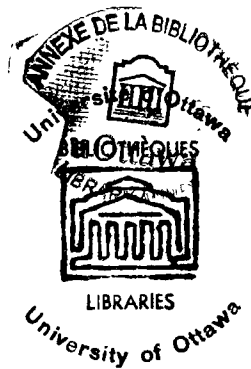


FACTORS LIMITING SPORTS PARTICIPATION BY HIGH
SCHOOL FEMALES AND MALES

by

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ABSTRACT

The purpose of this study was a) to investigate the relative importance of perceived reasons why female and male high school students do not play more sports, b) to search for factors among the female and male reasons and c) to compare male-female responses at the item level.

A review of the related literature suggested that there should be differences between males and females on their reasons for not playing more sports, primarily as a result of experiencing different sex-role socialization processes. The male sex-role socialization process, which positively reinforces physical prowess, aggressiveness and achievement was considered to be consistent with the meaning of sport. Conversely, the female sex-role socialization process which positively reinforces attractiveness and dependency while negatively reinforcing aggressiveness and physical achievements appeared to be inconsistent with sports participation. Therefore, it was felt that females may feel more uncomfortable than males in a sport environment characterized by aggression with emphasis on physical strength or on winning.

To test for the relative importance of reasons for not playing more sports, a questionnaire was constructed consisting of fifty-five variables possibly limiting sports participation. These variables related to attitudes of significant others, one's sports ability, available facilities, equipment and opportunities, health problems, sexuality, self-concept,

competition, body image, injuries, time, coaching, self-consciousness, models, socialization, organization, learning and aggression.

The respondents to the questionnaire were randomly drawn from a high school in southern Ontario. The sample was composed of 310 female and 403 male students, representing grades nine to thirteen. The subjects responded to the questionnaire by indicating how important each variable was to them as a reason for not playing more sports.

The single most important reason why males and females said they did not play more sports was that sports were not enough fun. The lack of fun was apparently related to the seriousness of players, the necessity of being a good player and always performing well.

The results also indicated that the females felt significantly more uncomfortable than males in a sport environment characterized by aggression, emphasis on skill, humiliation of players because of skill or an emphasis on winning. However, in spite of the more intense feelings by the females, the males also felt negatively about these aspects of sports. Results of the factor analysis indicated that these variables could be summarized in one single factor labelled Competitive Emphasis, which was found to be a major contributor to non-participation in sports by high school students.

A second factor resulting from the factor analysis was labelled Socio-Cosmetic and was found to have no limiting effect on sports participation by either male or female high school students.

TABLE OF CONTENTS

CHAPTER		Page
I.	INTRODUCTION.....	1
	Statement of Problem.....	2
	Rationale.....	3
	Limitations.....	6
	Definition of Terminology.....	7
II.	REVIEW OF LITERATURE.....	9
	Theoretical Overview of Behaviour	
	Acquisition.....	9
	Women and Sport: Past and Present.....	12
	Sex-Role Socialization.....	21
	Factors Influencing Sports Participation....	24
	Normative Beliefs.....	24
	Expectations and Motivation.....	25
	Availability.....	26
	Achievement Orientation.....	27
III.	RESEARCH METHODS.....	31
	Overview.....	31
	Subjects.....	31
	Instrument Development.....	32
	Procedures.....	34
	Statistical Analysis.....	34
IV.	RESULTS AND DISCUSSION.....	36
	Interpretation of the Scale.....	36
	Determining the Importance of Variables.....	41
	Highest Ranking Variables Restricting	
	Sports Participation.....	42
	Sports Are Not Enough Fun.....	42
	Up Tight.....	45
	Time.....	47
	Opportunities.....	48
	Not Good Enough.....	50
	Devoting Too Much Time.....	52
	Seriousness.....	53
	Studies.....	54
	Judged.....	54
	Summary of the Top Nine Variables.....	56
	Secondary Variables Restricting Sport	
	Participation.....	56
	Competitive Emphasis.....	57
	Lack of Equipment.....	59
	Organizational Problems.....	59
	Not Beneficial or Benched.....	61
	Travelling and Money.....	63
	No Help When Learning.....	63
	Friends Do Not Play Sports.....	64
	Already Much Time.....	65

CHAPTER		Page
IV.	Controversial or Lowest Ranked Variables.....	66
	Aggression.....	66
	The Female Image.....	69
	T-Tests for Comparison of Males Versus Females/Participants Versus non-Participants.....	72
	Significant Differences Between Female and Male Responses.....	72
	Differences Between Non Sport Participants and Sport Participants.....	76
	Summary of T-Tests.....	84
	Factor Analysis.....	84
	Significant Factors.....	85
	Self Esteem/Competitive Threat.....	85
	Factor Socio-Cosmetic.....	91
	Error Factors.....	94
	Factor: Opportunities.....	94
	Factor: Health.....	95
	Factor: Autonomy.....	96
	Summary of Factor Analysis.....	97
	Integration of Findings.....	99
	Implications.....	
V.	SUMMARY, CONCLUSIONS AND RECOMMENDATIONS.....	111
	Summary.....	111
	Conclusions.....	112
	Recommendations.....	115
	BIBLIOGRAPHY.....	118
Appendix		
	A: SPORT QUESTIONNAIRE.....	126
	B: RESPONSE FORM.....	132
	C: VARIABLE MEANS AND STANDARD DEVIATIONS FOR FEMALES.....	134
	D: VARIABLE MEANS AND STANDARD DEVIATIONS FOR MALES.....	138
	E: VARIABLE CORRELATION MATRIX.....	142
	F: RESULTS OF T-TESTS FOR SIGNIFICANT DIFFERENCES BETWEEN MALES AND FEMALES.....	147
	G: RESULTS OF T-TESTS FOR SIGNIFICANT DIFFERENCES BETWEEN FEMALE SPORT PARTICIPANTS AND NON SPORT PARTICIPANTS...	151
	H: RESULTS OF T-TESTS FOR SIGNIFICANT DIFFERENCES BETWEEN MALE SPORT PARTICIPANTS AND NON SPORT PARTICIPANTS...	155
	I: ROTATED FACTOR MATRIX FOR FEMALE SAMPLE.....	159
	J: EIGENVALUES FOR FEMALE FACTORS.....	163
	K: CUMULATIVE PROPORTION OF TOTAL VARIANCE FOR FEMALE FACTORS.....	165
	L: ROTATED FACTOR MATRIX FOR MALE SAMPLE.....	167
	M: EIGENVALUES FOR MALE FACTORS.....	171
	N: CUMULATIVE PROPORTION OF TOTAL VARIANCE FOR MALE FACTORS.....	173

LIST OF TABLES

TABLE		Page
I.	Highest Ranking Variables Found to be Inhibiting Sports Participation by High School Girls (310) and Boys (403) as Determined by Mean Scores.....	44
II.	Secondary Variables Found to be Inhibiting Sports Participation by High School Girls (310) and Boys (403) as Determined by Mean Scores.....	58
III.	Variables Where the Greatest Differences ($p \leq .001$) Were Found Between High School Female (310) and Male (403) Responses.....	74
IV.	Variables Where the Greatest Differences ($p \leq .001$) Were Found Between High School Male Sport Participants (247) and Non Sport Participants (151).....	78
V.	Variables Where the Greatest Differences ($p \leq .001$) Were Found Between High School Female Sport Participants (129) and Non Sport Participants (177).....	80
VI.	Highest Factor Loadings for Males and Females on Self Esteem/Competitive Threat Factor.....	89
VII.	Highest Factor Loadings for Males and Females on Factor: Socio-Cosmetic.....	93

LIST OF FIGURES

FIGURE		Page
I.	Diagram of Scree Test for True Factors: Female Sample.....	86
II.	Diagram of Scree Test for True Factors: Male Sample.....	87

CHAPTER I

INTRODUCTION

Sport, throughout history, has taken on many meanings, both real and symbolic, as it has been shaped by the cultures in which it has existed. Traditionally, sport has been restricted to various segments of the community primarily through social and economic pressures. During the Tudor era, for instance, sport was primarily the realm of the rich. Females have formed another group in society which throughout history have had sport opportunities suppressed by social pressures.

Sport participation today is generally thought to be an acceptable pursuit for everyone. However, despite national advertising campaigns to motivate participation, statistics clearly indicate that large portions of our population still do not play any sports (Burgess, 1973). Within the select group who do participate, the number of females has remained disproportionately small (Bailey, 1974; Heit and Malpass, 1975).

Why then are people not choosing to play sports and why are females less involved in sports than males? This research study is aimed at answering these questions as they relate to high school students.

Statement of Problem

The purpose of this study was a) to identify possible reasons why high school age boys and girls were not participating more in sports, b) to determine which reasons were the most powerful inhibitors, c) to factor analyse individual items in an attempt to more concisely express them as factors and d) to compare male and female inhibition responses at the item level.

The purpose of the study can be translated into the following research questions:

1. What are the major reasons for high school girls not participating more in sports?
2. What are the major reasons for high school boys not participating more in sports?
3. How do the reasons for not participating more in sports compare between high school boys and girls?
4. What is the factor structure underlying the reasons that high school girls do not participate more in sports?
5. What is the factor structure underlying the reasons that high school boys do not participate more in sports?

Rationale

Physical fitness has been perceived as a national problem in Canada as Participaction, a federally supported advertising group was created by the Canadian government to deal with this problem. Participaction has reported that the average 35 year old Canadian is about as physically fit as the average 60 year old Swede. This slogan was based on cross cultural physiological studies comparing males of all professions and age categories in Sweden and Canada (Percival, 1974).

The Canadian Department of National Health and Welfare recognized the need to improve the physical fitness of Canadians as this was one of the reasons for inaugurating the Fitness and Amateur Sport Program in 1961. It was felt that a viable way of meeting our fitness objective was, "....to increase the number of participants at all levels of competitive and non competitive physical recreation and amateur sport" (Canada Yearbook, 1972: 349). In 1970 the Canadian government formed a new policy on sports which again advocated the, "....benefits from mass participation and the inculcation of sports and recreation into the Canadian culture" (Canada Yearbook, 1972: 349).

The apparent emphasis on participation and fitness by the federal government suggests that Canadians could benefit from increased involvement in physical recreation

and improved levels of fitness.

Apart from the physical benefits which may be reaped by the participants, the sports environment also has the capacity to develop many positive socio-psychological attributes. According to Orlick (1974), sport has the potential to develop important human qualities such as positive self concept, co-operative behaviour, resourcefulness and independence. Orlick goes on to point out that the sport environment also has the capacity to develop negative qualities which must be considered before wholeheartedly promoting sports for everyone. It is important to advocate increased sports participation only in the positive sense.

The goal of sustained worthy mass participation in sport will only be realized if we can be reasonably sure that the experience meets the positive expectations of the participants and is a rewarding experience for them. One means of helping to achieve this end is through motivation studies which investigate what it is that people want to get out of sport. A second approach concentrates on why people no longer or perhaps never did play sports.

Although several studies have been completed or are in progress on the topic of motivation in sport (Alderman, 1975) few have considered the unique question of the female sport participant (Berlin, 1974). Research has begun on the drop-out athlete by Orlick (1972, 1973, 1974) which dealt

primarily with young male sport drop-outs and to a limited extent with females.

In order to more thoroughly understand the motivational questions in sport, there is a need to know more about people who have never been involved in sport. With respect to this there is a large void in research dealing with female non participation in sport (Harris, 1972). There is also a need to gain a better understanding of those people, both male and female, whose involvement in sport is minimal. This study was an attempt to help fill these gaps in the research.

Limitations

The sample used in this study was restricted to students attending one high school, which limits the generalizations one can safely make from the findings. It must be recognized that the teachers and particularly the principal at a given high school can greatly vary in their approach to sports. However, in the case of the school used in this study, the principal was visably in favour of sport participation by both sexes. Also the school was large, having a student population in excess of 1500, so one might expect a fairly normal distribution of teacher attitudes towards sports.

The large size of the school presents the additional problem of opportunities for participation. Although a large school provides a wider variety of sports, Lane and Beauchamp (1962) pointed out that in a school of 500 students, 50% or 250 students have the opportunity to participate, whereas in a very large school of 2000 students, only 20% or 400 students can participate. However, in this study, sports provided both by the school and in the community were included thus reducing the above affect.

The nature of the research questionnaire was limited by the researcher's ability to exhaust all of the possible reasons why someone would not play sports. Through careful and extensive pilot work, it was felt that this limitation was minimized.

The instrument was also limited in that an assumption was made that the students knew why they did not participate more in sports and would honestly indicate their thoughts. Martens (1975) concurred with Allport that if you want to know something about someone, just ask them. A recent sport inventory validated by Martens (1975) supported this proposition. This advice was heeded in the present study as the students were thought to be in the best position to express their personal feelings and this methodology has been shown to be successful in reporting self perceptions in the past.

