior to camp affect other students were referred to by two students. For Wini, peer opinions expressed before going to camp had not influenced her negatively. Friends at school had told her what they thought of camp-

Some friends of mine that came here go 'oh it's really hard and you won't like it and it's muddy and it's too much work' and everything ...

- but she did not allow this to influence her participation -.

... I just turned around and said well I'll do my best (Wini, 5).

Peer reports of communal showers were claimed to have deterred some girls from attending camp -

... we were told that all of [the showers] were communal ... like a girl coming back from camp [said]: 'Oh, it's awful, the showers are communal you don't have your own' and things like this ... that's what put some girls [off]. A couple of girls they didn't want to go because they had heard of the communal showers ... (Josie, 7).
It would seem in the light of these comments that it may be particularly important for girls to receive accurate information before camp. If they do, it may be less likely that those hesitant about going to camp will be influenced by the sorts of reports illustrated by Wini and Josie above. There is no indication from the data gathered about how many girls were affected by peer reports of camp, nor about how many resisted such influence. Teachers concerned about female participation in outdoor education may do well to be wary of peer influence, not only for girls yet to attend camp, but as a reflection on the experiences of those returning. Both positive and negative comments can be useful in evaluating programmes and in ensuring that outdoor experiences are accessible to all those targetted.

**Teacher Influences**

An example of pre-camp discouragement from participation arose from an interview with Luana who referred to how a teacher's introductory explanation of camp activities had affected her motivation to participate -

Yeah well, the teachers are the worst sometimes. Before we went [to camp, a teacher] was telling us about it and told how 'a big fat girl' fell. That put me off before I even went. Everyone takes notice of how you look (Luana, 4).

This comment is related to Luana's other concerns regarding body image. It would seem that teachers, who are in powerful positions in relation to students both at school and at camp, can have significant effects on who takes part in activities and who does not.

According to these results there are a number of factors which influence girls negatively before they attend camp. These relate to the somewhat limited opportunities for participating in outdoor activities where there is only one chance to go to camp in the fourth form year. It may in fact be the only opportunity some students have for outdoor education at school. For those girls who miss out on going to camp, because of other commitments, injuries, costs, or because camp is used as a prize for the 'well-behaved', their lower level of experience in outdoor pursuits may become a barrier to future participation. Societal expectations for girls also tend to be a deterrent to participation, however the strength of this influence needs further analysis. Finally, the level of
information and preparation students have for camp appears to be a significant obstacle to some.

Qu. 8. Are there aspects of outdoor education which occur during the camp that deter girls from outdoor pursuits activities? That is, is there something about the outdoor pursuits activities offered at camp, the way the camp is run, the situation or the organization, that is off-putting for girls?

The answers to this question are found in the results of the interviews and observations. Results are reported thematically.

Barriers to participation

Illness was an 'external' barrier to participation I observed once at camp. One and a half days into one camp half of the group were struck by a viral infection, confining them to beds until camp was evacuated on the third day. These girls participated in three of the scheduled seven activity sessions. The girls who were not sick were also prevented from participating because some teachers were ill and those who were not were fully occupied attending to patients. This was a rare event at Tautuku and while it effectively prevented many students from enjoying outdoor activities, it is not likely to be a factor which afflicts one gender or the other selectively. Therefore, it will not be discussed further.

Self-Confidence

I observed that some girls approached some activities saying "I can't do this" (Obs log p15) which suggested that they lacked confidence in themselves. The activity sessions involved were rock-climbing (Obs log p6), abseiling (obs log p14), and the confidence course (obs log pp15-16). On two occasions at the confidence course four girls out of the twelve present in each case frequently stated "I can't" at each element of the course, and then proceeded to do each activity without obvious problems.

A co-ed group conversation revealed a little more of the reasons behind low self-confidence in girls during physical activities. The girls in the group had stated that girls can't do
outdoor activities as well as boys and when asked why they thought this, the response was -

Oh because nobody's got the confidence in us and so we don't have the confidence ... [we need to] try it more, more self-motivation, more encouragement and practice I suppose, cos I mean they are stronger than us straight out, ... but you get some strong girls too (Obs tape, 1).

Some girls also felt that they were compelled into the activities rather than having choices to participate. This was at times experienced as a block in the development of self-confidence -

I don't like being forced into doing things.

It doesn't make you feel confident. I reckon it makes you feel less confident.

PL: Why does it make you feel less confident?

Because I reckon you get more confidence from deciding to do it yourself.
(obs log, p10).

The types of activities offered and methods of instruction employed at these camps may not foster the development of self-confidence in girls as well as they could because they are based upon a model of experience designed for men. The Outward Bound model of outdoor experience was designed to instil character and confidence in men by impelling them into challenging activities (McRae, 1990). However, the same model may not work as well for girls who are not socialised into vigorous physical activity the same way boys are, and who may therefore not respond as positively to the pressure to participate. These comments are, of course, generalisations as there were some girls on camp who did respond positively. However, the hesitancy and resistance expressed by others may be explained in this way. If more girls are to gain access to outdoor pursuits as recreations outdoor educators may need to consider the style of outdoor experience they are offering and adjust it if necessary.

Camp experiences enabled some girls to gain confidence in doing outdoor activities, according to interview results -

I've got more confident in myself doing stuff, like tramping and abseiling and everything and stuff like that.
....And ......I realise that I was scared of heights, I mean like ......rock climbing I even realised I was scared then (Kae, 6).

... like before I went on camp .... if it was just a few of us, and ...if we are going up Mt Cargill say, I can just picture what we would take. We would take really pathetic stupid stuff and wouldn't take like a hat ... (Kae, 9).

PL: Now that you've been to camp how do you feel about outdoor activities?

I'm a bit more confident about them now. I really like tramping so I'll probably do a lot more tramping (Ella, 10).

I'm more confident now than I was - I never thought I could do that abseil ... (Yvonna,5).

... I liked abseiling the best ... When I did do it I felt good, cos I'd done something I hadn't done before ... (Odette, 2).

Fourteen respondents made comments that seemed to reflect their lack of self-confidence in activities and for many of them participating in activities was an achievement and a boost to their confidence-

Well, I didn't really want to do abseiling but in the end when I did it I felt really good and I went home and told Mum and she was really proud (Nita, 3).

... all the activities that you did was [sic] just to get your confidence up and everything and overcome your fears and everything (Nita, 6).

I liked abseiling and tramping.. in the bush and everything, and on the peninsula walk, and the confidence course was good. I didn't think I could do any of that stuff. I thought 'I'm not going to be able to do this' but I actually did it.

PL: Why did you think you wouldn't be able to do it?

I dunno I've never done some stuff like that, I always seem to avoid it, try to get out of doing stuff like that. Going on tightropes and all that sort of stuff. So I'm glad I actually did it all (Michaela, 1).

'Fear of heights' was one explanation used for being reluctant
... I just keep thinking I'm going to fall all the time ... it just scares me that I might fall and break something (Michaela, 4).

... I don't really like heights, but now I'm just not afraid of heights any more (Nita, 3).

... when I went abseiling, I was a bit scared of the height, but um when you were holding that safety rope I felt a bit better, that I knew I couldn't fall ... (Ella, 8).

I don't like ... abseiling, I'm scared of heights (Zara, 2).

Well, I guess I'm just afraid of heights, but it didn't really bother me when we were there. With abseiling I was really scared when we were actually waiting to go over but once you're harnessed up it didn't really bother me at all (Henrietta, 5).

Many girls alluded to feelings of insecurity during this activity, especially at the edge of the cliff where the descent steepens to a vertical face. Students recalled this aspect of abseiling in the following ways -

I'd done it before but I hadn't done it for a long time ... I didn't like the feeling of going over the cliff and not being secure. Abseiling wasn't a problem but I was sort of scared - but I could do it (Rangi, 3).

I liked it ... I did it twice ... I felt good that I'd done it, and accomplished it. It's not that bad, it's just going over the edge that you think, oh no!! But once you get down there it's OK. You feel like you're safe. You're attached to everything and it's just sort of getting over the top that's the hard bit (Michaela, 7).

... when I got on the rope I wasn't [scared]. Sort of at the very top it was pretty freaky, but half way down it was OK (Odette, 3).

... at one bit I got scared on that abseiling - its just that everyone did too. It was just going over that first wee bit, you go down and its fine and then you get over that [edge] ... I hated that, and I didn't think I could move and I didn't want to move and even though I had already done it

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before and we had gone off a steeper cliff and that, it was just that first [bit], oh that was so scary (Kae, 7).

I didn't want to do it again. I thought I would fall (Yvonna, 2).

The tyrolean traverse caused similar concerns in some female students -

I was worried about falling off the log at the start ... thinking of the things that could go wrong ... I knew if I didn't do it I'd regret it 'cos I've done that before with abseiling. I just decided I was going to do it. Otherwise I'd go on and on to myself that I should have done it. It was quite fun but the only thing I didn't like was it looked like you were going to bang into all the trees. It was really fun going down but I didn't want to at the start. [I got a] real feeling that [I]'d achieved something ... getting over the fear of falling. I felt really good cos I was really terrified at the start ... but once I got across I was Ok (Wini, 2).

Kayaking (canoeing) elicited fears of capsize and entrapment -

I thought it would be really hard. [I thought] we'd have to go down the river [and I] thought that was quite hard work ... and falling out. I would have panicked and I would have got really scared, cos I would be scared being under the water (Zara, 2).

[I wouldn't want to get tipped over] because the boat goes right over and I wouldn't be able to get out and I'd get stuck in the water (Siobhan, 11).

I don't like being caught upside -down. In standard four we had to roll our canoes ... I didn't enjoy it because they said you have to lean forward and I leaned back and they said that if it had happened that I might break my back ... and then I did fall out of my canoe [at TOEC]. There were three on our camp and they said they'd never had anyone fall out of their canoe before, which was really embarrassing. I didn't enjoy canoeing after that 'cos I was so cold and the water was freezing. They told us how to get out of a canoe they said do a forward roll but I don't know I just panicked when I actually did tip over. I couldn't get my legs to move and that was kind of scary, but I got out (Henrietta, 3).
But I just didn't want to fall out cos I never actually fallen out of a canoe and I was scared that I'd get stuck. We went to Moana Pool and did it but I never capsized. That was before we went to camp, it was for PE and we got the canoes and had a go. My friend, she went before me and she fell out of the canoe and she was wearing a life-jacket and she said when she rolled out that um the lifejacket sort of pushed her up, like back into the canoe and she couldn't get out and I was a bit scared that if I fell out it might happen to me and I'd panic. I think it's really important [to feel safe] because it gives you more confidence and wanting to do it and things like that (Michaela, 3).

I was a bit scared of... kayaking ... tipping out and not being able to get out of it [the boat] (Rangi, 3).

Canoeing - I don't like the water and I didn't do that. I don't like doing things I'm not sure what's going to happen ... I just didn't really feel like doing canoeing. I don't really like falling out that much. I don't really mind canoeing but I didn't want to tip out and that. I [didn't feel safe]. The [boats are] not that safe, not steady and they can tip over. I can't swim or anything. (Teresa, 4).

... I was worried about falling out of the canoe because I just freak out when I'm stuck in small places. I didn't fall out ... (Odette, 7).

The ropes course was the other activity that was mentioned often with respect to self-confidence. Like abseiling and kayaking, it seemed to both demand a certain level of confidence to participate fully, and also enhance confidence through successful participation.

Like on the confidence course I was afraid. I didn't do many of the high things. I wouldn't want to [injure myself] because, like, I wouldn't want to do that ever again, .. like if I went on the confidence course and I fell off I wouldn't have the courage to ever do it again, cause I would think I've fallen off and it will happen again (Michaela, 4).

Well, if I didn't like the look of something I wouldn't do it, I just wouldn't have enough guts, ... we had to climb up a net and go down a string without holding on, and I didn't have enough guts to do that. In case I rolled off (Ella, 4).
... I did do one, there was a rope where you just got on the rope and swung to the net so I did that one, that was alright. Some of them looked really dangerous. I knew I would probably panic and be aware of it all the time. So I'd probably make myself fall (Ella, 9).

I didn't try some of the confidence course because when its all muddy it looks like you are going to go slip sliding away ... I tried most of them but this one was up a ladder and you walked up a rope and then it had pipe things up here. It would wobble from side to side and it felt like it was going to tip over and I felt that my left hand wouldn't move so I had to move it along ... It looked a bit unstable so I didn't try it (Christa, 2).

... the confidence course was good - I didn't think I could do any of that stuff. I thought 'I'm not going to be able to do this' but I actually did it. I've never done stuff like that. I always seem to avoid it, try to get out of doing stuff like that. Going on tightropes and all that sort of stuff. So I'm glad I actually did it all.

PL: Why did you think you wouldn't be able to do it?

I dunno I usually just don't like doing stuff like that. It's not the sort of thing I really want to do, sort of go and risk my life, broken bones and stuff (Michaela, 4).

I don't really like confidence courses and I didn't do anything on that either 'cos it was slippery ... Davida didn't do some because she fell over and hurt her bum ... I did the first bit and when Davida fell over I didn't do any more because it was slippery. [I was afraid of] falling off or hurting myself or something as I went across (Siobhan,3).

Not all the girls who found the confidence course frightening at first were put off participating however, as the following extract shows -

I guess I'm just afraid of heights, but it didn't really bother me when we were there. Because there was a part in the confidence course where .. well lots of bits in the confidence course where you were up so high and you sort of look at it from below and you think 'I'm going up there!' ... but it was fine. When you got up there it was OK ... (Henrietta, 5)
For one girl the bush environment also caused some concern and for another it was rock-climbing -

I get freaked out. But we didn't really go deep into the bush, just sort of walked to the beach on tracks. I would have gone, I would probably have enjoyed myself but it's just the thought of it, being in there, in the bush, ... just being all closed in, not a quick way out, like if there's no tracks and that ... (Odette, 7)

I was actually terrified, really scared. It was the thought of falling off and that really put me off. [Getting] up there and [getting] stuck and ... not [being] able to get down ...You think about the landing area with some pebbles on it. That was a bit scary, going up just thinking of actually falling onto the stones. Crash pads maybe ... it doesn't give you a more positive attitude that you have actually conquered the wall or anything, if you have crashpads, if you know you are safe. But if you know that you are not safe and you are actually managing [to climb] you get more spirit in yourself ... (Kae, 7).