Definition of Terminology

Organized Sport: An organized sport was any sport where the person had to commit himself by either joining or "trying out" for the sport and a schedule was involved. Intramural sports were not included in this category for the purpose of this study because individual participation is often irregular, the duration of the sport may be very short and the rules, when enforced vary significantly from game to game.

Unorganized Sport: Unorganized sport included any sport which did not have a set schedule. Intramural sports were included in this category for the reasons stated above.

Sports Participant: A sports participant was any subject who reported himself or herself to be an active sports participant.

Sports Non Participant: A sports non participant was any subject who reported herself or himself to not be an active sports participant.

CHAPTER II

REVIEW OF LITERATURE

The review of related literature begins with a theoretical overview of behaviour acquisition. This is followed by a review of women's changing place in sport through the past century up to the present, the effects of early sex-role socialization on the form of later sport participation and finally additional influences thought to be effecting sports participation.

Theoretical Overview of Behaviour Acquisition

Before focusing on specific factors thought to be influencing sports participation, a general theoretical overview of behaviour acquisition and modification will be presented. This theory has been approached from a social learning point of view which is based on the belief that to a large extent behaviour is learned, motivated and maintained by social environmental factors. It has also been theorized that mediating between stimulus and response are cognitive processes on individual interpretations which can also be attributed primarily to the environment (Bandura, 1969).

Bandura (1969) believes that there are three processes involved in the control of behaviour; stimulus control, internal symbolic control and outcome control.

Stimulus control has been described as the potential attributed to a given behaviour as a function of the expectancy

of a goal and the expected reinforcement of the goal (Weiner, 1972). Expectancy was defined as, "the probability held by the individual that a particular reinforcement will occur as a function of a specific behaviour on his part in a specific situation" (Rotter, 1954: 107).

All three of the above constructs involve individual interpretation and are subject to perceptions which may be a product of individual experience and inborn qualities (Lane and Beauchamp, 1962).

One important form of stimulus control was referred to by Bandura (1970) as modeling and covers behaviours such as identification, imitation, observational learning, copying and role-taking.

Internal symbolic control involves internalized feelings composed of perceptions of self, perceptions of situations and the interrelationship of the two (Combs and Snygg, 1954). Each person has a multitude of self perceptions which are organized into a hierarchy according to how basic they are. For instance, perception of being either male or female is probably one of the most basic of selves (Combs and Snygg, 1959).

When two or more of these perceptions of self or the environment come into conflict a state of tension is experienced. Behaviour is usually directed to avoid such conflicts but when conflict is encountered it is alleviated either by

changing the behaviour which caused it or by changing the conflicting perception. Therefore self perceptions, which are largely a function of social learning and social feedback have obvious behavioural implications (Lecky, 1945, McCandless, 1961).

Outcome control refers to the reinforcing properties attributed to the consequences of a given behaviour in controlling the likelihood of that behaviour occurring again. Outcomes, or consequences, which increase the probability of the behaviour reoccurring are thought to be positively reinforcing. Consequences which, when removed, increase the probability of the behaviour happening again are considered to be negatively reinforcing (Skinner, 1953).

In the study of social behaviour such as sports participation, special emphasis is placed on social reinforcers such as attention, approval, disapproval or ridicule. These are known as social reinforcers because they require mediation through another organism (Skinner, 1971).

Since social reinforcement is very powerful in controlling behaviour the question of who is reinforcing is also important. Those with strong reinforcing powers for an individual are known as significant or referent others. For a young child, the mother is usually the most significant person. At adolescence, peers tend to become increasingly

significant as affiliation gains strong reinforcing properties (Kinch, 1963).

In summary, the probability of a behaviour occurring is largely determined by expectations of the behaviour, a perception of the behaviour in relationship to the self and the situation and previous outcomes of the behaviour.

Women and Sport: Past and Present

Expectations, perceptions and consequences of sport participation are greatly affected by the meaning and role of sport in society. The following section discusses the meaning of sport and places the relationship of sport and society in historical perspective with particular emphasis on the relationship between sex-roles and sport.

What is the meaning of sport? What emotions, memories and expectations are aroused by the concept of sport?

Felshin has suggested that sport is "a symbolic formulation of ideal values" (Felshin, 1974: 181). It symbolizes many facets of society and is often idealized as an expression of the finest human values. The physical nature of sport and the idealized values it symbolizes denote a masculine connotation. It has been said that, "Neither the norms, collectives, nor roles within the 'dominant sports creed' in American society have much if any reference to women" (Felshin, 1974: 186).

The masculine connotation of sport and the lack of reference to women suggests that male and female sex-roles are important considerations in determining sport related behaviours.

Historically the conflict between the female sex-role and sport has been quite evident as exemplified in the Victorian era. The image of woman at that time was of, "an ethereal person, on a pedestal, somewhat above the realities of life" (Gerber, 1974: 9). The concept of sport was the antithesis of the female image. Where the female was delicate, sport was vigorous; where the female was modest; in sport the flesh was exposed; and where the ideal female was attractive and bore children, sport exposed the face and reproductive organs to possible injury (Gerber, 1974).

During the early 20th century sport became more vigorous with an increasing number of team and indoor sports.

Prior to World War I, Western Culture was typically patriarchal, male dominated and sex-role segregated. Women were generally excluded from sport during this period (Hartley, 1970).

According to Degler, World War I resulted in a merging of sex-roles.

"By the close of the twenties the ordinary woman in America was closer to a man in the social behaviour expected of her, in the economic opportunities open to her, and in the intellectual freedom enjoyed by her than anytime in history" (Degler, 1964: 659).

As one would expect, this period saw the growth of women's sport organizations in the community. However, it is interesting to note that physical educators were opposed to women's involvement in organized sport (Perrin, 1924).

In true adherence to Victorian ideals Perrin, a physical educator, wrote,

A woman should always preserve her inborn sense of modesty and innocence; she must never be seen by the opposite sex when she is likely to forget herself. (Perrin, 1924: 658).

Physical educators were also convinced that exposure to physical stress during a sporting contest would be harmful to the female's reproductive organs (Arnold, 1924). Potential harm to male reproductive organs was never sighted as a reason why males should not participate in sports. Perhaps this oversight indicates the extent to which sport was a valued part of the male's expected life style.

Although physical educators were doing their best to restrict female participation in sport, more powerful social factors were at work. During this period of economic stress an increasing number of women began working. Women were moving into the city, away from parental influence and the suffragette movement was evident, all of which served to alter the social milieu (Gerber, 1974). This also set the stage for greater female sport involvement.

Following World War II, in a period of economic

expansion, woman's role once again became less aggressive and as could be expected fewer women engaged in sports.

Today, in an economic period characterized by a high rate of inflation, once again there appears to be a merging of the sex-roles. Statistics from the United States indicate an ever increasing proportion of women are completing a university education and are entering the work force (Hilton, 1965).

Hoffman (1960) in studying sex-roles found that males were increasingly involved in household and child rearing tasks in families where the mother had outside work.

In terms of sport participation, "certainly comparatively more women now take part in organized sport competition than at any other time in history" (Gerber, 1974: 8).

Although the large majority of women are involved in the traditionally acceptable sports of bowling, tennis, softball and golf, they are also taking part in vigorous and eustressful sports such as parachuting, motorcycling, kayaking, skiing and distance running.

The fact that a magazine such as "Women Sport", dealing almost exclusively with female sport endeavours, both amateur and professional, could be economically successful in the market place is a good indication of the increasing acceptance of women's sports. In fact, a comparison between "Women Sports"

and male oriented sports magazines suggest that women are involved in as many diverse sports as males, if not more. The October, 1975 issue of "Women Sports" had twelve major articles dealing with topics such as fastball, fishing, golf, swimming, track, rowing, athletic scholarships for women, kayaking, flag football, sailing, fencing and dirt bikes.

With the rising number of female sport participants, one might also expect performance of the top athletes to be improving and thus decreasing the gap between male and female performances. This might suggest that female sports will become increasingly more exciting for spectators and thus more marketable. However, between August 1971 and September 1972 out of 366 hours of live sports shown by NBC, a major sports television network in the U.S., only one hour was devoted to women's sports (Sports Illustrated, May 28, 1973: 96). Likewise, newspapers rarely highlight female sport performances.

The fact that the media generally ignores female sports has helped to maintain the dearth of positive female sport models and has reinforced the idea that women's sports are second class or unimportant pastimes engaged in by only a few unusual females.

Although there appears to be a great deal of evidence to support the acceptance of broader definitions of sex-roles, there are some indications that this is not the norm. Hartley

(1970), after taking a closer look at the statistics felt that although some people have a liberal concept of their sex-roles, this is better described as the exception rather than the rule. The existence of stereotypic concepts of sex-roles has become well documented.

Rosencrantz, Vogel, Bee, Broverman and Broverman (1968) used a questionnaire consisting of 122 bipolar descriptions of personal characteristics from which subjects selected one to describe females. It was found that both sexes valued stereotypically masculine traits above female traits. The female subjects, all college students, assigned to themselves stereotypically feminine characteristics which they also had rated as being socially undesirable. Examples of some of these traits are the following:

not at all resourceful	very easily influenced
not at all intellectual	very immature
feels very inferior	not at all intelligent
not at all realistic	not at all competent
very submissive	(Rosencrantz et al, 1968: 291)

A series of interviews with 837 American women and 423 American men, conducted by Steinman and Fox (1966) helped to clarify the above results. The women subjects described themselves as being "relatively balanced between strivings of self realization development and achievement through their own potentialities" (Steinman and Fox, 1966: 268). They

reported their ideal woman as being slightly more active than their self-image thus suggesting that they would prefer to be more active.

Steinman and Fox (1966) also found a wide discrepancy between the men's concept of the ideal woman and the women's prediction of this concept. Women predicted incorrectly that men prefer women with little self assertion or self achievement and who had a permissive, subordinate role in a traditional family setting.

Research by Gump (1972) showed that the most acceptable concept of femininity as described by 162 senior college women combined the traditional mother-wife role with the contemporary career-oriented role.

Goldberg (1968) concluded from his study of reactions to articles supposedly written by either a male or a female, that women considered their own sex to be so inferior that they generally became prejudiced against other women.

Broverman, Vogel, Broverman, Clarkson and Rosenkrantz (1972) suggested that "despite historical changes in the legal status of women and despite the changes in permissible behaviours accorded men and women, the sex-role stereotypes continue to be clearly defined and held in agreement by both college men and college women" (Broverman et al 1972: 77). This suggests that although the behaviour of men and women have changed, for example men doing the cooking or women

dirt bike riding, attitudes about sex-roles may not have changed. Such a proposition or phenomenon is difficult to understand and will require further study. As Felshin (1974) has suggested, this appears to be a transition stage which is difficult to interpret.

The problem is further complicated by the feminist movement which prescribes a significantly different role for women than the construct of woman based on femininity. Important in the feminist doctrine is that women should become more aware of their own potentialities and take advantage of them (Felshin, 1974).

The existence of the feminist movement has probably provided the female athlete with an alternative more viable self-concept from that which could arise from the feminine ideal of woman. Perhaps this may serve to reduce the assumed conflict between athletic behaviour and the self-concept of women.

Felshin (1974) supports this idea by suggesting that women understand normative values associated with sex-roles but that these are specific to the situation. For the female athlete, therefore, the problem is not to maintain consistency but "...rather the problem may be in the attractiveness of sport as a social phenomenon in relation to the desirability of a feminine view of the social construct of woman...(therefore) a dichotomy between feminine goals and sports

participation cannot be assumed for the athlete" (Felshin, 1974: 246).

Perhaps for the woman who has never accepted the feminist point of view a conflict does exist between sports participation and the concept of the ideal woman. Today's woman seems to have the option of adopting a traditional view of her role, a feminist view, or something in between. The extent to which women prescribe to any of these options is unknown. Likewise, the extent to which these beliefs may inhibit female sport participation is also unknown. The female's sex-role is highly changeable and ambiguous, sometimes in conflict with sports participation and sometimes not, whereas the male sex-role appears to be more stable and in harmony with sport participation.

The literature to this point clearly supports the contention that sport symbolizes the values and behaviours historically associated with the male image. However, sport has traditionally been the antithesis of the construct, 'ideal female', and until the recent rise of the feminist movement, female sport participants have probably experienced some degree of role conflict. The 'contemporary' minded female, on the other hand, tends to value traits for herself which might be considered more consistent with those symbolically idealized in sport.

It would, therefore, appear to be important in any

discussion about inhibition or motivation of sports participation to consider male/female differences.

Sex-Role Socialization

The differences in attitudes by males and females towards sports participation are thought to have their roots in the early sex-role socialization process.

In summarizing the social learning theory, Grantier (1973) felt that, according to this point of view, at birth all children are essentially the same within some very broad genetic limits. The socialization process begins immediately and through differential reinforcement of acceptable behaviour and through modeling the child learns how to behave appropriately. Furthermore, the person learns how to interpret this behaviour in terms of self and will probably attribute this behaviour to himself eventually.

When a child is born, the process of socializing the appropriate sex-role begins immediately (Rosenberg and Sutton-Smith, 1972: 53). It has been found that by the age of three the child is already aware of which jobs are appropriate for men and which are for women, as well as the appropriate sex-role behaviour (Bardwick, 1971).

One of the key differences in early sex-role socialization appears to be the area of learned aggression. Sears,

Maccoby and Lavin (1957) found that parents differentially reinforced boys for aggressive behaviour and that girls were rewarded for non aggressive behaviour and conformity.

This point was confirmed by Mischel.

The greater the incidence of dependent behaviours for girls than boys and the reverse situation with respect to physically aggressive behaviour, seems directly applicable in social learning terms. Dependent behaviours are less rewarded for females in our culture and consequently there are mean differences between the sexes in the frequency of such behaviours after the first few years of life (Mischel, 1966: 75).

Another important sex-role difference concerns autonomous achievement.

.....small females are valued in terms of the attractiveness of their persons and the appropriateness of their interpersonal responses.....Little is demanded of them in the way of competitive or autonomous achievement.....Almost from birth the boy has more problems to solve autonomously (Hartley, 1970: 140-141).

During youth, the socialization process for females is less rigid than it is for males. Bardwick (1971) refers to this as the bisexual identification of middle class American girls. She has said that girls are permitted and sometimes encouraged to succeed in traditionally masculine and hence more valuable pursuits, but only until adolescence. However, children still perceive the sex-roles in a traditional way.

Females tend to take advantage of this ambivalence by taking an increasing interest in "masculine" sports from grades three to six (Sutton-Smith and Rosenberg, 1961).

As the young girl reaches adolescence, peer and societal pressures to conform to the accepted behavioural role tend to become more important than her tomboyish activities (Rosenberg and Sutton-Smith, 1960). Klafs and Lyons (1973) have suggested that at this age the girl tends to become more socially oriented than males and finds greater satisfaction in social interaction with others. Girls place increasing importance in how others view them. Douvan and Adelson (1966) stated that, "What the boy achieves through separation and autonomy, the girl achieves through intimate connections with others because her identity is defined through her attachment to others." (Douvan and Adelson 1966: 231).

It is during adolescence that the parent becomes less significant and the peer group becomes the most significant influence in a child's life. Behaviour is then guided by the real or anticipated reactions of this group (Bardwick, 1971).

Thus the "normal" adolescent girl has learned to identify herself as a female and perceives herself as feminine but has also learned through experience in her youth that she is capable of achieving success at what are now, for her, considered

to be masculine modes of behaviour. She also realizes that the masculine activities are generally perceived to be more highly valued than traditionally feminine activities (Brown, 1958). This is a critical period from a sport perspective because it has been found to be an age when many girls drop sports (McNally, 1974 a and b). This phenomenon is consistent with the female sex=role socialization process but the implied cause and effect relationship is not conclusive as a great number of males, who experience a far different socialization process, were also found to drop out of sports at this age (Hansen, 1970).

Factors Influencing Sports Participation

The discussion thus far has focused on the overall socialization processes which affect an individual's behaviour patterns and in particular how these differ between males and females. How then do these general processes relate to sports participation? Specifically, how does the socialization process, differential reinforcement and self concept effect one's participation or non participation in sports?

Normative Beliefs

Wankel has defined normative beliefs as, "an individual's perception of a reference person or group's position with respect to the action or object" (Wankel, 1975: 4). A child's parent's reaction to sports participation strongly influences

the likelihood of him or her playing sports. During adolescence, perceived attitudes or reactions of friends become increasingly influential. In the case of a female, if her reference group holds traditional views of what activities are appropriate for females, then she is less likely to participate in some sports. Clearly, the perceived attitudes of reference groups or individuals play an important role in determining the probability of sports participation.

Expectations and Motivation

Expectations were described earlier as a form of stimulus control of behaviour. A person's expectations of what it will be like to play a sport effect the decision to play or not play. If a person expects positive outcomes such as meeting new friends, having fun or perhaps improving fitness levels, there the probability of participating is enhanced. Negative expectations such as ridicule by friends, injury or feelings of failure will probably result in non participation (Orlick, 1972; Wankel, 1975).

There is some evidence that males and females differ in their ideas on positively valued expectations of sport participation. In other words, they are motivated by different aspects of sports.

Petrie (1970) found that university women were motivated to play sports for social interaction, fun and

aesthetic expression. Males were found to play sports to pursue risk, to demonstrate their skill with a weapon, to compete on the basis of skill or combat or to compete against nature.

Orlick (1974) found that most people were motivated to play sports just for fun. Fun referred to freedom from pressures to perform, freedom from imposed controls and freedom from numerous other extrinsic motives (Bouet and Orlick, 1974).

If positive expectations from sports are not fulfilled by participation, then expectations will probably become negative and the likelihood of future participation diminished.

Availability

Perhaps one of the most basic factors frequently cited for a lack of sport participation is availability (Heit and Malpass, 1975). Availability, in a broad context, can refer to availability of facilities, suitable programs, time to participate, ease of travelling, financial means, others to play with or program at a suitable skill level (Wankel, 1975).

Many of these aspects of availability were highlighted by girls in Germany as reasons why they did not like to engage in sports. The major reasons given were:

1. Lack of time
2. Distance from sport facilities

3. Expense of the desired types of sports
4. Lack of qualified instructors
5. Too narrow sport program in school

(Heuser, 1965: 57)

The lack of any of these important aspects of 'availability' could effectively limit sports participation.

Achievement Orientation

In modern western culture sport is largely achievement oriented. Prior socialization towards or away from achievement as well as one's reinforcement history should logically play a role in determining one's disposition toward sport as it presently exists.

The discussion on sex-role socialization suggested that males receive more positive reinforcement for achievement than females. Females, in fact, receive negative reinforcement for achievement requiring physical assertion or aggression, whereas males are usually encouraged in this regard.

As a result of this process, it could be expected that an achievement orientation and physical aggressiveness would be inconsistent with the female self image and consistent with the male image.

The unacceptability of high success by females in sports

was suggested in a pilot study by McNally and Orlick (1974). In response to the question, "How good would you like to be in sports?", 77 per cent of the non-sport participant group said they only wanted to be average.

Ogilvie (1967) expressed the opinion that it is degrading for a girl to strive for victory or to be ego involved in a sport activity. He feels that girls are not supposed to be competitive and that it is unacceptable for a girl to want to win.

Sherif (1971) maintained that, "By striving toward and attaining a high level of performance she (female athlete) experiences success in one respect but faces failure in others, namely in those spheres traditionally defined as being feminine" (Sherif, 1971: 7).

A pilot study by McNally and Orlick (1974) also found that a majority of the high school girls interviewed who were non sport participants perceived "trying to win" as degrading and that visable expression of an all out effort towards the best possible performance was undesirable.

One possible factor influencing the dropping of sports by females was discussed in Bardwick's work (1971). She said ".....when achievement success can be seen as threatening affiliative (dating) success, at that time it will be an important conflict if the girl cannot gratify both her

traditionally feminine needs and her achievement needs" (Bardwick, 1971: 142).

The point at which this conflict occurs seems to be changing, thus reducing its potential as an inhibitor of sport participation. Snyder and Kivlin (1975) concluded from their research with 275 university women that, "the social costs of athletic participation by women today are not as great as previously" (Snyder and Kivlin, 1975: 197).

If, however, achievement in sports was perceived as being a cause of conflict for the female, it could be solved by not achieving in sports, not participating in sports, a change in significant others or a change in self concept.

Avoidance of sport participation and realignment of self concept appeared to have been the strategies employed by the athletes and non athletes in McNally and Orlick's research (1974). Clearly the image of the ideal female was more traditional for the non athletes than for the athletes.

Achievement orientation, when narrowly defined as winning the contest, has some other effects which could conceivably alter sports participation for either sex. In a pilot study, using an all females high school sample, it was found that such things as not being good enough to play, unsportsmanlike conduct and being made to feel inferior were clearly influencing the girls' decisions to not play more sports (McNally, 1974 b).

Orlick's (1972, 1974) sport drop-out research revealed that intense competition in sport turned people of all ages and sexes away from sports. At the high school level, 67 percent of the students dropped out of sports because of the competitive emphasis.

Perhaps it is as Orlick's research suggests, that although ours is a competitive, aggressive culture, there is a point in sport and in life where there is too much aggressiveness and too much competitiveness to be enjoyable, regardless of whether one was raised to be an aggressive male or receding female.

CHAPTER III

RESEARCH METHODS

This chapter discusses the methodology followed in this study beginning with an Overview, followed by Subjects, Instrument Development, Procedures and Statistical Analysis.

Overview

This research was exploratory in nature. In an attempt to investigate the relative strength of possible reasons why sports participation may be limited, a conceptually exhaustive array of reasons were included in a questionnaire format. Comparisons were made between males and females at both the item level and at a more general level inferred from the underlying structure of the questionnaire obtained from the factor analysis.

Subjects

Responses to the questionnaire were obtained from 310 female and 403 male high school students in grades 9 through 13. These students all attended the only high school in a town of approximately 17,000 people located in southern Ontario. The sample included students in the academic, commercial, technical and occupational streams in the school.

A randomized block design was used as the sampling procedure. The ratio of classes selected from each grade

level was roughly equal to the ratio of students in each grade in the school. The classes chosen to represent each grade level were randomly selected from all of the classes in that grade. Each class selected was taken as a whole unit.

Instrument Development

A survey inventory was developed for use in this study which was designed to assess why high school students do not play more sports.

Exploratory factor analysis requires that there must be representativeness not only of subjects but also of opinions or reasons (i.e., in this case reasons for not participating more in sports). Accordingly, a conceptual analysis was undertaken to identify the total set of possible areas of concern. This conceptual analysis was developed through a thorough review of related literature as well as through discussions with teachers, coaches and several sport psychologists. A pilot study was also conducted utilizing open ended questions. 144 females responded to the questionnaire according to their perceived reasons for not playing more sports. The categories resulting from this search included: Significant Others, Ability, Facilities, Health, Sexuality, Self-Concept, Competition, Cosmetic, Physique, Injury, Time, Coaching, Self-Consciousness, Models, Socialization, Organization, Learning, and Aggression.

The next step was the development of sets of approximately equal numbers of statements to represent each area of concern. To construct appropriate statements, actual responses from the open ended questions mentioned above were utilized to ensure that the wording would be meaningful to the subjects. Items not covered by this procedure were constructed based on the literature. In particular, Orlick's 1972 dissertation which was based on interviews with male non participants in sports was used as a guide to possible items for inclusion.

Fifty-five items were selected from the item pool such that no area of concern was disproportionately loaded with items.

The number of items was kept to a minimum due to time constraints imposed by the procedure of using one class period as the testing time. Also, if the form became too lengthy, it was felt that the respondents might lose their initial motivation to answer carefully towards the end of the form.

The items, or reasons, were randomly ordered on the questionnaire which was entitled "Sport Questionnaire" (See Appendix A).

The response format for each item was a 10 point scale which represented increasing importance ranging from 0, or no importance, to 9 or extreme importance as a reason for not

playing more sports. A 10 point scale was selected as it allows a substantial range of choice and because this type of response format yields data satisfying the scaling assumptions underlying Pearson's r , a statistic used in the analysis.

Procedures

The testing all occurred on one school day. The questionnaire entitled "Sport Questionnaire" was administered by the regular teacher for that class period. Each respondent was given a questionnaire (See Appendix A), a response sheet (See Appendix B) and a pencil. The instructions printed on the questionnaire were read to the respondents by the teacher. The respondents could then ask questions if they did not understand the answering format.

The total testing time was approximately 30 minutes, leaving 5 minutes at the end of the period for the students to ask questions about the test.

Statistical Analysis

The data was divided into female and male groups for analysis. Each variable was analysed for frequency of responses, mean value and standard deviation. The correlations between all variables, using Pearson's r , were then calculated.

The data was further analysed by multiple T-tests.

Comparison groups were males versus females, male sport participants versus male non sport participants, and female sport participants versus female non sport participants.