This student identified a difference between fear on the climbing wall and in other activities high above the ground -

I reckon its just because of falling off, because with the confidence course you had something to grip onto and everything and with the abseiling you don't actually look down but you feel really secure because you have the apparatus on and you have got the teachers standing up [above], ... it wasn't even that high, ... [but] I suppose it was just me and the wall (Kae, 7).

The confidence course and the abseil cliff had not provided the same challenge although in the case of abseiling she was sure of where her limits were-

I liked the confidence course ... it was really weird watching everyone getting scared of going across you know the real thin wire ... and that and I was just not scared at all, it didn't worry me (Kae,7).

PL: And the abseiling?

No, it didn't worry me. I would not have gone down frontwards though, there's no way I would have done that (Kae,7)....
One student expressed her lack of self-confidence on the confidence course in physical terms -

... the confidence course had things on it, I mean there was this bird cage one where you had to get through these wee 'berches' and I didn't like that, it was really awful. [It] just looked like you had to have muscles to be able to lift yourself up and put yourself through the next one. Only Libby did it, she is really muscley (Christa, 4).

As these results indicate, many girl students expressed considerable lack of self-confidence in undertaking some of the outdoor activities. This bears out the literature which claims low female self-confidence in physical activities generally, and in particular activities which involve an element of risk (Corbin, 1984). It may be argued that the extent to which low self-confidence was reported reflects a male bias in provision of outdoor activities. It is conceivable that the outdoor activities offered at Tautuku are based upon the interests and expectations of boys and men, especially if one remembers that outdoor education has strong roots in military training and in the Outward Bound movement which was originally established to build physical endurance and "character" in young men (McRae, 1990; Anderson, 1989). Some activities within outdoor education programmes such as confidence courses, abseiling, kayaking, and rock-climbing may still be designed with male risk-seeking and physical challenging in mind. An example can be drawn from the kayaking sessions run during the course of this study. As observations indicate kayaking involved students undertaking a short journey by kayak, after very little introductory instruction, and in somewhat unpleasant conditions. Girls, it could be argued, are oppressed by this because with generally lower self-confidence, less physical strength and less propensity to seek risk (which they suggested themselves in interviews and observational conversations), they are set up to experience failure.

I do not mean to suggest here that differences between males and females in physical strength, self-confidence or risk-seeking are purely 'natural' and biologically determined. Scraton (1990) presents research results indicating that many physical educators maintain either biologically or culturally deterministic beliefs about female physical ability. I have no information about the beliefs of the staff on outdoor education camps. Quite possibly most of the difference is socially determined and differences will lessen as socialisation of boys and girls converges. However, until girls and boys are given similar opportunities for physical development throughout
their early years the differences will remain. While differences exist so too will the possibility for one gender to be treated at a disadvantage to another, unless programmes such as outdoor education reflect the needs, competencies, and interests of both groups.

One of the clearest themes to emerge from this study is that of low self-confidence among the girls in outdoor education activities. Twelve of the girls interviewed indicated that lack of self-confidence has been a factor in their participation of activities. The activities most commonly cited were abseiling, with 10 mentions; kayaking (7), confidence course (6), and rock-climbing, tyrolean traverse, and bush-walking, each with one mention. Reasons for the lack of self-confidence hark back to issues of social and personal expectations for girls. Some girls I spoke to believed that they could not do outdoor activities as well as boys because:

... nobody's got the confidence in us and so we don't have the confidence ... [we need to] try it more, more self-motivation, more encouragement and practice ... (Obs tape, 1).

Corbin (1984) and Lirgg and Feltz (1989) maintain that vigorous physical activity remains more positively identified with males and it is vigorous activities in which females tend to experience least self-confidence. Abseiling and kayaking are both vigorous activities which were commonly mentioned by subjects in this study to be worrisome activities. I have stated earlier that perhaps confidence courses have less of a male image than activities such as abseiling and would therefore be less problematic for girls. However, the figures quoted above suggest that the confidence course is just as much of an issue as kayaking, at least. This may be due to a perception by female students of a level of physical strength required to complete the elements of the course, and a lack of confidence in their own muscularity and strength. Christa's comments (see p127) illuminate this point.

Corbin's (1984) hypothesis was that immediate performance feedback can enhance the self-confidence of women in physical activities. In outdoor education activities feedback about performance is both immediate and clear. In most cases, either you have successfully abseiled or you have not abseiled at all. Either you have crossed the high two-wire bridge or you have not. This is one way in which outdoor education can be particularly beneficial to those who initially have low-self-confidence. Examples of increases in self-confidence occurring
as a result of participation came from Yvonna, who reported she was "... more confident now than I was - I never thought I could do that abseil ..." (interview, Yvonna, 5), from Nita, who "... didn't really want to do abseiling but in the end when I did I felt really good ..." (interview, Nita, 3), and Kae, who made the connection between risk-taking and self-confidence in her statement about her experience on the rockclimbing wall (see p126).

Related to the issue of self-confidence is the issue of risk. The literature review provided pointers to ways in which women are socialised out of risk-taking (Jones, 1981) and also suggested that risk-taking is anathema to female experiences of personal relationships, in particular motherhood (Norwood, 1988). Interviews in this study indicated clearly a reluctance by girls to take risks, as the following abstract indicates:

... I just keep thinking I'm going to fall all the time ... it just scares me that I might fall and break something ... (interview, Michaela, 4).

Weiller and Higgs (1989) suggested that the values socially expected in women include passivity, weakness and vulnerability. Associated with the concept of female vulnerability is the notion that risk-taking is not appropriate for women. Girls in this study did not allude to risk in this way, and I suspect that their reluctance to take risks may have more to do with the issue of self-confidence. Being afraid of heights was mentioned specifically by six of the interviewees and being scared in general was mentioned by fourteen girls. Most of the fear appeared to be generated by the risk of physical injury, a risk most were not prepared to take.

It would appear, then, that offering 'scary' activities to girls who are not high in self-confidence does not encourage their participation. An alternative strategy would be to offer activities, at least initially, that appear to be lower in risk and in which consequently girls feel they have more control. Building additional outdoor experiences upon an initial positive experience is more likely to succeed in enabling girls to participate than just a one-off week. One of the aims of outdoor education should surely be empowering young women to participate in activities after their camp week and it is doubtful that this would occur through fear and uncertainty. Security and safety appear to be what some girls seek in outdoor physical activities.
Andrews (1984:26) understands this as an effect of socialisation - "... in general girls learn to shy away from situations in which the outcome is uncertain ... ". This prevents some women from participating in activities which require "... commitment, confidence, even audacity ... " (Burrows, 1985:39). Burrows continues, stating that confidence is -

the key element underlying any calculated risk taking and it seems women in general could do with more of it ... Fear of failure is a common intimidation for women, and in the light of patterns of socialisation men and women are subjected to in Western culture, this revelation is hardly surprising. The willingness to be a bold, aggressive risk-taker is a trait fostered by experience, a trait men in general are more likely to display than women (Burrows, 1985:39).

In order to encourage young women to participate in outdoor activities, then, it would seem that attention should be given to the level of fear felt by the students, and a flexible approach to the type and level of activity offered would seem desirable. Not all the girls in the study exhibited fear or stated that they had been afraid to try some activities. It would be erroneous to interpret these results as a call for a lower level of outdoor education programming for girls than for boys. It is quite possible, in fact, that some boys are as fearful as some girls in activities such as abseiling. What is important, I believe, is acknowledging that not all students arrive at camp with the self-confidence to participate fully in outdoor activities. Many girls may benefit from introductory activities at school and a range of activity level choices at camp.

Segregation/Integration

Four of the observations I made were of interactions between girls and teachers or girls and boys which indicated the effect of mixed sex grouping on girls' participation. In a kayaking session nineteen students were asked to arrange themselves in two equally numbered groups. They voluntarily chose to divide themselves into a group of eight girls and a group of eleven boys but one extra person was required in the girls' group so that everyone would get a kayak. A male senior student (Quentin) elected to change groups giving a group of eight fourth form girls and one seventh form boy. Perhaps (though not necessarily) as a result of this arrangement the girls in the group frequently asked Quentin to help them rather than help themselves or each other. When encouraged to practice a new
skill several girls were heard to say 'I can't' even when they actually were doing it! (obs log p5).

A second observation was of one overnight campout group in which it was observed that boys were pressuring the girls to do the group cooking while they (the boys) sat around the fire and talked. Some girls did cook some food while others said "no" to the boys demands and exhorted them to do their share of the work. Because most of the girls refused to cook for the whole group, little of their food was actually prepared and everyone in the group ended up eating only sausages and bread. Later some of the girls stated that they would have liked better food on campout (obs log, p6).

These observations reflect socialisation into a style of gender relations which allows women to see themselves as incompetent and dependent on men and which allows men to harass women. In the first situation, there was only one male present. He was older than the girls in the group and more skilled in outdoor activities. It was quite natural that he help them and give them advice. However the extent to which girls relied on his help, especially after being exhorted to help themselves, is indicative of the way girls resist changes in gender relations. Another example of this came from a comment made by one girl from a single-sex school, who in response to the question "How would you feel if you were sharing this camp with a group of boys?" answered -

It would be good because they would be there to support us 'cos they're stronger (Obs tape 2).

Marsh et al (1989) suggested that girl-only groupings in education fostered greater assertiveness and academic performance in girls especially in subjects historically male-dominated. There is evidence here too that girl-only groups may foster greater assertiveness in girls in outdoor education, if only because opportunities to rely on males would not occur.

During another activity, a guided bush walk, it was noticed that as the walk progressed four of the five girls in the group of twelve tended to take marginal positions in the group. Boys talked and answered questions asked by the teacher (a male); boys were more often in front of the teacher on the track and during discussion times girls were more often behind or to the side of the teacher (obs log p12). The girls were less inclined to offer answers and it was a boy who was asked to read from the booklet each student had (obs log, p12).
Similar observations were made at the climbing wall on one occasion when a teacher was instructing a co-ed group of students in rock-climbing technique and safety procedures. Students had been asked to sit down for this initial instruction and the resulting configuration was that the boys sat closest to the teacher and the girls furthest away. Once climbing started the boys immediately ascended the wall while the girls hesitated. Girls generally gave up more easily than the boys but did continue if encouraged.

These results bear out the literature which illuminates the way girls 'lose out' in mixed-sex groupings for physical activity (Turvey and Laws, 1988). My observations did not indicate which girls 'lost out' most as more specific research might, and it was not evident that girls were marginalised because of boys' larger size and greater strength as Abigail (1984) found. Gendered images of outdoor activities may play as big a part in girls' peripheral participation as assertiveness and capturing of teacher attention by boys. For this reason, segregated activities would appear to benefit girls especially when the activity is one which is seen as more male specific.

During an abseiling session I had the opportunity to record the following conversation with a co-ed group of students. The topic discussed was raised by girls in the group and revolved around issues which have been at the heart of recent segregation/integration debates.

The guys - they always seem to think that we [girls] can't do [activities] as well as they can. And that sort of puts you off a bit.

Because I mean they say that 'you can't do it' as well as they can ...

It's mostly the guys ... they think we're not equal to them ...

When asked why girls were more hesitant at activities like abseiling, my respondents referred to their belief that boys liked to live dangerously and girls didn't, but that there might be a "social reason" too -

Like the fact that people think that girls are weaker.

Like they think that way so we believe that way (Obs. tape 1).
PL: How do you find out what people expect of you?

You just sort of know.

You can tell by the way they look at you or say 'oh I'm not going to go after P..., she's going to take yanks ...'.

They sort of treat you like some sort of weed or something.

They usually say it jokingly but some people take it deep down.

In our class you're used to it 'cos I mean most of the guys hassle you but they don't mean it.

They all just joke about it, but some people really take it seriously. It just gets to you. And you get sick of hearing it all the time.

And sometimes you think, 'Oh is that really true? Can't I do that?' And then it makes you want to go out and see if you can do it.

We may take longer, and we may not do it as well, but we can still do everything they can do (Obs. tape 1).

Another group interview, this time with a number of girls from a single-sex school, provided the following extract-

I think co-ed schools are harder to work in 'cos boys tend to put girls down.

You know how boys say boys are better than girls, well they're not really they just say that to put the girls off it ... and the girls lose their confidence because boys are sort of going ... you might not be able to do that and so they lose their confidence in doing things and that sort of thing.

PL: What is the difference between boys making negative comments to girls and girls doing the same thing?

It's worse if boys do it to girls. They mean it more but most girls are just joking. Girls seem to take boys really seriously. All girls have boyfriends and that and they'll think 'Oh no, no-one likes me, and he doesn't like me.' That seems to put girls down quite a lot (Obs tape 2).
From this material it is evident that male verbal harassment of girls does occur in outdoor education and that it affects the way girls think about their own capabilities. Turvey and Laws (1988) had similarly found that both boys and girls believed girls are "no good" (p254) at physical activities. Similarly, Ostrow et al (1981) concluded that there are differences in expectations for males and females in physical activity and Csizma et al (1988) found that these expectation differences can result in gender stereotypes. The stereotypes then, in turn, affect participation. Comments made light-heartedly or in jest were powerful influences on girls if repeated often enough. Schools, then, need to be aware of the tone of boy-girl interaction and take steps to sensitise boys to the effects of their comments.

At the same time, however, girls find ways of overcoming the put-downs they receive from boys. Several girls commented on the way they feel when disparaging comments about them are made:

That doesn't put me off. It just makes me do it ...

It depend what it is. If I know I can do it, it doesn't worry me, but when I can't do it ... If it's something I don't like doing I won't do it.

It kind of puts me off but it kind of makes me want to do it more just to prove that I can do it. Like when we climbed the wall yesterday, I did it for the rest of everyone else 'cos everyone treats the girls like the weaklings and we're not.

You can prove to them that you're not a weakling and that you can do everything that they do and it can change their attitude a bit.

And you'll notice too that even though the boys are scared, to go down the cliff they'll still do it 'cos they have to do it 'cos all the other guys do it [so] they have to do it. I've seen a lot of scared boys go down the hill but they'll do it because .. they're a boy and everyone's going to call them a 'girl', or a wimp ... (Obs tape, 1).

There is support here for Humberstone's (1987c) notion that outdoor education can change the way boys and girls inter-relate. She found in her study that conventional ideas of appropriate behaviours for males and females were called into
question by students after co-ed outdoor experiences. Boys had been seen to express emotions such as fear and reluctance just as girls had, and girls were also able to demonstrate their abilities in the activities which were similar to the abilities of boys. In these ways, new views of gender were established. Thus, outdoor education, as well as sport and recreation, can have revolutionary potential (Birrell, 1988). Co-educational outdoor education therefore has the advantage over segregated programmes that Evans (1984) suggested, in that it provides opportunities for students to refer new meanings of gender to mixed-sex settings similar to those they will encounter in their usual social situations. Girls whose usual social situation at school was one of segregation also considered there to be advantages in co-ed outdoor education, as the following extract indicates -

... in the outdoors boys are interested in it and if you can do well in outdoors and they can see that they start to respect you a little bit more and I think that if a co-ed school can come together in a place like this and see that girls can work well in fields that they [boys] work well in then they could give a little bit more respect.

PL: How would you feel if you were sharing this camp with a group of boys?

We'd be doing the same things as they would be doing and we could just say, like if they were going 'Oh you're a girl, you can't go on that tramp or you can't lift this or something' you could do it and you could say 'Well we can do it, I mean we're doing the same activities as you are'. It would sort of prove to them and they would sort of think about what they had said and that afterwards I think (Obs tape 2).

PL: Would sharing the camp with boys affect the way you felt about yourselves or the way you went about activities?

Yeah, it would make us feel better about ourselves I think.

[We would] try harder. To show off. It would make you prove to them. 'Cos I mean if they're going around saying 'you can't do that' you'd feel better if you could go round saying 'yeah I can do that and I'm just as good as you are'.

'Cos camp is where you build up your confidence and you do strong things and everything.
Sometimes you find that when you get into different environments they sort of act differently, like sometimes they try and help you ... and other times they will just rubbish you for being a girl.

They are good to be there if there's something you're not doing too well at because if ... they're standing there and maybe if they do rubbish you you might find the fight to do it again and to improve what you're doing.

I think it would be quite good because it would give girls more confidence, and boys would get the picture that girls can do things same as boys can.

PL: Why would it give girls more confidence if there were boys here?

Because some boys say that girls can't do things better than them but the girls would get more confidence in doing things the same as they do (Obs. tape 2).

This material further supports Humberstone's (1987c) thesis that outdoor education has the potential to be a venue for renegotiation of the gender order. The girls in my study allude to this process in their comments above, and perhaps the process would be improved by debriefing sessions with students in which issues such as gender were raised.

The issue of competition versus co-operation in physical activities did not emerge in this study. Dilution of the outdoor education programme for all-girl groups was also not observed. Carrington and Leaman (1986) have suggested that dilution occurs in all-girls PE thereby restricting girls' choices of physical activity. The schools I observed ran similar outdoor education programmes in both style and content. Research involving a larger sample may illuminate differences in outdoor education curricula if any exist.

**Puberty Issues**

Bodily functions and bodily privacy were topics brought up by girls which may be a function of their gender and stage of social and physical maturity. Two observations made appear to indicate a level of discomfort felt by some girls regarding their bodies in outdoor education activities. At one abseiling session three girls giggled in what seemed to be embarrassment when the teacher demonstrated how the safety
rope was to be secured around each student's chest before descending (obs log p14). Similarly, two girls commented while on the confidence course that they were concerned about some elements of it because people might look up their fashionably baggy shorts from below (obs log p2).

No further observations of this type were made so the discomfort that appeared to affect the girls mentioned above may not have been shared by others. Alternatively, it may have been that I didn't notice that others displayed discomfort. Whichever it was, if girls are more familiar with the activities they will be engaged in at camp, their discomfort may be reduced, thus pre-camp preparation would appear to be in order. Additionally, fuller information on the nature of activities may help girls select appropriate clothing, too.

Toiletting and menstruation were the subject of the five observations I have categorised as issues affecting pubertal girls. The toilet and bathroom facilities used by girls while at camp were of two sorts. Girls in the 'girl's dormitories' had separate showers, san-burners and tins for disposal of menstrual waste. 'Boy's dormitories' had communal showers and, understandably, no facilities for disposing of menstrual waste. At one co-ed camp I observed girls were accommodated in boys dorms and vice versa (obs log p1). On this occasion the girls were not expected to use the facilities in a nearby 'girls' toilet block. During girl-only camp weeks half the girls would use 'boys' dormitories and half 'girls' dormitories, but all at least had access to the facilities in 'girls' dormitories.

During activities arrangements for toiletting did not appear to reflect girls' needs for dealing with menstruation. Half-day and full day tramping trips that I observed were undertaken with few suitable stops for toiletting, kayaking similarly did not allow girls to stop and find privacy (obs log p3).

Menstruating while at camp seemed to be an issue for some interviewees-

Well, it's a bit annoying getting rid of the stuff, ... the toilets don't actually flush them ... the burner at camp didn't actually work, that was annoying. It's just uncomfortable and sometimes I get cramps as well which doesn't make life very easy. I was talking to my friends and quite a lot of people did actually have it. That was about the only thing that really worried them about camp ... (Henrietta, 2)
PL: What was worrying them about having their period on camp?

It's just generally an added hassle that you have to deal with, and on camp out it's really annoying because you only get about this much loo-paper when you go into the bush, well you can take a whole roll but we sort of had communal provisions ... (Henrietta, 2).

PL: If you'd had your period at camp would it have worried you?

Yeah, I would have felt conscious of everyone. Like I would have been conscious that I had it and I would have been worried like, cos we spend a lot of time away from camp, and just things like changing at camp out and things like that, that would have bothered me (Michaela, 2).

It's just different being on camp than it is at home ... you would be with your friends and you would think they know or something like that ... (Siobhan, 9).

I just wouldn't like to have it at camp .. I feel it would actually ruin it having it at camp .. if you had a sore stomach or something like that it would be miserable (Ella, 3).

For Ella, changing while out on a tramp would have been a problem, as she stated she "just like[s] lots of privacy" (Ella, 3), a view echoed by others -

... if you were out on a tramp and that, you couldn't [change] ... there was no way ... (April, 2).

PL: Was having your period a problem for you at camp?

Yes. When we went canoeing I didn't want to do it because I didn't want to get wet ... It was awful having to go to the toilet on camp out. I didn't drink anything so I wouldn't have to go (Luana, 2).

[At campout] there was no toilet. Couldn't find a decent toilet in the bush ... trying to find it in the dark, that was a bit off-putting and the guys started following us when we were trying to look for a loo. [Menstruation] would have been a real hassle. Because, [there was] no loo, and it was hard to carry everything and it would be
embarrassing. You [need] a loo where everyone knows where it is ...(Gaby, 6).

Michaela commented on the facilities for and information about menstrual waste at the centre during her week there -

... it was disgusting ... people that had their periods, they just chucked like used tampons and pads just ... some of them weren't even in the bucket, and it was just all round the toilet,... probably cos the bin was full ... and they probably put it on the top and it just fell off but it was just around everywhere ... there was this little bin but no one had emptied it ... I think we were meant to empty it every day but no one emptied it ... no one told us to empty it every day but it would probably be better if we did (Michaela, 8).

For others, menstruating at camp was not an issue -

I just don't worry ... because it's just a thing in life that you got to put up with (Nita, 4).

The issue of menstruation is an area where male-centredness in outdoor education programming is clearer. From the design and equipping of the accommodation block and the sewerage treatment system, to information given girls and the timing and routing of various activities, teenage girls' toileting needs have been overlooked. Most girls reach menarche at about twelve or thirteen years of age (Coles, 1980; Scraton, 1990) and as Prendergast (1989) has shown, struggle with management of their menses at school throughout their junior high school years and perhaps beyond. Girls in Prendergast's study specifically mentioned showering and swimming as problem areas for them in physical education and this is echoed in these results (see also section on body image). Problems of actually getting to a toilet and then disposing of waste were also common to both studies. Additional difficulties stem from girls reluctance to let others know they are menstruating (Prendergast, 1989; Gall, 1987) in accordance with strong social pressures to hide this physiological process away (Laws, 1990). Outdoor education camps are yet an additional hurdle to be survived by menstruating adolescents. For the participants in this study, little information, if any, was supplied before camp about how to manage menstruation and menstrual waste. Generally girls appeared to be unskilled in toileting procedures outdoors, and for those with periods, overnight camp can be particularly worrisome, as Luana (2) indicated. Carrying and water-proofing supplies, finding privacy,
disposing of waste, and managing pain and discomfort in unfamiliar routines all need to be considered in the planning of outdoor activities for girls. Harassment from boys, if it occurs, can make menstrual management even more difficult. Planning of other outings such as day-walks without reference to the needs of girls who are menstruating is another aspect of the male-centredness of outdoor education. Activities appear to be planned and implemented based on human experience which does not include menstruation - and in the case of fourteen and fifteen year olds this can only mean that activities are set up with boys in mind.

Body Image

Six observations refer to aspects of body image. Four of these were to do with the effects of body size on participation in activities. Two were related to the effects of girls' attempts to look 'feminine' while participating. It seemed that bigger girls tended to be more uncomfortable about their body size when it came to participating in activities. Three girls in particular came to my attention for this reason. One of the three sat at the abseil site reading a book about dieting and would not attempt to abseil. She did not put on a harness, nor would she speak about why she wasn't participating. Peer informants told me that-

... she didn't want to do it because she thinks she's really fat but she isn't.

... she doesn't think the harness will fit.(Obs log, p8).

Fear of being ridiculed was also reported by peer informants to be a reason for non-participation for this student. Later in an interview this student stated that the problem of peer attention was associated with body image and it effectively stopped her from taking part in the activity -

I know I can do things, I don't need to prove it that much. There was another girl there who was ... a bit fat. Well, the others all made comments about her - how fat she was - when she was abseiling. I didn't want that said about me. I would have done the abseiling and that but not in front of all those people. Maybe if it was just me and one teacher that I like ... (Luana, 3).

An explanation for Luana's non-participation has been put forward by Bain (1990) who claimed that for women the body is
seen as the valued commodity whereas for men it is action and physical performance. It is therefore possible for Luana to forego the activity in order to reduce the devaluing of her body she felt would occur if she participated. In a similar vein, another plump student informed me that she didn't want to go kayaking because she didn't want to have to get into a wetsuit (obs log, p9). None of the wetsuits available to the students would fit this girl as they were all either too small all together or far too long and lean for her to get into. Students had been advised that they would need a wetsuit in order to keep warm during the kayaking session and no alternative clothing had been made available to them.

The third activity which I observed to be problematic for bigger girls was that of the tyrolean traverse, a 'flying fox' in the bush. On one occasion (obs log p10) two out of twenty-eight girls did not participate, and on another two out of a group of fourteen abstained. Three factors seem to make the tyrolean traverse onerous to larger girls. First there is the necessity to wear a close-fitting harness in order to be attached to the rope which is suspended between two trees across a stream in the bush. Second, once attached to the rope by a pulley one's weight becomes obvious as the rope sags in proportion to body weight. Third, it is necessary to be pulled up the far side of the crossing by peers, who struggle to get heavier students across. On a third occasion a bigger girl who was reluctant did participate although she had stated that she did not want her classmates to have to pull her in. Once across, however she seemed cheerful and talked to others about the experience (obs log p20).

Interviews with two girls substantiated this information -

I was worried about the harness - oh no, maybe it won't fit, because y'know we had to make our own and they're quite small, and the first one didn't fit me but the second one was OK (Josie, 9).

I felt really fat, ... having to get into a wetsuit. They wouldn't fit me ... and the harnesses, so I didn't do it. It would have been alright but not in front of all those people (Luana, 3).

Those game things ... [initiative problems] .. I didn't do those because you had to lift people and they would laugh at me if I tried to do things like that so I didn't do them because I didn't want to be laughed at (Luana, 5)....
Body image appears to be quite a problem for some students at camp. As Luana indicated, two pieces of equipment commonly used at all camps were the harnesses for abseiling and the tyrolean traverse, and wetsuits for kayaking. The image of the body which is to use these items may indicate something about the assumptions underlying activities. The wetsuits offered students came in a range of sizes but all in the same lean shape. Luana, a generously built girl, was deterred from participating in kayaking because of her inability to find a wetsuit that suited her body-shape. This issue may be more one of athleticism than of sexism, but there is still the issue that girls, more than boys, tend to be less athletic in build. In this way lack of provision of warm clothing other than wetsuits may be seen to be less than girl-friendly. One solution would be to offer alternative clothing such as polypropylene which at least stretches more than neoprene rubber!

The relationship between body image and physical activity participation (Henderson, et al., 1988) existed for the girls in my study. The evidence of Stanton (1990), Dukes (1991) and King (1989) that women, especially during adolescence, are concerned about their body size and shape regardless of their actual physical dimensions, is borne out by girls’ concerns for the way they think they look. Body size can be a problem in outdoor pursuits when equipment is not available to fit bigger people. Harnesses, kayaks and wetsuits are particularly likely to be size limited. On the camps I observed, only wetsuits were a real issue. Harnesses were enlarged for bigger students and no one was too big for a kayak. Donning a harness was still not attractive to bigger girls and I think there are a number of reasons for this. The first is that having a harness enlarged to fit would be embarrassing for girls ashamed of their bodies, and would tend to draw attention to them because of the extra attention received from staff. Second, during abseiling and the tyrolean traverse, everyone’s attention tends to be focussed on the person on the ropes at the time. Bigger girls shy of overt attention would not welcome this. For other girls too, this is an issue even when the attention is intended to be supportive. Two girls who had walked down from the abseil site without attempting the activity began their explanations for non-participation began with-

... just don’t want to. It’s too high, too scary (Coralie).

It's too high and it's too steep!" (Kym)
- and, when asked if they would participate under different conditions, progressed to -

Yeah, I would. If it was flatter. And no-one else was around. Not all these people (Coralie).

I might have a go if it was just me and a few friends here. But I'm not doing this, not here (Kym) (obs log, p17).

Similarly, another girl having difficulty with the abseil commented to me that she was put off by the amount of attention directed at her by everyone else in the group. Group members were watching her quietly, as they had all been watched previously. However, as only two people can abseil at a time from the Tautuku cliff site, when one person has difficulty they tend to become the centre of attention. In this case the attention was unwelcome -

Ooo, don't watch! Oh, this is gross. They are all gawking at me. How embarrassing (obs log, p16).