The male and female data were then separately factor analysed using the Principle Axis solution (Harmon, 1967). The resulting factor matrices were then rotated to simple structures according to the Varimax criteria (Kaiser, 1958). Factor solutions were restricted to those with eigenvalues above 1.0. To test for significance the eigenvalues associated with the generated factors were plotted on a graph in descending order and examined by means of the Scree Test for the point in the distribution where the curve became a straight line thus marking the beginning of error factors (Cattell, 1966).

The meaning of each factor obtained was interpreted in terms of common elements apparent in the items which loaded most heavily on it.

CHAPTER IV

RESULTS AND DISCUSSION

The analysis of the research data and interpretation are presented in this chapter beginning with a discussion of possible interpretations of the scaling procedure. This is followed by a presentation of individual variables focusing primarily on the top ranking variables and on variables strongly suggested in the literature but not substantiated in the findings. A presentation of the T-tests comparing males and females, and sport participants and non sport participants is made followed by results and discussion of the Factor Analyses. Implications and recommendations form the final sections of the chapter.

Interpretation of the Scale

In order to determine the relative importance of the subject ratings of each of the fifty-five variables, a 10 point scale was designed ranging in value from zero to nine. Immediately to the left of the zero was the label "This is not a reason why I don't play more sports" and immediately to the right of the nine was the label "This is a very important reason why I don't play more sports" (See Appendix A). The instructions appearing on the questionnaire implied that this was a bipolar scale with strong unimportance on the extreme left of the scale, strong importance on the extreme right of the scale and a hypothetical mid-point representing neither

importance nor unimportance presumably around the 4.5 point.

However, the scale did not necessarily elicit the kind of response that a bipolar (good - bad) concept elicits. The subjects may have treated it like an ordinal scale, zero being selected for "Not a reason". Thus, they could have literally translated the dimension, "Not a Reason", to be represented by zero and used the remainder of the scale to indicate the relative importance of variables considered to be meaningful as reasons for not playing more sports.

The possibility of two different response sets leads to more than one reasonable interpretation of the data. The two most logical explanations will be examined.

The first interpretation assumes that the scale was treated by the respondents as a bipolar scale. The assumption is that for each variable, the respondent located the hypothetical mid-point of the scale somewhere in the vicinity of 4.5 and then moved towards increasing importance or towards increasing unimportance from the neutral mid-point.

Acceptance of this interpretation implies that the variables receiving mean scores between zero and three were very unimportant reasons for not playing more sports, mean scores between six and nine were very important reasons, and scores around four or five were neither important nor unimportant.

A review of the mean scores of the variables (See Appendices C and D) in light of this interpretation indicates that approximately 80% of the variables were very unimportant, that the remaining 20% were either slightly unimportant or in the uncommitted region of neither unimportance nor importance and that none of the variables were of any importance as reasons for not playing more sports. This would mean that virtually all of the fifty-five variables were actually non-reasons for not participating more in sports and that the data merely indicates the relative unimportance of these variables. One might legitimately conclude that the item pool in the questionnaire did not include any of the truly important reasons why high school students do not participate more in sports. However, the item pool was a product of a rigorous review of the literature, conversations with several sport psychologists, coaches and teachers and pilot studies with high school students using open-ended question. In particular, Orlick's 1972 Ph.D. dissertation based on extensive interviews with people who had dropped out of sports along with follow up study (1974) was used as a basis for the item pool. Orlick specifically asked why each person thought they had dropped out of sport. The subjects in Orlick's research clearly identified major areas of concern to the sport drop out which appeared around the mid-point or neutral area along the scale in the present research. However, this and other drop out research indicates these reasons were important enough to withdraw from participation (Orlick, 1972; Hansen, 1975).

Acceptance of the present research based on the foregoing interpretation of the response set casts serious doubt on our ability thus far to identify any of the reasons limiting sports participation as actually perceived by people. It means that people attribute their lack of further sports participation to reasons which they have not yet openly expressed.

A second interpretation of the response set used by the students suggests that they treated the scale as an ordinal scale. In this case, the students first decided if the variable was or was not a reason for not playing more sports. If it was not a reason, and seeing the label, "This is not a reason why I do not play more sports", they would mark a zero. If, on the other hand, it was a reason for not playing more sports, they would begin to distinguish shades of importance by moving to the right of zero. Thus, anything marked to the right of zero would be interpreted as a reason for not participating more. The further up the scale, the more its relative importance.

By once again reviewing the mean scores (See Appendices C and D) in light of the second interpretation, 73% of the variables had a mean above 1.0 and 27% under 1.0. The mean scores of the reasons steadily increased from 1.0 up to 5.3 indicating a ranking of the variables according to the relative importance they had as reasons for not playing more sports.

Although it may have been expected that the top ranking variables would have had higher mean scores than 5.3, there are several explanations as to why this might not have been expected. One explanation may be that high school age students are perhaps reticent to indicate, even to themselves, that something is having an extremely inhibiting affect on their behaviour as this may suggest a lack of freedom to them. A second explanation is that non participation in sports is a highly complex phenomenon, dependent on a number of variables which may or may not be related to those investigated. Thus, instead of finding one extremely high mean score, that is, one variable where nearly everyone agrees that it is the most important variable, we find a number of variables all inhibiting sports participation to some extent.

Although either of the two foregoing interpretations may be correct, the author has chosen to accept the second approach for the following reasons. Acceptance of the first interpretation suggests either that the responses did not reflect the true feelings of the respondents or that none of the research to date has identified any of the real reasons limiting sports participation. Secondly, it implies that the variables most strongly supported in the literature were treated as neutral items not having sufficient meaning to elicit a definite response, whereas, the least supported variables from the literature elicited the most meaningful responses. This apparent contradiction between past and present research is difficult to explain.

Conversely, the second interpretation would seem to be much more appealing as it allows one to believe that past research on this topic has been meaningful and that among the vast number of reasons given by people in interviews and in open ended questionnaires for not playing more sports, at least one is an important reason limiting sports participation. It also means that the mean scores of the variables can be interpreted as a ranking by importance. In this case, there is a great deal of agreement between the data and past research. The author feels more confident with this interpretation as the findings according to this interpretation are highly supported in the literature, making them logical and thus believable, whereas, with the former interpretation the contradictions are difficult to explain. Therefore, the author has chosen to accept the second interpretation as the basis of the following analysis and discussion.

Determining the Importance of Variables

Fifty-five variables were rated by the subjects on their importance as reasons for not playing more sports. Male and female mean scores were tabulated separately on each variable and used as a measure of relative importance of the variables. The mean scores had a possible range from zero to nine with a higher mean score indicating a greater limiting effect on sports participation.

After having studied the alternative interpretations of the data and having accepted the assumption that any score of 1.0 or above on a variable indicates some meaning as a reason for not playing more sports, the variables have been discussed in terms of relative importance.

Highest Ranking Variables Restricting Sports Participation

The variables discussed in the following section constitute the most important reasons found for high school students not playing more sports. These nine variables are presented in order of importance beginning with the most important reason for not playing more sports.

Sports Are Not Enough Fun

The single most important reason why high school students said they did not play more sports was because there was not enough fun in sports. This finding was based on variable NO FUN (I'd play more sports if there were more opportunities to play just for fun) which received the highest mean score from both males and females, thus designating it as the strongest variable restricting sports participation (see Table I).

In essence, these students have indicated that their main reason for playing sports is to have fun but that available sports are not enough fun to motivate more participation.

What is there about sports that makes it either fun or not fun? A Fun questionnaire devised by Orlick and his graduate students was administered to minor hockey players between the ages of 7 and 15. In response to the question that makes hockey fun, 30% said playing with other kids, 37% said just playing the game and 11% said when they played with good sports (Hansen, 1974).

In response to the question what makes hockey not fun, 51% of these boys made reference to aggression and violence, 18% said losing and 9% said sitting on the bench. Playing badly, parents and too much pressure were other reasons given. It was felt that these non fun factors were all related to the emphasis being placed on winning (Orlick in Hansen, 1974).

Bouet and Orlick (1974) also approached the question of what is fun through the use of a questionnaire administered to 111 University students studying physical education or recreation. One theme of fun revolved around spontaneous behaviour oblivious to internalized inhibitions and contrary to evaluation in any form. Also, togetherness was cited as another important aspect of fun. It was fun to share, communicate, cooperate or just be involved with other friendly people.

Themes of non fun found by Bouet and Orlick (1974) included ".....monotony, repetition, predictability, closed situations where the individual is imprisoned in rigid

TABLE I

Highest Ranking Variables Found to be Inhibiting Sports
Participation by High School Girls (310) and Boys (403)
as Determined by Mean Scores

VARIABLE	FEMALE MEAN SCORES	MALE MEAN SCORES
NO FUN	5.38	4.78
UPTIGHT	4.10	3.33
TIME	3.74	4.08
OPPORTUNITIES	3.56	3.20
NOT GOOD	3.47	2.46
DEVOTE TIME	3.42	3.18
STUDIES	3.38	3.06
SERIOUSNESS	3.36	3.13
JUDGED	3.23	2.35

The range of scores was from 0 to 9 where a higher mean score indicated a more important reason for not playing more sports.

structures or where he is otherwise restricted" (Bouet and Orlick, 1974: 9).

The literature suggests that fun is a complex aspect of sport. The existence of positive elements and the lack of negative ones contribute to a fun situation thus presenting two avenues for altering the total amount of fun experienced.

The finding that these students would play more sport if it was more fun implied that sport either does not have enough fun elements or has too many non fun elements. If participation is to be increased, then either sports as they presently exist, will have to be modified to make them more fun or new sport opportunities will have to become available which focus primarily on fun.

Up Tight

The variable UPTIGHT (I'd play more sports but even when we play for fun the other kids get up tight about playing well) was ranked as the second most important reason restricting sport participation for females and third most important for males (see Table I).

This variable has been interpreted as meaning an over-concern for performance to the extent of significantly reducing the fun of other players. One characteristic of fun

as outlined in the previous section was a lack of concern by the players for performance. Although someone's desire to perform well should not present a problem, when it creates an atmosphere of seriousness or tension, the carefree play of others can be effectively stifled.

It was inferred from variable UPTIGHT (I'd play more sports but even when we play for fun, the other kids get uptight about playing well) that some people cannot or are not able to play for fun even though they initially agreed that fun was their main objective. They are either unaware that their behaviour is perceived by others to be inconsistent with the overriding "group objective" of fun or they are unable to control their behaviour.

Constantly worrying about performance may be the result of a long conditioning process which reinforces the notion that being the best is extremely important. Although this conditioning process may be found in many aspects of life, it is particularly evident in sport. Research has shown that the longer the exposure to a competitive conditioning process the greater the conditioning effect. It was found that older children were less accepting of non competitive sports than younger children who readily accepted and enjoyed them. It appeared as though the older children needed to know how well they had performed before they could enjoy the game, whereas the younger children took pleasure in just playing (McNally and Orlick, 1975).

The idea that some people are conditioned to be competitive regardless of the situation suggests that they are no longer able to just play without introducing a competitive component. In other words, these people are not capable of the playful behaviour which they may have enjoyed during childhood although it appears as though many would like to experience that carefree enjoyment again.

Two changes in the sport environment may help correct the negative effects of uptight players. The first suggestion is that people who play sports for fun and people who play sports competitively should have separate sport opportunities as the two groups seem to be incompatible. Secondly, it appeared as though some people would benefit from exposure to a conditioning program opposite to the intensive competitive conditioning they now experience to enable them to have the option of playing sports just for fun.

Time

The variable TIME (I'd play more sports but it would take up too much time) was the second most important variable for the males and third for the females as a reason for not playing more sports (see Table I).

The students' perception of time was an interesting one as presumably most students had a similar amount of time minus actual class time to delegate as they wished. Time is

normally spent according to the relative value of available alternatives as perceived by the individual. Therefore, the lack of time for sports may, in part, mean that participation in sport, relative to other possibilities is not perceived as having enough value to spend time on.

The actual lack of time to play sports is not an easy problem to solve but improving the quality of sport experiences and improving attitudes towards the value of sport participation could significantly decrease the problem.

Opportunities

The variable OPPORTUNITIES (I'd play more sports but opportunities for me to play are limited) was reported to be an important reason for not playing more sports as it ranked fourth highest, in terms of mean scores, for both males and females.

It was interesting that the males and females scored this variable similarly which tended to disprove a common notion that females suffer more than males from lack of opportunities to play sports. Apparently, they feel similarly inhibited by a lack of opportunities.

The idea of limited opportunities is rather vague and thus a number of possible explanations must be examined.

The lack of opportunities could refer to the actual

physical facilities required for certain sports. However, this explanation seems unlikely as many excellent sport facilities were available for the students involved in this research. At the school itself, there were three fully equipped gymnasias, a tennis court, and track and field facilities. Within this town, of approximately 17,000 people, public facilities included lighted tennis courts, swimming pools, golf courses, ski areas, numerous ball parks, curling and bowling facilities and an arena. Opportunities must therefore refer to something other than the existence of facilities.