Third, the amount of weight put on ropes in these activities is fairly obvious to observers and this is yet another way body weights of individuals can be compared and commented on. The sorts of comments that I heard during my observations were unkind and appeared to affect the students concerned adversely. The following scenario was one example -

... you know, I'm not the skinniest person in the world, and on the last day, I was wearing my togs, and a tee shirt, ... and you know they [other girls] started making these [vomiting] noises (Josie, 8)

Comments such as this were evidence of the value placed on leanness and the moral reproof accorded fatness to which Kirk and Tinning (1990) have referred.

Strategies which may help bigger girls to take part in outdoor pursuits could include offering more private opportunities for activities like abseiling in particular; fostering an ethic of acceptance in the school community; ensuring that the equipment used in outdoor activity sessions is not limited to particular body shapes or sizes; where necessary providing alternative types of equipment that are more suitable for bigger people; and altering the nature of the activity so that everyone can participate in a way that is positive for them. The latter strategy requires outdoor educators to prepare
flexible programmes aimed at fitting activities to students rather than students to activities.

The second aspect of body image that I observed was related to some girls' attempts to adopt one of the physical characteristics often considered 'feminine' - that of having long fingernails. On two occasions I observed that girls with long fingernails had difficulties on the rock-climbing wall because of their nails. Initially these girls tended to be reluctant to attempt climbing in case they broke their nails (obs log p6), but when they did climb two further frustrations were evident. Having long fingernails makes it difficult to grip small holds, and so they tended to fall off often, experiencing little success. For some who did climb with long fingernails, breaking one or more nails seemed to be quite a disappointment to them.

There are more reasons than one for having long fingernails but for girls who use their nails as a symbol of their femininity, participation in rockclimbing will clash with images of their female selves. In this way social constructions of physical attractiveness (Ritchie, 1989) work against efforts to involve young women in some activities.

Exposure of unclad or scantily clad bodies was a further issue for many girls. Several interviewees commented that the lack of privacy in the dormitories was a concern when dressing -

... you couldn't stand up and get changed like you normally do at home. Everyone was around you and ... I don't like getting changed in front of everybody (Christa, 5).

I wouldn't get dressed in front of everyone, there should be more privacy because not everyone likes everyone else to know what they look like. And people shouldn't be allowed to take photos of you without permission (Luana, 5).

All the girls, I didn't see one that just stripped off in front of everybody and put their clothes back on, you know.. got totally undressed in front of everybody ... (Josie, 7)

Communal shower facilities were also frequently mentioned -

They were funny, all in the shower washing our hair and everything together, it was quite funny ... everyone wore their togs (Christa, 5).
We were lucky we had the ones with the [curtains].

PL: How do you think the girls in the communal showers felt?

Oh they all showered in togs.

PL: So it wasn't really a problem?

Not for us but for them it was. They were always grumping about it (Josie, 5).

PL: How would you have felt if you'd had to use communal showers?

I wouldn't have wanted to ... I would have felt really [self conscious]. Girls are more self-conscious ... boys they sort of don't worry, they sort of just dive in but girls they sort of think, oh no, especially sort of at our age ... (Michaela, 9).

In these ways, then, camp experiences remind girls of the social meanings attached to the female body. Adolescent girls are particularly sensitive about appearances. There was no evidence gathered about girls' views of muscularity as it affects body image. All but one piece of information about body image suggests that for some girls outdoor education camp is just another place where women's bodies are compared to an 'ideal' image (Ritchie, 1989; Levin, 1990; Gray, 1981). The image itself was not made evident by the results of this study but it is clear that it does not reflect the body shapes of the bigger girls.

There was one student, however, who found in camp activities an opportunity to forget about appearances -

[On the mud walk] people just went out and had a good time didn't worry about how you look and the way that they dressed and stuff. just having a good time and relaxing and getting into the outdoors. You don't mind getting dirty when you're having a good time it's much more enjoyable. A few at the back were scared of getting in the mud and it sort of took the fun out of it, the whole point was getting muddy! In town .. you want to look nice but out in the bush it doesn't matter. In town [you] don't want to appear kind of untidy, [you'd] look pretty out of
place with mud all up your legs and your hair messy! (Una, 3).

The idea of girls dressing untidily, getting dirty and enjoying doing so is interesting in light of the literature which states that girls are discouraged from participating in physical activities because they are expected to maintain a clean, tidy appearance (Green, 1987; Scraton, 1986). Obviously not all girls are discouraged, at least not all the time, and possibly being away from the media which support these expectations allows girls the freedom to be less a stereotype and more themselves.

Images of Outdoor Pursuits

The images that students' have of outdoor pursuits may in some ways contribute to reluctance to participate by some. Two observations that were made during the same activity session (rockclimbing) and which may be related were seen to contribute to non-participation by some girls. First, three of the six girls in the group, when asked why they were not interested in participating, replied -

I'm just not.

It's just not something I ever want to do (Obs log p6).

However with encouragement and enthusiastic example from the instructor (myself) and the other girls they eventually all did participate for a short time. The point here is not that individual girls state disinterest in an activity - individuals all have their own interests and this is to be acknowledged. What happened next is of interest. After climbing for a short time one boy sat down saying "I can't be bothered" (Obs log p7). Immediately three more girls descended from the wall and sat out of the activity, and a further two girls sat down shortly afterwards. Only one girl was left climbing; all the others (six out of a total mixed group of fourteen) had opted out. When asked why they were sitting out of the activity the girls stated -

Well, Gareth is. He's a guy and he's not doing it, so we shouldn't have to (Obs log p7).

The one girl who had participated fully in the rock-climbing session expressed her feelings about it afterwards-
I didn't think I could do anything on that rock-climbing wall but then I tried and it was neat! I can't do it all but I like trying (Obs log p7).

It is possible that the initial espoused disinterest in rock-climbing was related the view that rock-climbing is not an activity for girls - a view expressed by the girls who sat down after Gareth. One co-ed group interview also provided some information about the way girls at the camp thought outdoor pursuit activities were portrayed, as the following extract shows -

Most people would say it would be a boys thing ... because it's outside ... Because it's out and you're up on a hill ... Because it's dangerous - girls don't like risks, they say.

On ads for beer and that it's always 'southern man', never southern woman.

It's always a man, a man with a tramp bag going up the hill, ... and a dog.

And on Indiana Jones, there's always the guy with the pack and all the outdoor stuff and then there's the bimbo with the make-up and the high heels and the dress, traipsing through the outdoors.

... looking sort of like a real tart ... looking out-of place ... she looks like she can't handle it, they're trying to make it look like the guy can handle it ...

Those ideas get built in your head and then you start to believe that way ... When the [question] says 'What do you think of the outdoors?' you start to think 'That's a guys activity' too. You don't want to, but you start thinking that way because everyone else thinks that way, [and] you think it's the right way to think.

I love camping. I love being outside.

PL: How does all that affect the way you felt about coming to this camp?

It didn't really matter at this one because we knew everyone was going to get treated equally ... (obs tape 1).
In a similar interview, the comment was made that girls are more afraid of abseiling than boys. When asked why they thought this, the students responded:

'Cos guys live dangerous lives!

Guys are just stronger.

Guys live on the danger and girls are more hesitant - we're scared of the heights whereas the guys love to live by danger.

There's just something about the height that we don't like.

Images of the activities undertaken during outdoor education programmes can be seen as negative influences on girls' participation, as Humberstone suggests in her British research (1989). The instances above generate support for this claim in spite of the evidence that New Zealand women's views on femininity include being active and strong (Cosgriff, 1983). Girls in this study similarly suggested that they themselves were strong and active, and there was no evidence of the "apologetic approach" being used to excuse their participation (Graydon, 1983). Some of the girls concurred with the notion of most outdoor pursuits being portrayed as male-appropriate because the images of outdoor people they had been exposed to in advertisements or films were of competent males and incompetent females (a "bimbo", "looking out of place ... like she can't handle it ..."). Outdoor environments, to these girls, were gendered environments - activities were "a boys thing" because "it's outside", "on a hill", and because "it's dangerous - girls' don't take risks, so they say". (obs tape, 1). There was a clear dichotomisation of gender characteristics evident here and the notion that the differences were innate was also clear. The girls' comments suggested that although they knew such images were not representative of women's abilities and achievements they were influential in socialising young women into "appropriate" activities. This is interesting in light of Ball's (1986) statement that to the general public there is a gap between real and imagined abilities of women in outdoor activities but that men and women who participate in outdoor pursuits both view women's abilities more favourably than the stereotype. The girls in my study recognised the discrepancy but still felt influenced by the stereotype.

These same girls, however also stated that such images did not affect their participation at their particular camp because they
knew they would be treated on an equal basis as the boys there. This suggests that the school environment from which the girls come can affect their participation in outdoor activities despite potential barriers such as images of activities. Clearly the girls involved in the discussion above expected to be treated in the same way as the boys were. With the support received through their daily schooling, these girls were able to override other signals from their lives that appeared to indicate that outdoor pursuits activities were not for them.

School support for outdoor education, and preparation for the activity within outdoor education, is necessary if maximum benefit is to be gained.

Whether or not equal treatment in outdoor education is best for girls is another issue for debate. Feminist educators have argued that because girls' experiences of the world are so different to those of boys, offering the same educationally is unlikely to produce the same outcomes for both groups (May, 1989). The "evening-up exercise" which underlies equality of educational treatment is a liberal feminist tool which has its place in the evolution of equitable gender relations but has been superseded by radical feminism's notions of girl-centredness and girl-friendly schooling (May, 1989:28). A gender-inclusive curriculum at school would seem to be the most supportive sort of preparation girls could get for their outdoor education experiences. Outdoor education would then become a vehicle for practical experiences and a natural extension of activities and learning undertaken in the classroom.

Action to change the images girls receive of women in the outdoors would clearly benefit girls and women generally. Schools can use posters, newspaper and magazine clippings, books and visits by outdoor women to help build positive images of women in outdoor environments. Role models may be particularly powerful if they are the teachers with whom girls share their week at camp. Some steps have already been made to popularise positive images of the outdoors for young women. For example, the Ministry of Education in Victoria, Australia, is attempting to alter both perceptions of water-based outdoor activities and levels of female participation in those activities by publishing a statewide newsletter entitled 'Making Waves' (Ministry of Education, Victoria, Australia, 1989). Aimed at teenagers, it documents experiences of young women in surfing, kayaking, canoeing, rowing, swimming, snorkelling, windsurfing, diving and sailing. A similar New Zealand publication, 'OutFront', has been distributed to all secondary schools nationwide to encourage girls into physical activity.
includes some information and articles on outdoor recreations amongst a more general offering of sports, health and fitness material. However, it is too early yet to know what effect these magazines and newsletters have on behavioural patterns and attitudes.

There is some evidence in this discussion of images of outdoor pursuits that outdoor education, because of its heavy use of outdoor pursuits, is male-centred. It is general images of men and women in society, though, rather than specific images of outdoor education, that cause this. Outdoor educators, I believe, have a challenge here in providing outdoor programmes that work toward equitable gender relations. I suggest that outdoor education, like physical education (Kirk and Tinning, 1990), has generally been viewed as a non-political enterprise. If it is to take up the challenge set out above it will have to operate a closely monitored politic based on the principle that girls and boys should not be excluded from any activity because of their gender.

Peer Effects

As previously discussed above in relation to body image, peer attention could be influential in the participation of some students if it caused embarrassment. Henrietta expressed the problem of peer attention without reference to body image but did mention the issue of gender -

You know - sometimes if you get stuck on things it can be really embarrassing when people look at you ... (Henrietta, 5).

... especially if they have already done it and everybody else has done it and there you are botching it up, it can be quite embarrassing ... maybe it has something to do with ... being co-ed and all the boys there ... at girls high at this camp it wasn't a problem at all ... (Henrietta, 6).

This particular student had attended camps with both a co-ed and a single-sex school. Here she suggests that the effect may be exaggerated if boys are present but does not elaborate on this.

Interview results indicated that for some girls in this study knowing that classmates had difficulties or were fearful during activities increased the apprehension they felt about
their own participation -

I never thought I could do that abseil, especially when everyone comes back at lunchtime telling everyone how scary it was and that (Yvonna, 5).

[At] abseiling [I was scared of falling] ... especially when I saw this girl in front of me slip ... on the edge (Petra, 3).

Similarly, on the tyrolean traverse -

... everyone was saying the ropes aren't safe, and they're not very thick and you'd fall and everything ... it was just scary (Wini, 2).

For Siobhan, the negative influence of a class-mate falling off part of the confidence course led her to abandon the activity, as this statement indicates -

I did the first bit [of the confidence course] and when Sarah fell over I didn't do any more because it was slippery (Siobhan, 3).

This negative influence was greater than the positive influence provided by other class-mates who were "cool" as "they were doing all of it" (Siobhan, 4).

Accidents and injuries seemed to be a powerful form of peer influence on participation among the girls. For example, on the confidence course one girl fell from the rope swing and hurt herself. Several other girls reacted by turning away, and saying "I'm not doing that." or "That's too dangerous." (obs log, p3). In another incident a girl injured her knee (which was already weak from pre-camp injury) on the rock-climbing wall, leading three other girls to be less eager to try the climb she had been on. However with encouragement and instruction in correct techniques they all succeeded on the climb (obs log, p13).

Reluctance to participate in activities in which peers have just experienced failure, or been injured is understandable to the extent that most people are concerned enough for their own safety to avoid potentially harmful situations. Part of these girls non-participation after accidents or injuries, however, may be caused by a failure to recognise their own individual strengths. It may have been that when a peer had difficulties with an activity other girls thought that they, too, would fail simply because they were also girls. One student, however, did
view her success or failure as a reflection of her own skill. Speaking of her kayaking (canoeing) experience, Ella stated -

I felt if I fell out it would be my fault by rolling over and that so I had a lot of fun canoeing. I knew it was me if I'd fallen out, it would be my fault so I felt OK. (Ella, 8).

Many of the girls, then, appeared reluctant to take risks. This supports the literature which suggests that personal risk-taking is not considered appropriate for women (Blum, 1980; Norwood, 1988). The issue of risk has been discussed in the section dealing with self-confidence and clearly there are multiple relationships between the themes under discussion here. The main underlying issue appears to be the effect of differential socialisation on girls and boys which causes limits to be placed on the expectations for girls, in this case in physical activities outdoors.

The effects of accidents, injuries and perceived risk worked in more than one way. Not only were some girls put off participating when they witnessed others in difficulty, but when peers did not attempt activities, some students seemed to feel that the pressure was off them to participate too. For example, on the confidence course, Christa felt "sort of helpless" when she decided not to attempt certain elements, but she stated that "most other people wouldn't try them either so it was OK." (Christa, 3).

Once the activity was completed, though, a different type of peer influence came into play. Not succeeding in an activity was observed to result in negative experiences for some girls once groups had returned to the centre and began talking over the day's activities. One girl in particular reported to me that after failing to successfully descend the whole cliff during an abseil session she felt uncomfortable around those who had succeeded-

They all talk about it and you feel left out. (obs log p9).

Others had similar experiences -

PL: If you didn't do an activity how would you feel among your peer group?

Oh, quite left out ... they talk about it and what they've done, and I wouldn't be able to say what my experience was like (Ella, 11).
Well, like my friends told this girl I didn't do much of [the confidence course] and she said 'Didn't you do it?' sort of thing, and I felt like, you know, really low. I thought 'I didn't do it'. What's everyone going to think? (Michaela, 6).

This student felt there was pressure on her and other students to participate in activities and that this was both "good and bad" because "it kind of pressures you into doing things but you feel really bad if you don't" (Michaela, 6).

These sentiments are supported by the view of two girls who made these comments about people who did not attempt activities -

I think they were stupid, really, they were wasting a chance ... just cos they were scared ... (Teresa, 3).

I thought they should have done it, ... and I thought they were missing out on something really good (Odette, 4).

The negative experiences girls had when peers put them down for not succeeding in activities may or may not have affected further participation. The data gathered does not give an indication of a trend either way. However, one can imagine reluctance by girls to be further involved in activities which leave them feeling shunned by their peers. Activity programming which can be responsive to the skill and confidence levels of all girls would again seem to be required before improvements in female participation rates occur.

Peer behaviour at camp was reported in interviews to influence participation in other ways, too. For some, seeing peers respond positively to activities influenced them into participation -

... abseiling was alright because I sort of know everyone else is happy about it (sic). (Teresa, 4). I really wanted to do it this time cos everyone said it was so good. I just sort of thought well I've got to do this ... everyone else was doing it so I might as well (Teresa, 2).

Everyone who'd already been [abseiling] said it was really good, and I just wanted to have a go. Because I knew I'd be disappointed if I didn't (Odette, 3).

Peer role-modelling is being reflected in these comments. There is little indication of the relative importance of this
form of role-modelling compared to adult role-models, apart from the fact that peer failure to perform was remarked on more than the supply of competent female outdoor pursuitists. The difference in number of comments may result from the fact that peer performance was more readily observable than adult performance. In any case, pre-camp preparation for activities may reduce the occurrence of poor student performances in activities thus reducing the effect of these performances on others.

**Teacher Influences**

Nine observations were made relating to teacher influences on girls' participation in outdoor pursuits. Throughout these observations I was made aware that staff approaches to students and to outdoor education were varied and that students may have had different experiences of camp partly as a result of the staff present. None of the observations were of direct sexism by teachers such as that observed by Abigail (1984) in physical education. This could be an effect of being observed but since no examples of direct sexism were raised by students either, it is doubtful.

Teacher management of girl-boy interactions were seen to be a barrier to enjoyment of camp by some. Most noticeably, evenings at the centre when staff took measures to ensure girls and boys stayed in their own dormitories and overnight camp created problems -

The teachers were a bit strict ... they left tins outside the [dormitory] door so that they would fall, ... and they listened at the door ... (Petra, 8).

[the campout] wasn't as good as I thought it would be, the teachers didn't trust us. They wouldn't .. if us girls went into the boys tent they'd listen outside and we weren't doing anything wrong, just talking, ... it was really annoying (Odette, 6).

While it is concerned with gender relations, this issue has more to do with the legal responsibilities of staff at camp than it has to do with the ways girls encounter outdoor pursuits so it will not be pursued further here.

In general, teachers appeared to exert strong influences on participation by students because the usual teacher-student power relation found in schools (Humberstone, 1987b) appeared
to occur on these camps as well (Obs log, p7). Evidence of teacher influence came from several students who were concerned that they would be "made" to do activities by the teachers. When asked if they felt they had to do activities or if they felt they had a choice about participating, one group of students replied -

Have to! (obs log, p10).

The teacher student interactions I observed suggested to me that if a teacher 'encourages' a student to try an activity, the student responded as though they felt they had to do the activity.

Individual interviewees also suggested that they thought teachers would make participation in each activity compulsory but also told me that this did not always occur -

... I didn't know if the teachers would make us do something like abseiling but none of them did so it was quite cool (Siobhan, 3).

PL: Do you think there are girls who would not go to camp because they are worried about the activities?

Yeah. But most of them do go but ... they think 'oh they [teachers] can't make me do it' ... (Ella, 5).

Everyone else does it and the teachers sort of, they really want you to do it and everything, and the teachers make you kind of, you know, like you have to do it. ... They kind of really want you to do it so you do ... I don't really mind, 'cos Ms P.... really wanted me to climb up the ladder and I didn't want to do it but I did it anyway. Then I did the whole thing so I'm quite happy she made me do it. (Michaela, 10).

Michaela went on to explain the difference between peer pressure and teacher pressure-

... It's kinda different. ... They [peers] kinda accept it if you don't do it but a teacher ... they can really try to get you doing it (Michaela, 10).

She also hinted at the way in which some students resist
teacher pressure-

Well I knew that we would probably be pressured into doing things I don't want, so I thought "God, I hope I can get away without doing everything". Even though I did every thing but I sort of thought well, I suppose I can get out of doing some things I don't won't to.

In Humberstone's (1987a) research, the approach to outdoor activities used by teachers was seen to differ from that of classroom style instruction. Teachers in her study were professional outdoor educators, whereas the majority of teachers in this study were classroom teachers. It may be that the style of interaction with students used by specialist outdoor educators, in comparison to specialist classroom teachers, is one which tends to facilitate voluntary student participation and less formal teacher-student relationships. The results above indicate that some students feel compelled to participate in activities and for some this is a negative aspect of outdoor education. For others, though, the same feeling of compulsion was appreciated once successful participation had been achieved. Further research into styles of instruction in outdoor education is needed so that the most appropriate models can be employed for girl students.

Role modelling was the subject of four observations. For one school it was common for form teachers, who act in an advising and liaising capacity for the class at school, to accompany their class on camp. In one case a female form teacher did not attend camp apparently because she did not like outdoor pursuits or camps. The other classes at camp that week had their form teachers present, some of whom were women (obs log p10). There was not the capacity in the methodology to test the significance of this observation for the girls in the class without the teacher. It is possible, though, that they were negatively influenced toward outdoor activities to some extent by the fact that their form teacher did not value the activities and the camp experience highly enough to attend.

The role modelling effect of teachers came to my attention again later in the study during a session on the confidence course. Staff who are responsible for physical activities at camp are expected to introduce the activities to students, explain the techniques to be used, encourage participation, and ensure participation occurs safely. The two female teachers who were the staff responsible for the confidence course session mentioned above had twelve girls on the course. One of
the two teachers traversed the first five elements of the confidence course, and then stayed on the ground encouraging the girls from there. The other teacher did only the last of the twenty-two elements, a swing into a net (obs log p15). The majority of teachers on the girls' schools camps were women but, in all schools, it was noticed that it was often men who led the kayaking, abseiling and rockclimbing activities. The abseil site was a venue where the absence of skilled female staff was particularly noted (obs log p18).

In all of these observations it appeared to me that the low level of participation by female staff members constituted less than positive role-modelling of women in outdoor activities for the girl students. If girls tend to lack self-confidence in physical activities (Corbin, 1984), especially those seen as being more appropriate for males such as some outdoor pursuits (Lirgg and Feltz, 1989; Dearden and Andressen, 1987), then it is particularly important for their role-models in those activities to be women with confidence and competence.

The effect of teacher competence and confidence on students was observed twice at abseiling sessions. In each case it was male teachers who were involved but the effect is still of interest. Some of the girls involved in these co-ed sessions were wary about abseiling after one of the two teachers present let it be known that he hadn't operated an abseil system "for a year or so". Several students, especially girls, moved back from the site a few steps (movement prevented me from counting how many students were affected) and their distrust was evident in their comments -

I'm going with that other man, then (obs log p14).

I'm not going down there. That's our teacher ... and they haven't done this for a year. How do they know what they're doing? I wouldn't trust them (obs log p19).

It's boring [camp]- and none of the teachers know what to do ... (obs log p19)

One of the purposes of school outdoor education is purported to be the development in young people of self-confidence (McRae, 1990; Ewert, 1989) but lack of confidence in their teachers is not likely to facilitate this development. Further, teachers who are less confident in their own abilities in outdoor education were reported by Humberstone (1987a) to adopt more formal approaches to the teaching of students. As mentioned
previously, teacher approach may contribute to the quality of the experience students perceive while at camp.

One of the reasons for female staff on school programmes to model low levels of participation was suggested to me in conversations with various women teachers who were reluctant to attend camp because they felt that would not know what they were doing when they got there. It cannot reasonably be assumed or expected that all class teachers of students taking outdoor education will have experience in outdoor pursuits. However if these teachers are expected to attend camps they should at least be well enough informed and prepared to able to fulfil their roles with confidence. The issue that arises from this is the need for staff training, perhaps especially for female staff members, as Burrows (1985) and LaBastille (1980) suggest. It may also be pertinent to reconsider the types of activities offered on camps. Activities that are matched with staff interest and expertise may provide more positive experiences for students than those activities which are clearly beyond the skill level of the teachers. There may also be a need to supplement school staff at camps with some specialist outdoor educators, including women. Competent female role-models have been utilized to effect in outdoor education in the past (Green, 1987) and can help perpetuate female involvement by the development of leadership qualities by women (Humberstone, 1986a).

In three of the schools, teachers and groups of students shared cooking duties during the week. In the fourth, a co-ed school, two women cooked all the meals with help from senior students (boys and girls) (obs log p1). Neither of the two women took part in any outdoor activity, and some senior students participated to a limited extent as kitchen duties allowed. To me, this situation in the fourth school had potential to exaggerate the marginal position of women in outdoor activities by modelling a traditional arrangement of labour division. Its effect was softened by the presence of senior boys from time to time, and countered by other women who did participate outdoors at some of the school's camps, so it may not be as important as it at first seemed. No mention was made of this aspect of staffing by the students and the methodology employed did not allow a fuller investigation of it. It seems reasonable to me that, in the interests of providing positive role-models for girls that issues such as this are considered when staffing arrangements are made for school camps.
Language use was also noted as an area where teachers could potentially influence girls. Non-inclusive language is a vehicle for sending messages about who is important and who is considered part of the action (Miller and Swift, 1981; Spender, 1980). Of the teachers I observed at camp, one was heard to use what I considered inappropriate language with a co-ed group during a morning bush walk. The staff member concerned (a male) was frequently present at camp. He described large trees as "big fellas", spoke only of male pioneers in the region, referred to kiwis and bellbirds generically as "he" and provided this commentary on local bird life -

... the grey warbler, he goes likes this (whistles) ... the shining cuckoo comes in and listens for where the grey warbler is nesting and then kicks his (warblers) eggs out of the nest and lays his own eggs in it ... (obs log p12).

These examples may not be typical of all teachers, nor all males, who attend camps but are indicative of the subtle ways in which girls are sent messages about their place in 'the great outdoors'. Together with the images of outdoor pursuits discussed above it provides evidence that outdoor education can become more 'girl-friendly' than it currently is. That most girls do participate in outdoor activities at camp may be a measure of their resistance to subtle social conditioning, or it may be a sign that other more powerful influences are at play that positively influence them. Whichever, there is enough evidence in this report, I believe, to support action which promotes the interests of girls in outdoor education.

Some students felt that their teachers had been encouraging and supportive during camp activities. Una (2), for example, told me that although she was fearful of abseiling, the teacher present helped to overcome her fear in order to participate. Ella (5) similarly had felt "a little nervous going to camp" but reported that her teachers reassured her. At the abseil site, teachers "sort of talked you down if you were scared" which Michaela (7) "thought was good". Kae also appreciated this teacher support -

Well Mrs M...... was up there and she told me what to do ... (Kae, 8).

Asked how the abseil experience felt, another girl responded -

It felt good. I enjoyed it. I thought I'd feel nervous because I usually do if I'm doing things I haven't done before. I was a little bit nervous, just at the [edge], but it
was good having him [teacher] there ... they talk you down from the top so it feels good (obs log p14).

For one girl it was a parent at the camp who provided support -

I got over [the confidence course] because there was a particular parent who had decided she was going to take me right round the whole course if it killed her, and that really helped. I really enjoyed it after that ... We'd just go as a pair ... and she just talked me over the things (Henrietta, 5).

This particular example also illustrates the positive effect of full participation by an adult woman on a girl student. Teachers, then exert both positive and potentially negative influences on students during outdoor education activities. Measures taken to reduce the negative influences would enhance girls experiences of outdoor pursuits thereby acting to increase the probability that girls who wanted to would take up outdoor pursuits recreationally.

**Cultural Influences**

Three observations were made that seem to reflect cultural differences between some student values and needs and those predominant at camp. These 'cultural' observations may not necessarily explain student behaviour completely but may have some explanatory power. One occasion a Maori girl sat aside from the main group throughout the tyrolean traverse exercise in the bush and did not participate. When asked what the problem was she replied "I don't like this ... being here ... this place, the bush." A staff member later suggested to me that there may have been a strong cultural or tribal reason for the student feeling uncomfortable in the bush (obs log, p11).

Two other observation involved Asian students. At one of the camps were a number of Kampuchean girls who expressed their unhappiness at being at camp. They reported that they disliked the rush of activities, getting up early, and the physical effort required in activities. They felt that heir dietary tastes were not catered for and they seemed to have difficulty approaching teachers about this issue (obs log, p13). One other Asian (Malaysian) student came to my attention when she exhibited obvious reluctance to enter the bush during a bush navigation exercise. Two female Taiwanese students on the same exercise did not appear to experience problems with being in
the bush (obs log, p16). Further evidence would illuminate the significance of these observations.

Programming

Programming refers to the way in which activities are presented to students, and the nature of those activities. This is an issue that was not raised by the literature reviewed and judging by the results below it is one worth following up. Three major issues have been drawn from eleven separate observations of programme features influencing girls' participation. The first issue concerns activity organization, especially in terms of equipment, timing, and progression sequencing. At abseiling, despite feeling as though she had plenty of support and encouragement, one girl would not descend down the vertical face of the cliff. When asked how the abseil could have been made easier for her she replied:

Well, if I could do it in an easier place for a start, then I think I would have done it (obs log, p9).