It is possible that suitable sport opportunities existed but that the students were unaware of their existence. If this was the case, then a more effective promotional campaign would seem to be called for.

The next logical explanation would be that suitable program opportunities were limited for many students. Although sport opportunities may exist for these students, they may be perceived as being unsuitable for reasons such as an undesirable emphasis in the program or because of the skill level of others in the program. The finding that variable OPPORTUNITIES correlated most strongly with variable HELP LEARN (I'd play more sports but few people will take the time to help me when I'm learning a new sport) ($r = 0.41$, see Appendix E) perhaps indicates one program area lacking at this

particular school. For a beginner, a sport environment conducive to learning comfortably probably constitutes a suitable sport opportunity. It would, therefore, seem important in offering a sport opportunity that the specific desires of the prospective participants be examined and the program then be geared to satisfy these desires.

Not Good Enough

The first major difference between males and females was on the variable NOT GOOD (I'd play more sports but I'm not good enough). For all of the previously discussed variables, both sexes were generally in agreement on the importance of each item. However, the females ranked NOT GOOD as the fifth most important reason for not playing more sports, whereas NOT GOOD was ranked fourteenth by the males (see Table I).

The idea of not being good enough to play sports suggests either that the opportunities to play have been limited according to skill or that feelings of inferiority or humiliation by others have resulted in avoidance of sport participation. The first explanation, although it may be contributing to the problem does not explain the male-female differences as opportunities for both groups were approximately equal. Therefore, the latter explanation appears to also be involved and affecting the females more than the males.

The literature does suggest that feelings of inadequacy affect participation in sport (Orlick, 1972, 1974; McNally, 1974 b). However, only Hyland (1975) in his research with physical education drop-outs, found that females may be more affected than males by these feelings.

That females should feel more inhibited by feelings of inadequacy indicates that they are more sensitive to these feelings.

The latter hypothesis was supported by McCandless and Evans (1974) who suggested that females were more sensitive to negative evaluation than were males. Females appeared to be more dependent on the opinions of others as a means of defining themselves, whereas males had a tendency to define themselves more independently (Douvan and Adelson, 1966).

Furthermore, it was found that females generally felt incompetent and inferior (Rosenberg, 1968). It follows that women should have a tendency to feel inferior as performers in sport which has traditionally been considered a male domain.

It is important to note that the females reported themselves to be more highly affected by feelings of inferiority as it indicates a strong need for non-evaluation type sport opportunities for females. However, it should not be overlooked that some males were also affected by feelings of inferiority and therefore greater care should be taken to

eliminate elements in the sport environment for both sexes which foster feelings of inferiority if participation is to be increased.

Devoting Too Much Time

The sixth most important variable for the females and fifth for the males was DEVOTE TIME (I'd play more sports but coaches expect you to devote too much time). The female mean on this variable was 3.42 while the mean for the male sample was 3.18 (see Table I). Apparently these two groups felt similarly affected by the amount of time expected to be consumed by sport participation.

It was implied in this variable, DEVOTE TIME, that coaches desired a greater time commitment from their players than the respondents were prepared to give. Although it is possible that coaches do expect too much time from their players, that cannot be concluded from the response to this variable. It is, however, clear that respondents' perception of what is expected is a factor limiting participation, even though they may have never played under a coach.

Perhaps in attempts to get more people involved in sports, particularly where coaching is involved, the potential participants should be reassured that they have a role to play in determining the extent of their commitment. There should be a clear understanding among the players and the coach at

the outset concerning their mutual expectations. This suggests that in recreational sports, a democratic leadership style would probably lead to greater participant satisfaction which could ultimately result in increased participation levels.

Seriousness

The variable SERIOUSNESS (I'd play more sports but some players are so serious they try to injure others) had a mean score of 3.36 for the females and 3.13 for the males and ranked eighth and sixth respectively in terms of importance as an inhibitor of sports participation (see Table I).

SERIOUSNESS (I'd play more sports but some players are so serious they try to injure others) was a complex variable as it contained two key words; serious and injury. In order to understand which of these two words the respondents were reacting to, the relationship of variable SERIOUSNESS to other variables was examined. It was found that SERIOUSNESS correlated most highly with variable UPTIGHT (I'd play more sports but even when we play for fun, the other kids get uptight about playing well) ($r = 0.45$, see Appendix E). This finding suggested that it was the seriousness as opposed to a dislike for injuries, which was having an inhibiting effect on sports participation.

The importance attributed to variables SERIOUSNESS and

UPTIGHT implied that many people want the opportunity to play non-serious sports. Although serious or competitive sport is very enjoyable for some people, it is clearly not for everyone. If all types of people are to be attracted to sports, then both competitive and non competitive sports should be available and readily distinguishable from one another.

Studies

The variable which ranked seventh for both males and females as a reason for not playing more sports was STUDIES (I'd play more sports but my studies are too important). This appeared to be an easily understood reason for not playing more sports, but its meaning became less clear after considering its very low correlation of $r = 0.11$ with variable TIME (I'd play more sports, but it would take up too much time) as it was felt that both variables dealt with the delegation of time. It may have been that playing sports was perceived by some as taking away from a concentrated study effort. However, the relationship between restricted sports involvement and studies may be more complex than expected.

Judged

The females on the variable JUDGED (I'd play more sports but I'd feel uneasy because I'd feel I was being judged) had a mean score of 3.23 which ranked it as ninth in terms of

importance as a reason for not playing more sports. The males reported themselves to be less limited by the feeling of being judged as their mean score was 2.35 for a rank of seventeen.

This variable, JUDGED, concerning negative feelings of being judged, correlated most highly with variables related to competitiveness, aggressiveness, and feelings of incompetence. Specifically, JUDGED had a correlation of $r = 0.50$ with COMPETITIVE (I'd play more sports but I don't like the competitive emphasis), $r = 0.46$ with NOT AGGRESSIVE (I'd play more sports but I am not aggressive enough to play sports seriously), $r = 0.45$ with TOO AGGRESSIVE (I'd play more sports but the people in sports are too aggressive for me) and $r = 0.45$ with LAUGH (I'd play more sports but people would laugh at me) (see Appendix E).

The above correlations suggested that the students felt they were being or would be judged in sport primarily on their weaknesses or through aggressiveness and competitiveness which they do not like. Apparently, they perceive sport to be mostly for serious players and feel that non-serious players will not be considered valuable and may be negatively judged or ridiculed for that reason. Such an interpretation presents a paradox as fun has been found to be a major motive for sports participation (Orlick, 1972, 1974, 1965b).

Summary of the Top Nine Variables

The most important reason found for not playing more sports was that sports were not enough fun. Sports were perceived as being too serious, too competitive and too aggressive for many students to enjoy them. Opportunities for non competitive, non evaluative play was desirable but not readily available. The expectation that coaches will demand too great a time commitment was found to be negatively affecting both males and females whereas feelings of inferiority and fear of being judged as inferior were found to be more strongly inhibiting female sport participation.

It appeared as though the seriousness attached to sport, perhaps as a result of the competitive emphasis, has made sports less enjoyable for many students, both male and female. Fun has been found to be a major motive for playing sports and thus, the lack of fun has lead to a general devaluation of sport relative to other activities resulting in the delegation of free time to other more valued alternatives.

Secondary Variables Restricting Sports Participation

The next group of variables to be discussed ranked tenth to nineteenth in terms of relative importance as reasons for not playing more sports. These variables received mean scores ranging from 3.0 down to 2.5 out of a possible score of nine, where a higher score indicated a greater limiting

affect of the variable on sports participation. Therefore, the reasons discussed in the following section were not perceived to be as limiting as those presented in the previous section.

Competitive Emphasis

The variable COMPETITIVE (I'd play more sports but I don't like the competitive emphasis) achieved mean scores of 2.99 by the females and 1.99 by the males out of a possible score of nine (see Table II). The greater mean score (according to a T-test; see Table III) by the females was consistent with results presented in the previous section (refer to subsections Not Good Enough and Judged). This finding indicated that females felt more negative about the competitive emphasis in sports than did males.

It may have been expected that variable COMPETITIVE (I'd play more sports but I don't like the competitive emphasis) would have been scored as highly as variables UPTIGHT (I'd play more sports but even when we play for fun the other kids get uptight about playing well), SERIOUSNESS (I'd play more sports but some players are so serious they try to injure others) and NOT GOOD (I'd play more sports but I'm not good enough) which were considered to be specific ramifications of the competitive emphasis. However, competitive emphasis is a general term involving additional components not as heavily scored as those aspects of competition

TABLE II

Secondary Variables Found to be Inhibiting Sports Participation
by High School Girls (310) and Boys (403) as Determined by
Mean Scores

VARIABLE	FEMALE MEAN SCORES	MALE MEAN SCORES
TOO COMPETITIVE	2.99	1.99
EQUIPMENT	2.96	2.83
BENCH	2.77	2.54
FAR AWAY	2.74	2.34
ORGANIZATION	2.68	2.73
BENEFIT	2.66	1.82
AFFORD	2.60	2.48
ALREADY TIME	2.59	2.95
NO HELP	2.58	2.36
FRIENDS	2.53	2.15

The range of scores was from 0 to 9 where a higher mean score indicated a more important reason for not playing more sports.

mentioned above. For instance, COMPETITIVE (I'd play more sports but I don't like the competitive emphasis) correlated most highly with TOO AGGRESSIVE (I'd play more sports but the people in sports are too aggressive for me) ($r = 0.40$, see Appendix E), which was a minimally important variable. Therefore, it would seem that only certain aspects of the competitive emphasis are having strong negative effects on participation levels.

Lack of Equipment

The males and females were in agreement concerning the relative importance of EQUIPMENT (I'd play more sports but I don't have the necessary equipment).as a reason for not playing more sports.

Although the equipment constraint was only of moderate importance compared to other reasons for not playing more sports, it is a problem which may become more evident in the future as a function of economic change. Solutions to this problem should be sought if the variety of sport opportunities is to be maintained or increased. Consideration could be given to cooperatively owned equipment or to other forms of sharing as possible solutions.

Organizational Problems

The proper organization and administration of sports appeared to play a moderately important role in determining

participant satisfaction with the total sport experience. The scoring on variable ORGANIZATION (I'd play more sports if they were better organized) showed that the males and females were similarly affected by organizational problems as the mean scores were 2.73 for the males and 2.68 for the females, (see Table II). Organizational problems ranked tenth in importance for the males and fourteenth for the females.

Organizational problems could refer to a variety of things such as scheduling, starting games on time, deciding on rules and regulations or communications. When any aspect of the organization and administration of a sport is not effectively carried out, participant dissatisfaction can be expected.

Some organizational problems are more easily solved than others. For instance, one of the most difficult areas to improve is that of communications. It is generally more pleasant to be well informed than to be left anxiously wondering what is going to happen next. Likewise, prior knowledge and acceptance of rules and regulations tends to lead to a more satisfying experience than when there is bickering due to a lack of understanding. Avoidance of this type of organizational problem is difficult and often involves not only a conscientious effort by administrators, but also involvement of participants in the administrative process in

order to optimize communications and understanding between the decision maker and the participants.

It is felt that, although solving communication problems may be time consuming, reduction of this as well as other organizational problems will help to increase participant satisfaction which will ultimately lead to increased participation in sport.

Not Beneficial or Benched

The notion that only those who play sports well, play sports at all was evident in variables BENCH (I'd play more sports, but I would probably be a bench warmer) and BENEFIT (I'd play more sports but no team would benefit from having me on their team). Both of these variables were found to be moderately important reasons for not playing more sports (see Table II) and had a correlation with each other of $r = 0.51$ (see Appendix E).

The inhibiting effect of benching was substantiated by the literature. It was found that there are many enthusiastic people who played on a team at one time, but who were benched or generally humiliated for their lack of ability, to the point where there was little reason to continue playing or to ever attempt playing again (Orlick and Botterill, 1975).

Orlick (1974) found benching to be an important factor influencing the dropping of sports by younger children. One

boy who had quit sports explained:

They never let me play. They just let the good guys play. The little guys just have to sit around and watch (Orlick, 1974: 3).

Not being allowed to play eliminates nearly all of the previously identified important sources of fun such as just playing, playing with good sports and spontaneous behaviour. Since fun is perhaps the primary motivation for sports participation, it is not surprising that the practice of benching has contributed to the elimination of many potential sports participants.

The variable BENEFIT (I'd play more sports but no team would benefit from having me on their team) contained two separate ideas. One idea was that anyone who plays for a team must be a beneficial player. The second idea was an evaluation of oneself as an inferior player.

From this variable BENEFIT, it could be inferred that people have been conditioned to sacrifice their sport experiences so that better players can experience success. Evidently, there is a common feeling that sports are just for those who are good at it and those who are not should not get involved (Orlick, 1974).

The sports environment, when it in any way emphasizes player inadequacies must be modified not just because it reduces participation, but also because of other possible

negative effects on the individual. This must be considered particularly important in children's sports. Feelings of inadequacy experienced in basketball may not only carry over to soccer, but also to other more general concepts of self. Sport is one of the environments where much care must be taken as it can have an impact on the child's self concept (Orlick, 1974; Snyder and Sprietzer, 1974; Scott, 1973).

Travelling and Money

The distance one must travel to play sports and the availability of money needed to play sports could potentially take precedence over any other variables limiting sports participation, particularly for high school students. Naturally, these practical issues must be a constant concern of the sport administrator who is attempting to maximize participation.

The distance one will travel or the amount of money available for sports is probably dependent to some degree on the value attached to sports relative to other alternatives. Therefore, although improving the quality of sports will not eliminate problems associated with travelling and the cost of sports, it may alter the perceived beneficial effect of these variables.

No Help When Learning

Although variable HELP LEARN (I'd play more sports but

few people will take the time to help me when I'm learning a new sport) has been described as a secondarily important variable, it was touched on in the section on top ranking variables under the subheading Opportunities. In that discussion, it was suggested that more opportunities were needed at this particular school to play sports in a low competitive or non threatening environment.

The learning stage, or first exposure to a sport is probably the most critical in terms of future participation. A person at this stage is testing a new sport to see if he or she will like it. If a person wants help or consideration but it is not offered or is not available, he or she will probably not enjoy the experience as much. Depending on the individual and the situation, this may be enough to prevent further participation.

Therefore, there apparently is a need for readily available, non threatening fun learning opportunities where a person has a chance to get 'a feel' for the sport and can experience fun right from the start.

Friends Do Not Play Sports

The females felt slightly more restricted in their sports than the males because their friends did not play sports. The female mean score variable FRIENDS (I'd play more sports but not enough of my friends play sports) was

2.59 versus 2.15 by the males (see Table II).

The slightly greater need by females to have friends in sports before playing was consistent with the finding in the literature that girls have a greater need for affiliation whereas males are more autonomous (Douvan and Adelson, 1966).

Coupled with this greater need by the females was the finding that the girls probably had fewer of their friends in sports simply because a smaller proportion of the girls than boys were found to be involved in sports (see Appendix D).

The problem appears to be circular as apparently the way to get more people involved in sport is to first get other people, preferably their friends involved. However, if all of the previously discussed major problems were solved then hopefully this minor problem would also disappear.

Already Much Time

In order to be exhaustive in listing possible reasons for not playing more sports, the possibility of already being substantially involved had to be included on the questionnaire. Logically, variable ALREADY (I'd play more sports but they already take up a lot of my time) applied primarily to those students extensively involved in sports. The significantly higher scores by both the male and female sport participants compared to non sport participants supports this hypothesis

(see Appendices G and H). Therefore, variable ALREADY had little importance for non sport participants.

Controversial and Lowest Ranked Variables

The discussion thus far has dealt with the top nineteen variables or reasons for not playing more sports. Together they represent approximately the top 50% of the range of mean scores recorded. Of the remaining variables, only those which are of special interest have been highlighted in this section.

Aggression

One aspect of sports which was expected to rank higher as a factor limiting sports participation was aggression. Both Orlick (1972, 1974) and Hansen (1974) found that many people, regardless of sex, view aggression in sports negatively. When young hockey players were asked what made hockey not fun, over 50% mentioned aggression or violence (Hansen, 1974).

A concern for violence in sport has become increasingly evident, particularly in hockey. The McMurtry Report, recently commissioned by the Ontario Government (1974) gives a good indication of the extent of the problem in amateur hockey.

North American professional hockey has also experienced a shift from the finesse style of play to reliance on intimidation. Bobby Hull's criticism of this new style of hockey

which he has been forced to contend with in the World Hockey Association is evidence of this trend (Globe and Mail, 1975).

It was also suggested in the literature that females, in addition to finding aggression to be unpleasant, likewise considered aggression to be an unacceptable behaviour for their sex. Sears et al (1957) found that parents differentially reinforced boys for aggressive behaviour, but that girls were rewarded for non aggressive behaviour.

A pilot study by McNally (1974) indicated that female non athletes felt negatively about both strong physical effort and aggression in other females. It might, therefore, be expected that the females would attach additional importance to aggression as a factor restricting participation as a result of some degree of role conflict.

The findings in the present study only mildly support a general distaste for violence and the expected sex difference. The mean values on the three variables related to violence, NOT AGGRESSIVE (I'd play more sports but I am not aggressive enough to play sports seriously), AGGRESSION (I'd play more sports but the people in sports are too aggressive for me) and ROUGH (I'd play more sports but sports are too rough) were moderately low (relatively unimportant for not playing more sports) (see Appendices C and D). Although the female mean scores were slightly higher than the males on all three variables, this difference was only

significant (see Appendix F) on the variable ROUGH (I'd play more sports but sports are too rough) where the female mean was 1.69 and the male mean was 1.10 (see Appendices C and D).

In order to understand why aggression was not perceived to be acting in a more limiting capacity on sports participation, the above variables were more closely examined.

There appeared to be two separate ideas contained in the variable NOT AGGRESSIVE (I'd play more sports but I am not aggressive enough to play sports seriously). First, there is the perceived need to be aggressive in order to successfully play sports, and secondly, the connotation of seriousness which has been attached to sports. The former aspect seems to involve an evaluation of self-aggressiveness relative to others in sports. Going beyond subjective comparisons with others, the variable AGGRESSION (I'd play more sports but the people in sports are too aggressive for me) required a value judgement. It not only implied that other people were aggressive, but that this aggressiveness was perceived negatively.

The variable AGGRESSION, which dealt with the aggressive behaviour of others in sports had a correlation of $r = 0.55$ with variable ROUGH, whereas variable NOT AGGRESSIVE had a correlation of $r = 0.44$ with ROUGH (see Appendix E). The

implication was that the aggressiveness associated with others refers more to physical aggression or violence than did the aggressiveness associated with self which may have referred more to assertive behaviour.

There would appear to be two explanations as to why aggression was not found to play a stronger inhibiting role on sports participation as would have been expected from the literature. One possibility was that the respondents have become increasingly more accustomed to aggression, possibly as a result of vicarious exposure to aggression through the media. A second possibility is that the majority of the sport opportunities available to the respondents do not contain much violence.

There is some reason to believe that the latter explanation is at least partially true, as the majority of sports offered at the school surveyed were non contact sports such as volleyball, badminton, basketball, gymnastics, track and field, and curling. This evidence supporting the latter explanation does not, however, rule out the possibility of the former reason also being true.

The Female Image

A great deal of emphasis in the review of literature was placed on the female sex-role socialization process as a possible source of inhibitions on female sports participation.

However, the research presented in the literature was not consistent. The research by Steinman and Fox (1966), Hartley (1970) and Broverman et al (1968) all gave evidence that sports participation should be interpreted as being inconsistent with the female self image and the concept of femininity. Conversely, Hoffman (1960), Gerber (1974), and Felshin (1974) all provide information which refutes the hypothesis that there should be a conflict.

Although some aspects of the female sex-role such as greater sensitivity to feelings of inferiority and a greater dislike for physical assertiveness and aggression seemed to be limiting female sports participation, other aspects such as a need to preserve the feminine image and cosmetic reasons did not appear to be influencing the amount of sports played by these high school girls.

Variables such as IMAGE (I'd play more sports but I think it would harm my image, female $\bar{x} = 0.46$), UNIFORM (I'd play more sports but I won't wear the ugly uniforms worn in some sports, female $\bar{x} = 1.13$), ATHLETE (I'd play more sports but I wouldn't want to be known as an athlete, female $\bar{x} = 0.82$) and SWEAT (I'd play more sports but I don't like to sweat, female $\bar{x} = 0.49$) depict a concern that sports may harm the feminine image. The low scores recorded for the above variables suggested that these female high school students did not feel that sports participation had any harmful effect on their social image.

The literature also suggested that females avoid playing sports for fear they will be less popular with boys, particularly if they play sports well. The low scores on variables BOYS PREFER (I'd play more sports but boys prefer girls who don't play sports, female $\bar{x} = 0.89$), GOOD (I'd play more sports but I don't think I'd ever want to be good at sports, female $\bar{x} = 0.95$) and POPULAR (I'd play more sports but the girls in sports are not popular, female $\bar{x} = 0.48$) tended to refute this hypothesis (see Appendix C).

In the review of literature it was indicated that girls were more valued because of their physical attractiveness, whereas boys were more valued for their achievements (Hartley, 1970). It could be predicted then that females would be more conscious of their appearance and would probably avoid appearing dishevelled.

However, contrary to the literature, males and females did not significantly differ on variables HAIR (I'd play more sports but wrecks up my hair, female $\bar{x} = 0.33$), DIRTY (I'd play more sports but I'd get too dirty, female $\bar{x} = 0.33$) and CLEANED (I'd play more sports but it takes too long to get cleaned up after playing, female $\bar{x} = 0.70$) suggested that this is not a current concern of the high school girls (see Appendix C).

This finding should not be too surprising in light of

the recent trends in both male and female student fashions. High school students no longer try to appear well groomed and immaculate as they did in the 1950's and 1960's. They go to a great deal of effort to look as casual and unconcerned about their appearance as possible. Typical of this trend is their reticence to wear brand new blue jeans, preferring instead faded worn-out ones.

The responses to all of the variables discussed in this subsection tend to refute some of the mythology surrounding female sports participation. Perhaps at one time, playing sports did present a strong sex-role conflict for women, but this no longer appears to be true, at least for contemporary high school girls.

T-Tests for Comparison of Males vs Females/ Participants vs Non Participants

Three separate sets of multiple T-tests were performed on the data to compare females with males, female sport participants with female non sport participants, and male sport participants with male non sport participants. The variables where the most significant differences ($p \leq .001$) were found to have been highlighted in Tables III, IV, and V. Full results of this analysis appear in Appendices F, G and H.

Significant Differences Between Female and Male Responses

The greatest difference between males and females

occurred on variable WRONG SEX (I'd play more sports but they are mostly for boys (girls)). This was an expected result as sports have a strong masculine connotation (Felshin, 1974). However, the female mean score was a modest 2.0 out of a possible score of 9, and ranked 26th as a restricting variable. Thus, even though the females scored WRONG SEX (I'd play more sports but they are mostly for boys (girls)) significantly higher than the males, there were numerous other more restricting reasons for females not playing more sports.

On the variables NOT GOOD (I'd play more sports but I'm not good enough), COMPETITIVE (I'd play more sports but I don't like the competitive emphasis), JUDGED (I'd play more sports but I'd feel uneasy because I feel I am being judged) and BENEFIT (I'd play more sports but no team would benefit from having me on their team), the females scored significantly higher than the males. These were also found to be among the most important reasons found why both males and females did not play more sports. The significantly higher scores by the females indicated greater negative feelings towards competitive sport environments. The females' greater reaction to feelings of being not good enough and of little value in sports or being judged as such, suggest that females feel much more self conscious or uncomfortable when participating or when being evaluated in sports than do males. This difference between the sexes is consistent with the finding

TABLE III

Variables Where the Greatest Differences ($p \leq .001$) Were Found Between High
School Female (310) and Male (403) Responses

VARIABLE	FEMALE MEAN	S.D.	MALE MEAN	S.D.	T VALUE	
WRONG SEX (I'd play more sports but they are mostly for boys (girls))	2.03	2.89	0.87	1.91	-6.09	***
NOT GOOD (I'd play more sports but I'm not good enough)	3.51	2.91	2.49	2.72	-4.74	***
COMPETITIVE (I'd play more sports but I don't like the competitive emphasis)	3.05	3.10	2.03	2.70	-4.54	***
JUDGED (I'd play more sports but I'd feel uneasy because I feel I am being judged)	3.03	3.07	2.39	2.64	-4.17	***
BENEFIT (I'd play more sports but no team would benefit from having me on their team)	2.68	2.84	1.83	2.61	-4.06	***
ROUGH (I'd play more sports but sports are too rough)	1.70	2.26	1.11	1.89	-3.70	***
ASSOC. (I'd play more sports but I don't like the type of girl (boy) who plays a lot of sports)	1.20	2.20	1.82	2.59	3.50	***

*** significant at the 0.001 level

that females are generally more sensitive to evaluation of self than are males (McCandless and Evans, 1974). It would, therefore, seem that females have a greater need for sport opportunities in a non-evaluative environment where they will not feel any extrinsic pressure to perform better. Furthermore, they need a sport environment which fosters positive rather than negative feelings about their sports ability; one where they can feel comfortable with themselves.