Girls who did have the option of an easier route appreciated the choice and the chance to experience success -

It just seems much safer doing it on grass, things like that. The rock just seems so freaky ... (Odette, 5).

I felt better going down the bank that I actually tried because I don't really like abseiling [and] I wouldn't have gone down the cliff (Siobhan, 4).

In the future this student thought she would:

... probably do the abseiling, I mean I wouldn't actually go down the cliff, but I would do something smaller ... (Siobhan, 4).

Another two girls were observed to have similar difficulties due to their "fear of heights". When given the opportunity, however, they both succeeded on a shorter, less vertical abseil. One girl then stated that she felt she had "done something, rather than nothing" and the other returned to the cliff site where she descended with an instructor accompanying her (obs log, p3-4).

Organisation of time for activities attracted comments from some girls. For example, at the confidence course two students
seemed to feel that there was insufficient time for them to try some of the elements -

If I went like just with my family or something I might have had a try at it you know, just at my own time but everyone was going ... and I just wanted to take my time ... (Michaela, 5).

[I'd like to] go through the confidence course again, with more time (Petra, 7).

... [I didn’t do] the telegraph pole - because it was really wet ... and it’s slippery, ... and another one I didn’t do because everyone was leaving, and it would have taken too long [triangles]. Because I wanted to get to the next one and have a go on it - the swing into the net ... (Petra, 4).

For many students, especially those girls who lack confidence, it seems that it is particularly important to offer a planned sequence of activities with adequate time available, through which confidence can be built. At the same time activities offered need to be pitched at a level where students can experience success. Kayaking sessions provided evidence of this need. During kayaking sessions it was often girls who made comments such as -

My shoulder is sore.

This is so dumb. I can’t go straight.

I hate this.

The kayaking venue is a tidal stream and estuary, often exposed to wind and at times students are required, by the nature of the programme run by one school, to paddle upstream. It seemed to me that strength would be an asset in learning kayak skills in such conditions, and some girls of fourteen may not have the necessary physical strength or stamina to paddle easily (obs log, p2, p15). There was often not enough time to implement a suitable skills progression for kayaking (obs log, p6, p15), and the water conditions led to some frustration among novice paddlers (obs log, p2). For one session the 'skegs' (fin-like attachments on the sterns of the kayak for tracking) were left behind when the gear was collected making the session even more difficult than it would otherwise have been for struggling students (Obs log, p2). The following excerpts from interview
transcripts are illustrative -

... like it was really narrow and everyone was bumping into each other, you couldn't really avoid it because everyone bumped into you or you bumped into them, and everyone was getting really moody with everyone, it was quite hard but when you got into a wider space it was OK. And then you know you could do more, you could make mistakes more and you wouldn't hit anyone. But um when it's all close together you really sort of pranging into each other and it's hard steering ... (Michaela, 5).

... when I was out actually canoeing, I was thinking 'I never want to do this again' because it was hard and we didn't have the stabilizers on the back of the boat, and we were turning in circles all the time, and I was sort of thinking 'I want to get out of here' but now when I look back on it it wasn't that bad (Gaby, 5).

Pre-camp preparation in the way of gaining familiarity with the activity and learning introductory skills would seem to be a useful precursor to the kayaking session girls encountered at camp. The merits of pre-camp preparation have been discussed elsewhere, and are perhaps particularly important for girls who are less physically able, have lower levels of self-confidence, and who are more likely to become frustrated with activity when difficulties occur.

Unpleasant conditions was the second issue noted and these were experienced during two kayak sessions. Rain and an incoming tide were experienced on one occasion while paddling down the estuary, though it was warm and there was no appreciable wind (obs log, p15). On another occasion, students capsized into cold water on a cold day. During a different activity, the tyrolean traverse, I noticed that some time was spent by the students waiting for the equipment to be set up and the activity to begin, during which they looked bored and cold. On one occasion when the weather was inclement, the abseiling session was cancelled but no alternative activity was offered the students in the group affected.

Once again, greater flexibility in the types of activities offered students seems to be needed in order to prevent students from being put off activities because of physical discomfort during introductory sessions. It may well be that the actual venue used for this level of outdoor education is not appropriate. The likelihood of cold, wet weather at Tautuku is reasonably high therefore the numbers of days on which
pleasant outdoor experiences can occur is limited. I am not
suggesting here that TOEC should not be used at all, but that it
may be more appropriately used by students who already have
some skills in outdoor pursuits and who are therefore more
likely to respond positively to activities despite inclement
conditions. Introductory sessions may be best undertaken at
alternative venues.

Finally, the general organisation of activities appeared to me
to operate against the stimulation of interest or participation
by reluctant girls. In general, groups of between twelve and
twenty-four operated on activities when it seemed that
smaller groups would have been more suitable. Humberstone
(1987b) stated that teacher-student ratios of 1:8 or 1:10
appear to benefit girls in outdoor pursuits because they receive
more individual attention which bolsters confidence and
encourages participation. Little group development appeared to
occur and I observed that few opportunities for leadership and
decision-making were offered the students. One girl expressed
to me her frustration with "not being allowed to do things". She
was "brassed off" at "not even being involved in making the
meals ... they don't even trust us to do that!" (obs log, p18). She
and her friends told me that they wanted to be allowed to do
things for themselves (obs log, p18). Two interviewees were
of the opinion that student-lead activities were preferable to
teacher-lead activities -

It is more fun with a group without a parent because like
you take control and you just find your way and everything
like when you are with a teacher they actually take
control and they say go this way ... (Kae, 11)

... at camp it was really fun ... especially camp out. That
was really good. I liked that ... [You] had to cook and
everything for yourself, and that was really good ... we
just all had to cook, took us a real long time and we had to
wash our dishes and that at the beach with the sand sort
of .. it was sort of like really being outdoors sort of. It
was good I liked it (Michaela, 10).

Programming of activities which foster student leadership and
decision-making is another avenue for the development of self
confidence in girls.

Mention was made by one student of the need for optional
harness systems on some elements of the confidence course so
that tentative students might feel reassured and attempt more
activities (Ella, 12).
During each of the outdoor education camps that I observed there was an emphasis on structured activity. However, at least one student appreciated time that was not structured -

I think the best part of the whole camp was not actually something anyone organized and that, they had a camp fire to heat up the sauna things and um after we'd all had a sauna there were a whole lot of my friends, we were all sitting around the camp-fire singing songs and everything, that was really the highlight of the camp for most of us (Henrietta, 9).

For this student it was not the outdoor pursuits that were the most memorable events of the week and the importance of unstructured time and simple activities may often be overlooked in outdoor education. There is a message here for programmers of outdoor camps that could well be heeded if positive and enjoyable outcomes for students are sought.

Environment

Aspects of the physical environment which were observed to elicit negative responses from the female students were mud and cold water. Mud was mentioned frequently, often negatively, as (Wini, 5) and others show -

Just the dried mud on you. I don't mind getting dirty cause you have got your old clothes on and all that but it is just that I don't like dried mud on my legs and things because it feels funny. Because you couldn't really have a wash when you are just going to carry on and slip over in the middle of the tramp or something ... (Nita, 5).

I don't like getting dirty and that but when I walked through the mud and that I liked it was really cool. It's not the fact of actually getting dirty its the staying in the clothes ... I just hate being in dirty clothes ... (Kae, 5).

... often you are all sandy, mucky ... hot and sweaty - yuk. Can't have a shower ... the first day, ... we walked right along the beach, right to the other end and then up through the marshy bog and we didn't get back for tea until about 8 o'clock and we were so tired. When we did get back tea wasn't ready, someone had to make it and that was really uncomfortable (Josie, 4).
Despite this statement, Josie stated that "the main thing" was to be able to "wash [her] hands afterwards" and "[e]ven on the out-camp that was alright" (Josie, 6). Siobhan, too, made contradictory statements about the muddy conditions-

... I didn't want to get muddy. In case of worms sliding all over me or something. But it was quite fun because everyone was racing back to get to the showers. We got muddy all the time it was quite good fun (Siobhan, 5).

On another two occasions students responded negatively to mud, with one student stating that she would not want to do the same activities again if they involved getting muddy (obs log p2, p3). For some of the girls their first camp activity was a walk along a track at times knee-deep in mud. Responses to this were sometimes positive with comments such as -

When you go on the Tram Tracks you forget about what you look like and just have fun. It doesn't matter what you look like and how your hair's done on that camp.

... after you've been through that, you can do anything! (obs log, p4).

Other found that the camp environment was not as bad as they had imagined it to be -

I probably didn't know what it was like. Probably going on all the walks and ... just being out there ... I liked it, it was fun (Rangi, 4).

Well I didn't know really where we would be canoeing like it wasn't that bad but I thought it could be ... you know, really grotty or dangerous or something. When I got there and saw it it was OK, there was everyone around and it wasn't really that deep and it was just all boggy and that. (Michaela, 3).

Cold, murky water, with protruding logs and sticks greeted the girls at kayaking sessions. There was also smelly mud to traverse before launching one's kayak if the tide was low. Several girls were not as pleasantly surprised as Michaela (above) and responded to this situation with comments such as the following -

Oh, gross!

Is this it?
Do we have to get in? It's gross.

Once again some girls also responded positively despite the conditions-

Once you get in there and do it you realise it's not so bad and getting wet and dirty and that isn't so bad - it's no big deal to get dirt on you and that. You just go and wash it off anyway (obs log, p3).

These positive comments support my earlier statement that outdoor education camp can be a venue for girls to throw off the veil of socialisation which tells them not to get themselves dirty. An alternate explanation may be that these particular girls were not influenced by such social influences anyway. One influence no girls failed to notice was that of the weather at Tautuku. Given its reputation for being cold, windy and wet, those students who struck a fine week were appreciative of the added bonus. Those who struck a bad week verbalised their feelings for the effects of the weather on their participation as follows -

Abseiling. I had sore arms that day so I thought I was going to fall, and I didn't do it. I was going to, I had my harness on then I took it off ... it was raining and it was wet and also my arms were really sore and I couldn't close my hand. So I didn't think I'd be able to hold on (Petra, 3).

[Abseiling] sort of freaked me out the second time I did it, I did it when it was really windy and raining and when you sort of get blown about everywhere and then I went up on that Thursday afternoon and my boots, I was wearing my Mum's boots and they are a bit big on me but I was walking down and I went splat into the rock. Yeah I just got over the edge and bleugh! I was a bit shaky ... (Christa, 3).

... the weather, it should have been sunny ... it was raining all the time and that made it difficult to look forward to what we were going to do when you knew you would get soaked (Siobhan, 10).

Rain seemed to cause problems on the confidence course in
... it was a shame it was such a wet day so it was really hard doing it in the rain ... it wasn't raining steadily but it was really wet and slippery (Christa, 3).

I would have done some [of the confidence course] because it wasn't that hard but it was too slippery and thought I would fall over. (Siobhan, 3).

The rain. Sometimes you get a bit down because you're so cold (Gaby, 3).

Out-camp also caused discomfort for some students due to damp conditions -

I didn't really enjoy sleeping on the floor getting soaked because we had our ground sheet thing except you knelt on it for two seconds and the water would seep up to you. The teacher ... she got a totally wet sleeping bag so we had to put all our parkas on the floor and we didn't have any [sleeping] mats ... it was freezing to death ... (Christa, 6).

Gaby felt that the combination of the difficulty of activities and environmental effects may have caused other students to be deterred from future participation in kayaking -

Yeah. Because it was such hard work. We were going up stream and it was cold and wet ... But it was worthwhile ...If it was easier it would have been good, it was just that every time you put your paddle in the water you canoed in a circle (Gaby, 6).

One way of interpreting these comments is to take them as a criticism of outdoor programmes which did not have either the resources to equip students to adequately cope with wet conditions or the flexibility to offer alternative activities on wet days. However, there is a limit to the number of activities one can do on a wet day and some groups are at Tautuku for a wet week! Therefore, once again there seems to be reason to believe that TOEC is not the most appropriate venue for this level of outdoor education. At the very least it would seem that more suitable venues for some activities at Tautuku would be beneficial to beginners in outdoor pursuits. A warm, indoor kayaking pool, an indoor bouldering facility and a sheltered abseil site would allow positive experiences to occur in a range of activities despite the weather.

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On some occasions camp programmes were altered to take the weather into consideration and on these occasions some girls had alternate activities to do but others didn't. Wet weather sometimes meant that activities such as abseiling were not attempted at all. This, in a way, was a good thing because girls were not therefore deterred from participation by a cold, wet experience at camp. Fine weather was seen to be a positive influence on participation -

... you can get out and do more things instead of being sort of stuck indoors (Petra, 6).

Three students reported feeling very positive about the outdoor environment they encountered -

The place is just so gorgeous, in the bush and everything. Our cabin was really nice, everyone was really friendly and that. It was just the overall atmosphere if you like (Henrietta, 8).

I really liked the tramping and the coastal walk, that was really fun. Everything I liked. Walking along, talking, looking over that big drop into the water, that was really neat, breathtaking ... just the scenery and everything was really good too (Gaby, 7).

It was quite fun, and interesting and I really liked the bush. It was really nice ... the trees and the sound gave me a nice feeling ... it reminded me of sort of peace. You heard the birds and people enjoying themselves ... (Wini, 1).

For these students the outdoors was not an inappropriately gendered environment. There was no real evidence in the results of this study to suggest that students felt that the outdoors as an environment was a place of male action (Cameron, 1989). It was the activities rather than the environment itself that was gendered. Norwood (1988) and Bell (1989) both suggested that environments do not have meanings of their own. Rather, meanings are attached to them by their users. The meanings these young women attached to the environments they encountered reflected their positive experiences outdoors and are likely to feed their desire for future participation in outdoor pursuits.

In answer to research question eight, there are factors that occurred during the outdoor education programme that
negatively affected girls in their participation in activities. Not all girls were affected, though, and withdrawal from activities did not always occur. The factors were lack of self-confidence in the girls themselves; the effects of disparagement from boys in co-ed groups; lack of information about camp; lack of skill and knowledge in dealing with menstruation in the outdoors; the effects of poor body image; the effects of gendered images of outdoor activities; teacher influences; and problems with programming of the activities.