Although variables ROUGH (I'd play more sports but sports are too rough) and ASSOCIATE (I'd play more sports but I don't like the type of girl (boy) who plays a lot of sports) were scored significantly differently at the 0.001 level, the actual importance of rough play and being associated with athletes as reasons limiting sports participation were low relative to other restricting reasons for both males and females (see Table III). It was, however, interesting that it was the male group which felt more negative about being associated with athletes. This finding was not supported in the literature and requires further investigation to be clearly understood.

In summary, the major differences between males and females occurred on variables relating to aspects of sports participation which foster a feeling of being unworthy, degradation, or a feeling of not belonging because of one's skill level or sex. The females felt significantly more

restricted in sports than the males because of their negative expectations concerning these three areas.

Differences Between Non Sport Participants and Sport Participants

The male Non Sport Participants (N.S.P.) scored 13 variables for not playing more sports as significantly more restricting ($p \leq .001$) than the Male Sport Participants (S.P.) (see Table V). By the same criteria, on 16 of the 55 variables, significant differences were found between the Females N.S.P. and Female S.P. (see Table IV).

By examining the N.S.P. mean scores on each variable where significant differences were found, some insight can be gained about why the non-participants are not playing more sports. Of the variables where differences were found, six had mean scores of 3.0 or above. These were the following:

NOT GOOD (I'd play more sports but I'm not good enough)

JUDGED (I'd play more sports but I'd feel uneasy because I feel I am being judged)

COMPETITIVE (I'd play more sports but I don't like the competitive emphasis)

BENCH (I'd play more sports but I'd probably be a bench warmer)

BENEFIT (I'd play more sports but no team would benefit from having me on their team)

NOT AGGRESSIVE (I'd play more sports but I am not aggressive enough to play sports seriously)

Previously, in looking at the Females as a single group, only variables NOT GOOD and JUDGED had mean scores of 3.0 or above; COMPETITIVE, BENCH, and BENEFIT were considered to be of secondary importance and NOT AGGRESSIVE was found to rank twentieth as a reason for not playing more sports. It can be seen that once the moderating effect of the sport participants group was removed, all of the above reasons were important sport inhibitors for the Female N.S.P.

Once again, the negative effect of a competitive emphasis, feeling inferior, or being made to feel inferior and aggressiveness appear to be important in restricting female participation in sports, particularly for non sport participants.

Similarly, for the males, the following variables were found to be important sport inhibitors for the N.S.P.:

NO FUN (I'd play more sports if there were more
opportunities to play just for fun)

COMMIT (I'd play more sports but I don't like being
committed to things)

NOT GOOD (I'd play more sports but I'm not good
enough)

JUDGED (I'd play more sports but I'd feel uneasy
because I feel I am being judged)

BENCH (I'd play more sports but I'd probably be a
bench warmer)

COMPETITIVE (I'd play more sports but I don't like
the competitive emphasis)

NOT AGGRESSIVE (I'd play more sports but I am not
aggressive enough to play sports seriously)

TABLE IV

Variables Where the Greatest Differences ($p \leq .001$) Were Found Between High School Female Reported Sport Participants (129) and Non Sport Participants (177)

VARIABLE	N.S.P. MEAN	S.D.	S.P. MEAN	S.D.	T VALUE
NOT GOOD (I'd play more sports but I'm not good enough)	4.55	2.90	2.07	2.25	8.37***
LAUGH (I'd play more sports but other people would only laugh at me)	2.55	2.76	0.74	1.61	7.14***
BENEFIT (I'd play more sports but no team would benefit from having me on their team)	3.57	2.99	1.50	2.13	7.04***
BENCH (I'd play more sports but I'd probably be a bench warmer)	3.67	2.91	1.60	2.28	6.93***
SHAPE (I'd play more sports but I'm too out of shape to enjoy them)	2.66	2.64	1.00	1.75	6.58***
COMPETITIVE (I'd play more sports but I don't like the competitive emphasis)	3.91	3.17	1.90	2.62	5.98***
NOT AGGRESSIVE (I'd play more sports but I'm not aggressive enough to play sports seriously)	3.24	2.91	1.51	2.20	5.89***
ALREADY TIME (I'd play more sports but they already take up a lot of my time)	1.84	2.61	3.92	3.51	-5.59***
HURT (I'd play more sports but I'm afraid of getting hurt)	1.78	2.30	0.61	1.38	5.49***
TOO AGGRESSIVE (I'd play more sports but the people in sports are too aggressive for me)	2.85	2.68	1.42	2.11	5.19***
ROUGH (I'd play more sports but sports are too rough)	2.21	2.39	0.98	1.85	5.06***

TABLE IV (Con't)

VARIABLE	N.S.P. MEAN	S.D.	S.P. MEAN	S.D.	T VALUE
ASSOCIATE (I'd play more sports but I don't like the kind of girl who plays a lot of sports)	1.62	2.32	0.63	1.38	4.66 ***
JUDGED (I'd play more sports but I'd feel uneasy because I feel I am being judged)	3.93	3.00	2.50	2.89	4.19 ***
RUN (I'd play more sports but I don't like a lot of running)	2.51	2.70	1.36	2.18	4.08 ***
COMMIT (I'd play more sports but I don't like being committed)	2.71	2.79	1.61	2.31	3.73 ***
CLEANED (I'd play more sports but it takes too long to get cleaned up after playing)	0.93	1.83	0.38	0.95	3.42 ***

*** significant at the 0.001 level

TABLE V

Variables Where the Greatest Differences ($p \leq .001$) Were Found Between High School Male Reported Sport Participants (151) and Non Sport Participants (247)

VARIABLE	N.S.P. MEAN	S.D.	S.P. MEAN	S.D.	T VALUE
COMPETITIVE (I'd play more sports but I don't like the competitive emphasis)	3.24	3.20	1.34	2.08	6.44 ***
COMMIT (I'd play more sports but I don't like being committed to things)	3.54	3.03	1.88	2.42	5.65 ***
JUDGED (I'd play more sports but I'd feel uneasy because I feel I am being judged)	3.39	2.87	1.84	2.31	5.57 ***
BENEFIT (I'd play more sports but no team would benefit from having me on their team)	2.76	3.07	1.31	2.13	5.06 ***
NOT AGGRESSIVE (I'd play more sports but I am not aggressive enough to play sports seriously)	3.00	3.09	1.51	2.33	5.04 ***
NOT GOOD (I'd play more sports but I am not good enough)	3.39	3.02	1.96	2.37	4.84 ***
LAUGH (I'd play more sports but people would only laugh at me)	2.12	2.93	0.91	1.88	4.48 ***
BENCH (I'd play more sports but I'd probably be a bench warmer)	3.33	3.21	2.05	2.50	4.17 ***
TOO AGGRESSIVE (I'd play more sports but the people in sports are too aggressive for me)	2.43	2.92	1.30	2.03	4.16 ***
FRIEND (I'd play more sports but not enough of my friends play sports)	2.89	2.96	1.70	2.46	4.13 ***
SHAPE (I'd play more sports but I'm too out of shape to enjoy them)	2.09	2.58	1.17	1.92	3.73 ***

TABLE V (Con't)

VARIABLE	N.S.P.		S.P.		T VALUE
	MEAN	S.D.	MEAN	S.D.	
NO FUN (I'd play more sports if there were more opportunities to play just for fun)	5.47	3.11	4.40	3.17	3.31 ***
ALREADY TIME (I'd play more sports but they already take up a lot of my time)	2.35	3.9	3.51	3.42	-3.34 ***

*** significant at the 0.001 level

Previously, for the males, as a total group, variable NO FUN was considered to be the highest ranked reason for not playing more sports; BENCH was considered to be of secondary importance; NOT GOOD, COMMIT, JUDGED and NOT AGGRESSIVE were found to be of lesser importance and COMPETITIVE appeared to have comparatively little effect as an inhibitor of sports participation. Therefore, although for males in general, some of the above reasons did not appear to be very important, for male non sport participants these variables represent important inhibitors of sports participation.

The similarities between the Male N.S.P. group and the Female N.S.P. group is quite apparent. Both groups of non sport participants feel strongly limited in their sports participation because of a competitive emphasis, feeling inferior or being made to feel inferior, and aggressiveness in sports.

Of the remaining variables where significant differences were found between S.P. and N.S.P., only a few were found to have at least a moderate restricting effect on the non participants.

For the Males, the N.S.P. scored BENEFIT (I'd play more sports but no team would benefit from having me on their team) and FRIEND (I'd play more sports but not enough of my friends play sports) above 2.5. They also scored the remaining variables LAUGH (I'd play

more sports but other people would only laugh at me), TOO AGGRESSIVE (I'd play more sports but the people in sports are too aggressive for me) and SHAPE (I'd play more sports but I'm too out of shape to enjoy them) as significantly more important than did the Male S.P.

For the Female N.S.P., the following variables were moderately important as reasons for not playing more sports:

LAUGH (I'd play more sports but other people would only laugh at me)

SHAPE (I'd play more sports but I'm too out of shape to enjoy them)

TOO AGGRESSIVE (I'd play more sports but the people in sports are too aggressive for me)

ROUGH (I'd play more sports but sports are too rough)

RUN (I'd play more sports but I don't like a lot of running)

COMMIT (I'd play more sports but I don't like being committed to things)

Formerly, all of the above variables were found to have minimal importance for females as a group, yet they do seem to be playing a stronger inhibiting role on the participation level of the female N.S.P.

Variables ASSOCIATE (I'd play more sports but I don't like the kind of girl who plays a lot of sports), HURT (I'd play more sports but I'm afraid of getting hurt) and CLEANED (I'd play more sports but it takes too long to get cleaned

up after playing) were of comparatively little importance to either Female group as reasons for not playing more sports, even though scored as significantly more important by the female N.S.P.

The remaining variable for which there was a significant difference between S.P. and N.S.P. (both male and female) was ALREADY TIME (I'd play more sports but they already take up a lot of my time). As expected, it was the S.P. group, in both cases, which scored higher.

Summary of T-Tests

To summarize the important T-test findings, the Females were found to feel significantly more inhibited in their sports participation for reasons relating to competitive emphasis, feeling inferior or incompetent to play adequately and a feeling of not belonging in sports because of their sex.

Both Male and Female Non Sport Participants compared to Sport Participants were found to feel significantly more restricted in their sports participation because of the competitive emphasis, aggressiveness and feeling inferior or being made to feel inferior in sports.

Factor Analysis

To this point, the results and discussion have dealt only with individual variables. In the following section

the focus shifts to the factor level. Both the male and female data were factor analysed in an attempt to reduce the fifty-five variables into a smaller number of factors.

Significant Factors

As a result of limiting the number of factor solutions to those where the eigenvalues exceeded 1.0, five factors were generated from both the male and female sets of data. Although this method of determining the point at which all of the significant factors have been extracted is usually acceptable, it often stops too late when greater than fifty variables are involved (Cattell, 1966). To check for this error, a further test known as the 'Scree Test' was performed on the data. This test involved plotting the eigenvalues on a graph and determining the point where the curve changes to a straight line. The results of this procedure indicated that there were actually only two significant factors (see Figures I and II). The remaining factors, known as common factors, were attributed to a large number of random small influences arising from correlations among independent specifics in the population and measurement errors (Cattell, 1966). It is for this reason that only two factors have been discussed in depth. However, the remaining three factors, which may, in fact, be acceptable to those holding a less conservative view, were interpretable factors and have, therefore, also been reported.