There were also a number of positive influences on girls that occurred during the camp week, including improved self-confidence after successful participation in activities; enjoyable participation despite disparagement; enjoyable participation by some despite menstruation; positive effects of peer participation; encouragement from staff; and enjoyment of being in the environment at Tautuku.

Summary

Results from the quantitative data gathered constitute a general vote of confidence in outdoor education and outdoor educators. Qualitative analysis revealed that in general girls enjoyed their outdoor education camps, but that there were some aspects of outdoor education that could be improved for girls. This part of the research methodology produced the most useful information about why girls behave in particular ways in school outdoor education. It was also the more enjoyable aspect of the data collection.

Judging by quantitative results alone, girls are not deterred from participation in outdoor pursuits by factors occurring during or before their school outdoor education camp. Girls' attitudes toward outdoor education before camp were generally positive. Girls' attitudes toward outdoor education generally became more positive after camp.

Girls' self-esteem was in a large majority of cases either average or high before going to camp. After camp, overall self-esteem was very slightly higher. There were no statistically significant relationships found between self-esteem and type of school (single-sex or co-ed), socio-economic level, or previous experience in outdoor activities. Similarly there were no statistically significant relationships found between attitude to outdoor education and type of school, socio-economic level, or previous experience in outdoor activities (Qu. 7).
The results suggest that the girls in the sample were fairly representative of fourth form girls in general, that the girls were generally positive about outdoor education and had moderate to high self-esteem. There was little evidence in the quantitative results to support the notion that girls are put off outdoor pursuit activities by their school outdoor education camps.

Evidence for masculist underpinnings of outdoor education appeared in the form of observations and interview responses regarding menstruation, self-confidence, and body image. Lack of self-confidence, scarcity of appropriate role models, poor body image and menstruation are some of the barriers that have been identified to girls' participation in outdoor activities.

Improvements to outdoor education programmes that can be made to enhance the experiences of girls involve changes to programme structures to take account of girls' levels of self-confidence, their physiological functions such as menstruation, and the effects of socialisation on their motivation to participate.

Positive peer and adult role models, a programme that takes account of girls' needs, positive images of outdoor activities for girls and strategies which enhance the self-confidence of girls are seen to be factors which support positive outdoor pursuit experiences in girls.
Chapter Six
Reflections on the Methodology

This research was undertaken unprotected from the influences of everyday life. A variety of factors therefore, influenced the methodology employed, and further factors are worth noting because they influenced the ease with which the method could be employed. To look first at the factors which influenced the methodology directly, sample size was clearly affected. Reduction in the sample occurred before data collation when students were not present for each part of the study; that is, at school for the biographical questionnaire; at school for the pre-camp questionnaire; at camp; at school for the post-camp questionnaire. Additionally, interviewees could also be absent on the day of their interview. Efforts were made to 'catch up' students missed on one visit to a school by revisiting schools, but there was a limit to the amount of time available to do this. Further frustrations included two girls forgetting to come to interviews (these were rescheduled); managing to fit interview times in with both student timetables and staff time for liaising with the students; and finding time to write up and collate data amidst the flow of camps and other obligations.

The random sample of girls was drawn from class lists. Initial difficulties with the class lists were that often the lists were not up to date. There were cases where students on the lists were overseas for the year, or had left the school previously. There was one case where although I had checked the gender of students with unisex names at the school office, I still had a boy listed in my sample. In other cases some students actually in the class were not listed on the class list I was given, some students were in the class but were working on work experience programmes and were not present at school at the usual times and a small number who attended camp were on specialised programmes at school and therefore not attached to any particular form class. It would have been more useful to compile the class list from individual class teachers' rolls which are updated daily than to use the lists held in the school offices. The staff at all the schools were always considerate of my needs and very helpful so together they and I sorted out these types of problems to a satisfactory conclusion. In some cases, of course, the conclusion was that certain students were unavailable for the study.

In the sample were six Asian students who were recent arrivals in New Zealand and whose grasp of the English language was limited. These students could not complete the questionnaires without the assistance of either myself or the liaison teacher. For each student
the questions and statements had to be read and in some cases paraphrased, which may have introduced an element of teacher/researcher influence into their answers despite our careful choice of words. This situation was not one I had envisaged beforehand but is one to consider in future studies where ESL (English as a second language) students or students with disabilities are likely to be sampled.

The schools on which I based my study I found to be large, complex and busy places. Finding quiet, private places in which to conduct confidential interviews was difficult. At some times, there were no such places available at all so interviews had to be scheduled to suit room availability to some extent. Venues ranged from a proper interview room to a store-room behind an assembly hall stage. Just getting to the interview was a challenge for me sometimes as I negotiated my way through seemingly endless corridors in similar buildings. Once again staff and students at each school were always helpful.

The measurement scales themselves raised methodological problems that were not highlighted by the pilot study. When filling in the self-esteem scale, students commonly queried the meaning of the first item "I feel that I am a person of worth". When it was paraphrased as 'I feel that I am worthwhile as a person" they appeared to understand and continued with the questionnaire. This may indicate that this particular scale is not as suitable for this group of students as I thought, and that a modified scale may have been more appropriate.

Similarly, three items in the attitude to outdoor education scale appeared to be ambiguous or problematic. "Getting dirty was uncomfortable" assumed that the girls wouldn't like being uncomfortable from being dirty - in fact it was obvious from observations that some girls thoroughly enjoyed it! Second, the statement "I will be able to look after myself at camp" may have been interpreted as an indication of whether or not the student would cope with daily tasks in the camp environment, or it may have been interpreted to mean that the student would not need teacher help in activities. Finally, "I did fall out of my canoe" assumed that the students would feel negative about falling out, where in fact they may quite enjoy it. These issues highlight the need for verbal feedback from the pilot sample so that interpretations can be more adequately gauged.

Questionnaire D was administered to elicit information from girls who did not attend camp on their reasons for non-attendance. In retrospect higher quality information may have been obtained if I had interviewed these students instead of using a written questionnaire. However, some teachers suggested to me that getting accurate information from
the students about why they did not attend camp may be impossible because they may be too embarrassed, or too proud, to admit to the real reason (for example in cases of menstrual or monetary reasons respectively). The choices of response on the questionnaire were felt by these teachers to allow students to hide real reasons - for example "parents won't let me" could be used to mean "it's too expensive". A philosophical difficulty I encountered was that of withdrawing students from class to administer questionnaires and conduct interviews especially when the same subject was commonly targeted. I omitted to note the frequency with which students were withdrawn from particular subjects but I did note that Physical Education was a popular choice among teachers. In some cases it was an understandable choice if the outdoor education camp was part of the PE programme for the students, but in many cases it seemed that PE was felt to be less important than other subjects. I was not comfortable with this process and if I had foreseen it I would have tried to prevent it.

The emphasis in this study was on factors in school outdoor education programmes that may deter girls from participation in outdoor pursuits. While I think this sort of information can help improve outdoor education for girls, in hindsight it may have been better to have collected data on what encouraged girls' participation as well. Some data of this nature was collected but it was not a major objective of the study. One student reported to me that she thought only collecting data on deterrents was "weird" because "most girls aren't put off" outdoor pursuits and therefore I was not getting a very clear picture of the topic.

Feminist research methods seek to enable research to be undertaken while at the same time serving the interests of the girls and women involved as respondents. To some extent this was achieved in this study. Through discussions at camp, and interviews at school, I was able to interact with the girls in ways which allowed them to express their feelings and vocalise their concerns about the way outdoor education catered for their needs. Their responses were treated with respect and have all been included in the data analysis. Individual's who shared with me their personal problems were responded to in confidence and seriousness, and where I thought appropriate I responded with suggestions, action, or just an open ear. I feel that the mixture of quantitative and qualitative methods gave the study a strength and a balance that it would not have had if I had used only one type of method.

Not all my intentions regarding the methods employed were fulfilled, however. I had intended to give each interviewee a full transcript of her interview to read before using it in analysis. In this way students
would have had more power over their involvement in the study by correcting any incorrections in meaning that appeared in the transcribed record. However, by the time the tapes were all transcribed and I had time to revisit the students they were all in the fifth form preparing for examinations. I did not feel that it was appropriate for me to take up their time at this stage and if I had tried, it would have been very difficult and disruptive to their classes to make contact with them.

Using a combination of methods in this study was an appropriate methodology as the discussion reveals. The quantitative results indicate that outdoor education is viewed positively by most female fourth formers. However, these results alone mask the issues that do exist in the outdoors for girls. Interview and observational data brought these issues to light. If the quantitative analysis had not been done, a more negative view on the topic than was warranted may have been gained. Verbal expressions of the girls' experiences have been drawn in the context of wider opinion. The process of undertaking this research has been a valuable learning experience for me both personally and professionally. It is my hope that the information gained from it be used by the outdoor education community to aid the success of outdoor programmes for young women.
Chapter Seven

Conclusion

The results obtained from this study do not strongly support the hypothesis that the outdoor education programmes of the schools studied are male-centred. Some evidence does exist in the issues of self-confidence, body image, and menstruation. While I consider the issue of menstruation to be a telling one in the search for gendered outdoor education, it is not supported by conclusions drawn from other issues. Rather than being totally oppressive, activities undertaking within outdoor education were specifically mentioned by some girls in interviews as being enjoyable and avenues for personal growth.

If outdoor education is not totally oppressive it is still problematic. Quantitative results revealed that for most girls, outdoor education camp was a positive experience. There were some, however, who reported neither positive nor negative attitudes to outdoor education, and a few for whom outdoor education would appear to have been a negative experience. The comments girls made in interviews and my own observations reveal that there is considerable room for improvement in the way outdoor education is presented and implemented for girls. The same improvements may be of similar benefit for boys, but boys experiences were not a concern of this study.

There is a need for further research into girls experiences of outdoor education. Radical feminist theory is useful in explaining some of what occurs for girls in outdoor pursuits. Many of the issues that arise in outdoor education for girls may stem from general societal conditions, and are carried over into outdoor education as may be expected. If outdoor education is a site for challenging the gender order, as Humberstone (1990) suggests, outdoor educators need to be able to identify general societal influences and work toward reducing or eliminating their impact.

However radical feminism cannot explain all that goes on in outdoor education and theories which take account of the inconsistencies as well as the patterns in girls' lives need to be utilised.

Henderson and Bialeschki's (1991) three categories of change that are necessary in addressing issues in women's leisure can be modified to address issues such as those raised by girl's outdoor education. To structure changes in outdoor education
the following three conditions would need to be created. The first would be creation of an environment in which outdoor education is both safe and practical for girls. The second condition would require an improvement in the social position of females and the third would require changes in the provision of outdoor education programming.

The recommendations made by this study go some way toward enabling girls to maximise their experiences in outdoor education and to have freer choice in participation in outdoor pursuits as adults.
Recommendations

Based on the results of this thesis I make the following recommendations to teachers and outdoor educators working with adolescent girls on outdoor education programmes:

1. That girls are encouraged to participate in outdoor education programmes and in outdoor pursuit activities.

2. That information about the camp programme, activities, and facilities and arrangements for dealing with menstruation at camp is available to girls before they attend camp.

3. That preparation for camp activities takes place so that maximum benefit can be gained from activities once at camp. Preparation may include introductory skills sessions.

4. That staff training is planned and implemented so that competent, confident female role models are available to girls at camp. Consideration should also be given to the employment of female specialist outdoor educators.

5. That positive images of girls and women in outdoor activities are provided where they can be received by girls. Examples are posters, books, displays and visitors to schools.

6. That access to outdoor education is not withdrawn as a punishment for ill-behaved girls, but that outdoor education be viewed as an educational form capable of promoting change at both the individual and social level.

7. That outdoor education activities are programmed sequentially, giving girls a choice in the level of participation at which they involve themselves.

8. That outdoor education programmes are created with flexibility in mind.

9. That equipment and specialist clothing used in outdoor education takes into account all sizes, shapes and needs so that girls can participate without fear of ridicule.

10. That efforts be made to enhance boys awareness of the effects of derogatory comments on girls.
11. That girl-only groups are considered and utilised where appropriate to encourage the development of competence, leadership and decision-making in girls.

12. That the benefits of mixed-sex groupings in the form of renegotiated gender relations be borne in mind and fostered where appropriate.


14. That further research is undertaken into outdoor education and girls' experiences of outdoor pursuits.
Footnotes.

1. Outdoor recreation includes all recreational activities undertaken out-of-doors. The term 'outdoor pursuits' more specifically refers to activities which are characterised by risk-taking and usually occur in natural environments.
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Appendices
Appendix A: Questionnaires.
OUTDOOR EDUCATION STUDY.

Hi! I am a student in the Education Department at Otago University and I'm studying aspects of outdoor education for my Masters degree thesis. Thanks for agreeing to help me with my study. The following questionnaire is designed to help me with further research on this topic next year. Would you please answer the questions below as accurately as you can.

Your age:

School you presently attend:

How many adults are living at your home?

Please list each of these adults and beside each write their job(s) (e.g. mum- taxi driver; dad- unemployed; guardian- homemaker)

Please list all the experience you have had in the outdoors until now. Include school camps, holidays, outdoor trips and outdoor hobbies.

How many times in the last 12 months have you done an outdoor activity (e.g. tramping, abseiling, canoeing, caving, rafting, sailing, etc)?

Circle one: None 3 times or less 4 times or more

What activities?

That's all the questions for now. I have asked for your name on a separate piece of paper so that your responses in the next stage of the study can be kept together. The information gathered from this study will be entered on computer for analysis but the names will be replaced by numbers. There will be no real names used in any report of the study, ALL PERSONAL DETAILS WILL REMAIN CONFIDENTIAL. Thank you again for your help.

University of Otago.
OUTDOOR EDUCATION STUDY.

Last year you filled in a short questionnaire for me, as part of a study I am doing on aspects of outdoor education. Thanks again for agreeing to be involved in this part of the study.

On the following pages is a questionnaire which I would like you to complete as accurately and as honestly as you can. Most of the questions ask you how you feel about the outdoor education camp you will be going on soon. After the camp, I will be asking you to fill out a final questionnaire. A few people will be asked to participate in an interview session focusing on outdoor education.

I greatly appreciate your help with this study. Please now turn the page and begin the questionnaire.

University of Otago.
PRE-CAMP QUESTIONNAIRE.

1. For each of the statements below you may choose one of four replies.

SD = Strongly disagree  D = Disagree
A = Agree             SA = Strongly Agree

Please circle one option that is closest to your feeling for each statement.

I feel that I'm a person of worth, at least on an equal basis with others
I feel that I have a number of good qualities
All in all, I am inclined to think that I am a failure
I am able to do things as well as most other people
I feel I do not have much to be proud of
I take a positive attitude toward myself
On the whole, I am satisfied with myself.
I wish I could have more respect for myself
I certainly feel useless at times
At times I think I am no good at all
2. For each of the following statements you may choose one of four replies.

SD = Strongly disagree  D = Disagree
A = Agree  SA = Strongly agree

With respect to outdoor education please circle one option that is closest to your feeling for each statement.

I think that I will feel comfortable in the outdoor environment.  SD  D  A  SA

Tramping will be too hard for me.  SD  D  A  SA

There will be enough time for me to do personal things.  SD  D  A  SA

Getting dirty will be uncomfortable.  SD  D  A  SA

There won't be enough time for socializing with others.  SD  D  A  SA

Rivers and the sea will scare me.  SD  D  A  SA

I will be fit enough for the activities.  SD  D  A  SA

I will be able to look after myself on camp.  SD  D  A  SA

If I have my period on camp it won't worry me.  SD  D  A  SA

Other people will put me down.  SD  D  A  SA

Doing new activities will be fun.  SD  D  A  SA

I won't enjoy being away from home.  SD  D  A  SA

I won't try activities I'm unsure about.  SD  D  A  SA

Living in the outdoors will be enjoyable.  SD  D  A  SA

Others will have a better time than me on camp.  SD  D  A  SA

I will like getting muddy.  SD  D  A  SA
I won't get enough privacy at camp. 
I'm afraid of falling out of my canoe.
I won't have the confidence for most activities.
I will be afraid of heights.
The outdoor environment will be hostile and unfriendly.
I expect to overcome my fears.
Other people will encourage me during activities.
Abseiling will not be a problem for me.
I won't like being in the bush.
I will feel OK about most activities.
I won't be able to stay clean and healthy at camp.
There will be a comfortable place to sleep each night.

3. Please make any comments you wish to about camp:

Thank you for your co-operation.
QUESTIONNAIRE C.

POST-CAMP QUESTIONNAIRE.

1. For each of the statements below you may choose one of four replies.

SD = Strongly disagree  D = Disagree
A = Agree                SA = Strongly Agree

Please circle one option that is closest to your feeling for each statement.

I feel that I'm a person of worth, at least on an equal basis with others
SD  D  A  SA

I feel that I have a number of good qualities
SD  D  A  SA

All in all, I am inclined to think that I am a failure
SD  D  A  SA

I am able to do things as well as most other people
SD  D  A  SA

I feel I do not have much to be proud of
SD  D  A  SA

I take a positive attitude toward myself
SD  D  A  SA

On the whole, I am satisfied with myself.
SD  D  A  SA

I wish I could have more respect for myself
SD  D  A  SA

I certainly feel useless at times
SD  D  A  SA

At times I think I am no good at all
SD  D  A  SA
2. For each of the following statements you may choose one of four replies.

SD = Strongly disagree  D = Disagree
A = Agree        SA = Strongly agree

With respect to outdoor education please circle one option that is closest to your feeling for each statement.

- I did feel OK about most activities.  
- The outdoor environment was hostile and unfriendly.  
- Getting dirty was uncomfortable.  
- There was enough time for me to do personal things.  
- I was afraid of heights.  
- I did feel comfortable in the outdoor environment.  
- I was fit enough for the activities.  
- Others did have a better time than me on camp.  
- Other people did put me down.  
- I didn’t get enough privacy at camp.  
- Abseiling was not a problem for me.  
- I did overcome my fears.  
- I wasn’t able to stay clean and healthy at camp.  
- Living in the outdoors was enjoyable.  
- I didn’t like being in the bush.  
- Rivers and the sea did scare me.  
- I did fall out of my canoe.

SD D A SA
I didn't try activities I was unsure about.  
Other people did encourage me during activities.  
I was be able to look after myself on camp.  
Tramping was too hard for me.  
If I had my period on camp it wouldn't have worried me.  
There wasn't enough time for socializing with others.  
Doing new activities was fun.  
I did like getting muddy.  
I didn't have the confidence for most activities.  
There was a comfortable place to sleep each night.  
I didn't enjoy being away from home.

3. Please make any comments you wish to about camp:-

Thank you for your co-operation.
Dear

My name is Pip Lynch. I am a graduate student at the University of Otago, presently involved in a study looking at Girls and Outdoor Education (at Tautuku camp). Late last year, 1989, I came to your school and asked you and other third form girls to be involved in my study. This year I have worked with the teachers and students at each camp to find out what the important issues are for girls at camp. I have noticed that you didn't attend camp at Tautuku and I am interested in your reason(s) for not going. This information is important to my study. The information that you provide will not be supplied to your school or teachers in any way that will identify you. You are not required to put your name on the form.

Please put a tick in each box that corresponds to a reason you did not attend camp. Tick as many reasons as appropriate.

Camp was too expensive for me  
Parents/guardians did not allow me to go  
School teachers did not allow me to go  
I didn't go to camp because I had my period that week  
I don't like camps because ...  
I couldn't be bothered going because ...  
Other reasons (please state) ...

Thank you. Fold this form and put it in the envelope provided.

Pip Lynch,  
B. PH.Ed., Dip. Rec and Sport.,  
Dip. Grad (Education).

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Appendix B: Interview Schedule.
Interview Details.

1. Interviews will be held at a venue and at a time of the student's choice. Provided the school and the students agree, this would possibly be after school, in an empty classroom.

2. Liaison teachers will be notified and asked for approval before any interviews take place in the school. If an interview takes place outside of school time and/or school grounds, the student's parents/guardians will be asked for approval first.

3. Before an interview proceeds, I will point out to the student that although I have tried not to make assumptions before coming to the interview it is very difficult not to have some preconceived ideas about a person or a situation, and that if the student feels uncomfortable about the way I have worded a question or why I am asking a question, they are very welcome to question me about it.

4. I will then point out that at any stage in the interview the interviewee is welcome to ask me questions - the interview will be a two way communication process, a conversation. This should allow the student to feel more comfortable and will help me to gain rapport with the students.

5. Key areas of investigation:

a) EXPECTATIONS.
Before you went to camp - did you wonder what it would be like?
  What sort of things did you wonder about?
  What did you think it would be like?
  Why did you think this?

b) EXPERIENCES
Was outdoor ed. camp like what you thought it would be?
  What was the same?
  What was different?
Are there any parts of the camp that you would change if you could?
Did you feel uncomfortable in any way at any time during the camp?
What were the real highs of the week for you?
If you were to be telling a friend what to expect at camp, what would you say?

c) EFFECT ON LIFE.
Do you think your experiences at camp have had any impact/influence on your life?
Are there things you’d never do/do again? What? Why?
Are there things you’d really like to do/do again? What? Why?
Do you think you’ll get to do these things?

d) ADULT PARTICIPATION.
Do you think that there is any aspect of the camp that would affect your participation in outdoor activities as an adult?

e) LEARNING.
Did you find out new things at camp?
What did you find out?
What didn’t you find out that you’d like to find out?
Do you think that OE camp has helped you to be able to do outdoor pursuits activities for yourself if you wanted to? How?
Is there any way it has put you off doing outdoor pursuits?
If so, how can this be changed?
What are the thing/s you will most remember from your OE camp?
Appendix C: Observation Schedule.
Observation Schedule.

Mornings: Focus on -

- Setting - physical, facilities, atmosphere
- Organisation - timetable, groupings, programme discussions
- Activities - what is done, equipment, conditions, facilities, formal and informal activities
- How do participants experience activities - reactions, comments, conversations

Lunch-times: Focus on -

- Informal discussions with students and teachers

Afternoons: Focus on -

- Activities - what is done, equipment, conditions, facilities, what is not done, occurrence of specific behaviours, e.g. opting out of participating, student explanations for specific behaviours
- How do participants experience activities - reactions, comments, conversations
- Communication - how students communicate with each other about activities, language used by staff during activities
- Staff/student interactions

Evenings: Focus on

- Accommodation arrangements
- Conversations with students
Appendix D: Procedures for Administration of Questionnaires by Teachers.
THANKS VERY MUCH for undertaking this task on my behalf. I am deeply grateful to you.

I would like the following procedure to be followed:-

1. There are two questionnaires. The first (Pre-Camp) is to be administered during the week prior to camp week. The second (Post-Camp) is to be administered during the week after camp week.

2. All girls whose names appear on the enclosed list and who will be attending your first OE camp this year should be asked to complete the two questionnaires. This will probably involve 10-20 girls. I have put 33 sets of questionnaires in the box so you should have plenty.

3. When the girls are seated, hand them each an envelope. Inside it they will find an introductory letter and the first (Pre-Camp) questionnaire. Give them 15 minutes or so to complete the questionnaire. N.B. The first questionnaire sheet is double-sided - please point this out to the students.

4. When the students have completed their responses, ask them to write their names on the small pieces of paper which are stapled to the questionnaire and to the envelope (write their Christian and Family names on both). They should NOT write their names on the actual questionnaire sheet. This is to protect their confidentiality.

5. Ask the girls to put their completed questionnaires back into their envelopes. Place all envelopes back in the box.

6. During the week after camp, ask the same students to complete one of the Post-Camp questionnaire forms (loose in the box). When they have completed it, ask them to write their names on the small piece of paper attached to the form.

7. Hand back to each student their envelope and ask them to put their completed Post-Camp questionnaires in it (so now all their forms should be in their respective envelopes).

8. Store all envelopes in the box in a safe place. I will pick up the box as soon as I get back in late March.

THANKS AGAIN, Pip.
COMMON QUESTIONS AND ANSWERS.

The most important point to bear in mind when a student asks a question during this survey is to try not to influence their response on the questionnaire by the way you answer.

The most common questions I was asked during the pilot study were, for example:-

1. QUESTION: How do you spell abseiling? canoeing? etc

Answers to this sort of questions are straight-forward enough.

2. QUESTION: What is abseiling?

ANSWER: Going down a bank using ropes.
[i.e. Please don't say something like "It's when you go down ropes off steep banks and it can be pretty scary."]

3. QUESTION: What does 'a person of worth' mean?

ANSWER: If you feel that you are a person of worth, you feel that you are a worthwhile person; you feel that you are a person who has some value.

4. QUESTION: What if you want to answer between 'Disagree' and 'Agree'?

ANSWER: You must choose. Make sure you circle only one option for each statement. Don't mark between the options, and don't leave any statements unmarked. You are being asked to make a choice.

I hope these few notes help. For any other questions asked, please answer them as 'objectively' as possible. Thanks.
Appendix E: Examples of Comments from Questionnaires.
Examples of Comments about Camp from Questionnaires.

"Looking forward to being able, and allowed, to complete and enjoy tasks that are offered. Will attempt to get along with others, even during difficult circumstances. Everyone seems to be looking forward to this camp and that's very encouraging. Looking forward to meeting and becoming friends with people."

"It's really cool, you can just be yourself, wear what you want, because you're there to look funny."

"Camp was absolutely cool before the 'sickness'."

"The over-night was terrible. The tents were flooded. It was wet and cold. I didn't like it at all. The camp was good apart from the camp-out."

"I am strongly looking forward to camp. In my opinion outdoor education is very important in today's schools. This does not exclude females in any activities. I also think everyone gets a lot out of camp, even if it is only socialisation or doing something new."

"Camp was most enjoyable for me. Most activities were not new to me, but it was still neat fun."

"It was really good, I mean wicked ... apart from the camp out everything else was def."

I am not doing anything I don't want to. Teachers are not forcing me to do anything. I'm coming home if I don't like it.

"It was rude. I liked the tram-track. But otherwise I hated camp and being away for the weekend."

"Canoeing too far with [teacher]. He left the slow people behind and went ahead himself."

"I can't wait, it should be really great. It will be good to get away with all my friends. I almost decided not to go because I'll have my period that week. And I feel uncomfortable about it."

"It was really cool. I'd do it again any time."

"Should be more information on what clothes to take on camp."
"Canoeing was the worst activity. All the boys got ahead and told us to hurry up and it was too far. [Teacher] left us behind. Other than that it was really good."

"I'm looking forward to camp and trying abseiling (maybe). I hate doing confidence courses when people have to lift you through things because it's embarrassing when you're too heavy for them. Canoeing will be good but I've never fallen out. I don't think I'll mind if I do."

"I thought the opportunity to go abseiling was great. I didn't I'd ever be able to go over a cliff on a rope but after I did it I loved it. I got a great feeling being able to overcome my fears."

"I lived."

"It was really excellent but the burner in the loos didn't work which was annoying and canoeing was awful after I fell out. I loved the bush, it was really really great but we (our group) didn't have time for the orienteering."

"I definitely don't want to dig a hole when we go to the toilet, when we camp out."

"I enjoyed it. I tried to do every activity with my best efforts."

"I don't like the way we have been told that their (sic) is no washing facilities at camp. I reckon that's really dumb. I don't really feel over the moon about going in the coldest month or the year. The good thing is getting away from school and being with friends."

"I thought camp was really neat! and also a lot of fun. I thought we could've of (sic) had a bit more privacy e.g.: communal showers (that was a bit uncomfortable for me). But all in all I found camp to be a really worthwhile experience which I think was a neat time to get away from school and have a break."
Appendix F: Statistics.
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Appendix G: Scale Scoring Schedules.
SELF-ESTEEM SCALE

1 = lowest   4 = highest

1 2 3 4
1 2 3 4
4 3 2 1
1 2 3 4
4 3 2 1
1 2 3 4
4 3 2 1
4 3 2 1

TOTAL

10 x 4 = 40
10 x 3 = 30
10 x 2 = 20
## Pre-Camp OE Scale

1 = lowest  
4 = highest

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10. I will like getting muddy.

16 x 4 = 64
16 x 5 = 48
16 x 2 = 32
**PRE-CAMP OR SCALE:**

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**TOTAL**

$$2 \times 2 = 24$$
$$2 \times 3 = 36$$
$$2 \times 4 = 48$$
POST-CAMP OR SCALE

1 = lowest  4 = highest

1. I did feel OK
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17. I did fall

1  2  3  4  [ ]
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4  3  2  1  [ ]
1  2  3  4  [ ]
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**Total**