FIGURE I. DIAGRAM OF THE SCREE TEST FOR
TRUE FACTORS: FEMALE SAMPLE

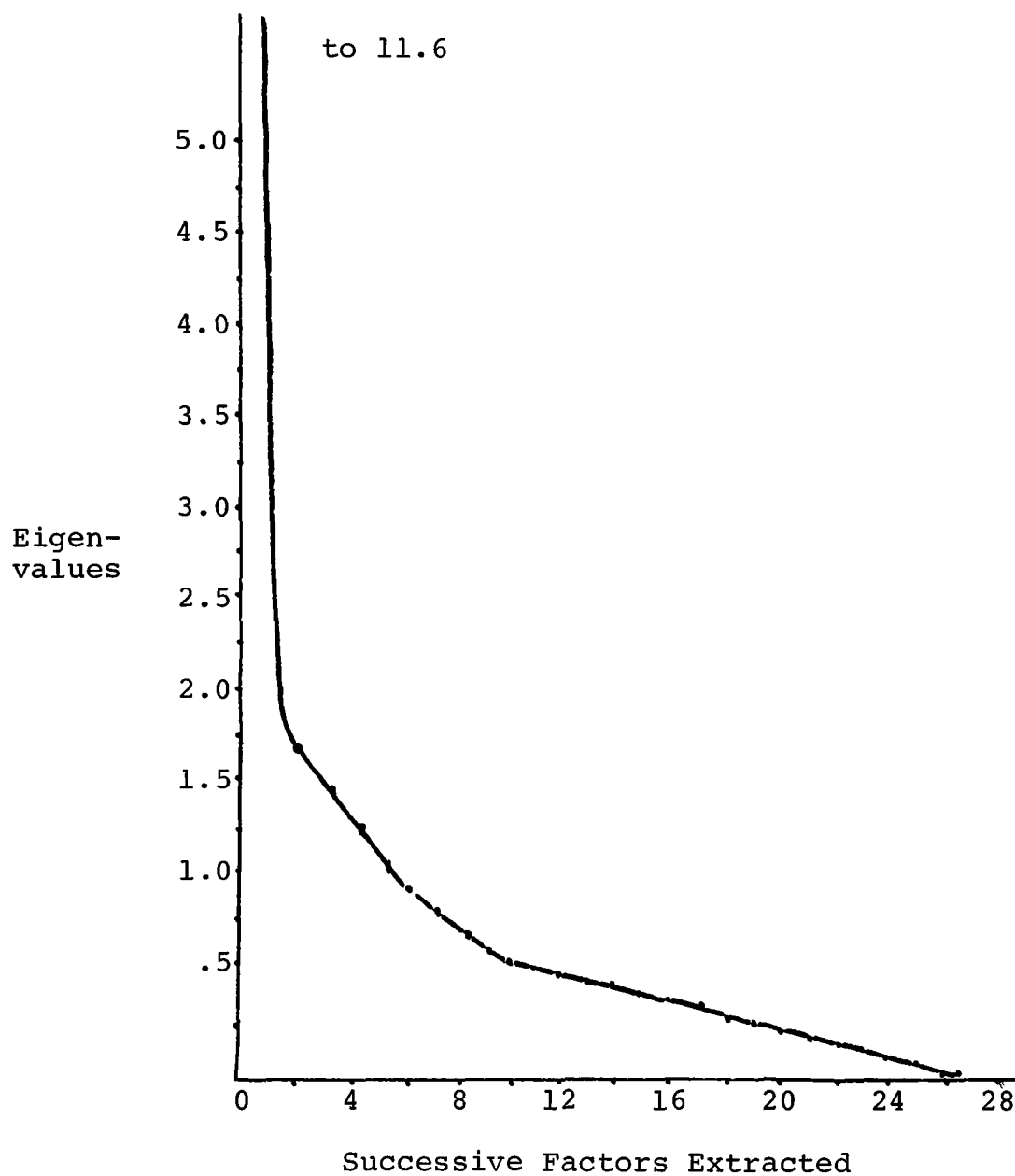
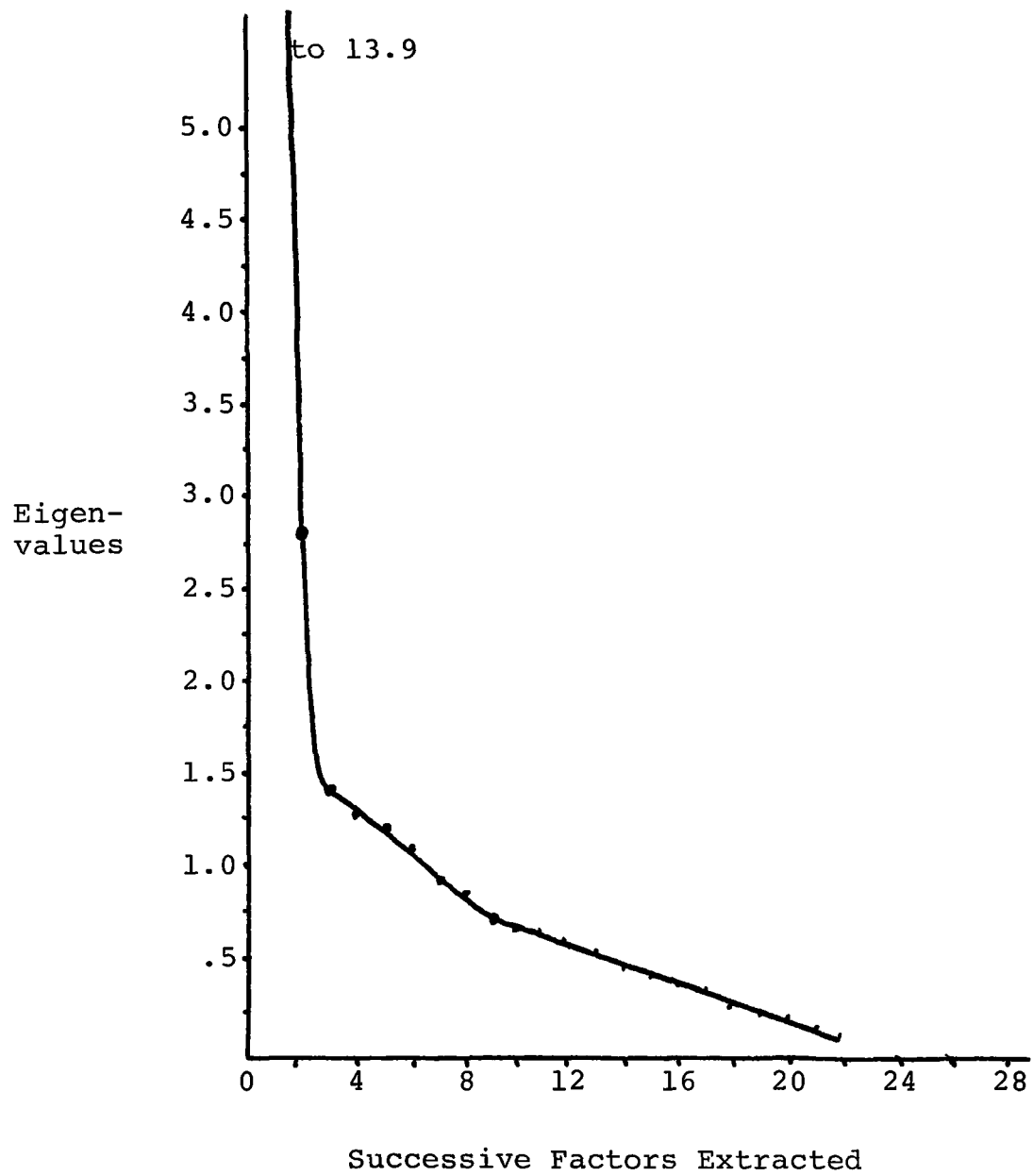


FIGURE II. DIAGRAM OF THE SCREE TEST FOR
TRUE FACTORS: MALE SAMPLE



The Self Esteem/Competitive Threat Factor

The first factor which accounted for approximately 22% of the common variance, was labelled Self Esteem/Competitive Threat and was the most salient factor derived from the data. It was also a very important factor limiting sports participation as the variables loading the most heavily on it also received relatively high mean scores.

The meaning of this factor was derived from two groups of variables. The first group of variables to load on this factor were related to self esteem. Specifically, these were NOT GOOD (I'd play more sports but I'm not good enough), BENEFIT (I'd play more sports but no team would benefit from having me on their team), BENCH (I'd play more sports but I would probably be a bench warmer), LAUGH (I'd play more sports but people would only laugh at me) and JUDGED (I'd play more sports but I'd feel uneasy because I feel I am being judged). The loadings for these variables were all above 0.57. The complete loading patterns have been reported in Appendices I and L.

The above variables, when taken together, strongly imply a fear of being judged unacceptable or inferior to others and not being allowed to play or otherwise eliminated or humiliated. Voluntary withdrawal from sports for this reason appears to have been partially justified by the belief that only players who are beneficial to the team should be allowed to play.

TABLE VI

Highest Factor Loadings for Males and Females on Self Esteem/
Competitive Threat Factor

VARIABLE	LOADING (MALES)	LOADING (FEMALES)
NOT GOOD (I'd play more sports but I'm not good enough)	.74	.74
BENEFIT (I'd play more sports but no team would benefit from having me on their team)	.69	.68
LAUGH (I'd play more sports but people would only laugh at me)	.65	.64
JUDGED (I'd play more sports but I'd feel un- easy because I feel I am being judged)	.58	.52
BENCH (I'd play more sports but I'd probably be a bench warmer)	.57	.64
NOT AGGRESSIVE (I'd play more sports but I'm not aggressive enough to play sports seriously)	.51	.55
PLAY WITH ME (I'd play more sports but when I'm learning a new sport I think that no one will want to play with me)	.50	.46
TOO AGGRESSIVE (I'd play more sports but the people in sports are too aggres- sive for me)	.46	.55
COMPETITIVE (I'd play more sports but I don't like the competitive emphasis)	.45	.54
ROUGH (I'd play more sports but sports are too rough)	.41	.49
SHAPE (I'd play more sports but I'm too out of shape to enjoy them)	.39	.46
HURT (I'd play more sports but I'm afraid of getting hurt)	.30	.46
UPTIGHT (I'd play more sports but even when we play for fun the other kids get up tight about playing well)	.36	.44

It should be noted that most of the variables dealing with self esteem were also those variables where the females were significantly more affected than the males and where the non sport participants for both sexes were significantly more affected than the sport participants.

The second group of variables which loaded on this factor included variables AGGRESSION (I'd play more sports but the people in sports are too aggressive for me), NOT AGGRESSIVE (I'd play more sports but I am not aggressive enough to play sports seriously), COMPETITIVE (I'd play more sports but I don't like the competitive emphasis), and ROUGH (I'd play more sports but sports are too rough). The loading pattern for these variables can be found in Appendices I and L.

The above group of variables was interpreted as a dislike for both physical aggression or violence and overly assertive behaviour. As with the variables concerning feelings of inadequacy, females and non sports participants were found to be significantly more inhibited from playing sports than males and sports participants because of the perceived aggression in sports.

The common link which seemed to bind low self esteem in a sports environment and a dislike for aggression into one factor limiting sports participation was the competitive emphasis and the resulting undesirable or inappropriate

behaviour by others in sports.

Low self esteem can arise from a tangible lack of consideration for the individual's feelings. Mocking a player or not allowing him or her to play are forms of behaviour which may help the team to win in the short run but can have devastating effects on an individual's self concept and future participation in sport. Likewise, overly aggressive behaviour by other players is also inappropriate, particularly when people are intimidated, when rules are violated, or when someone is injured.

Therefore, it could be concluded from the findings and the above interpretations that manifestations of over-competitiveness in sports, namely feelings of inadequacy and inappropriate aggression form the single strongest and most salient factor eliminating or discouraging sports participation by high school students, particularly female students.

Factor Socio-Cosmetic

The second factor, labelled Socio-Cosmetic, accounted for approximately an additional 5.8% of the total variance in the female data and 5.1% in the male data.

The items which produced this factor were HAIR (I'd play more sports but it wrecks up my hair), POPULAR (I'd play more sports but the girls (boys) in sports are not popular),

SWEAT (I'd play more sports but I don't like to sweat), IMAGE (I'd play more sports but I think it would harm my image), CLEANED (I'd play more sports but it takes too long to get cleaned up after playing), DIRTY (I'd play more sports but I'd get too dirty), ATHLETE (I'd play more sports but I wouldn't want to be known as an athlete), and BOYS PREFER (GIRLS PREFER) (I'd play more sports but boys (girls) prefer girls (boys) who don't play sports).

These variables logically divided into two groups. The first group, consisting of items, POPULAR, IMAGE, ATHLETE, and BOYS PREFER (GIRLS PREFER), all suggest a concern for one's social image which theoretically could be damaged by sports participation. A second group of variables included HAIR, SWEAT, CLEANED, and DIRTY which revolved around cosmetic reasons for not participating in sports.

The result of the Factor Analysis indicated that variables related to social image and cosmetics can all be grouped together to form one factor which theoretically could inhibit sports participation. However, for this particular sample of high school males and females, factor Socio-Cosmetic did not appear to be inhibiting sports participation to any appreciable degree, as the variables responsible for this factor were among the least important individual variables limiting sports participation.

TABLE VII

Highest Factor Loadings for Males and Females on Factor: Socio-Cosmetic

VARIABLE	LOADING (MALES)	LOADING (FEMALES)
SWEAT (I'd play more sports but I don't like to sweat)	-.64	.60
IMAGE (I'd play more sports but I think it would harm my image)	-.63	.65
CLEANED (I'd play maore sports but it takes too long to get cleaned up after playing)	-.60	.64
HAIR (I'd play more sports but it wrecks my hair)	-.59	.76
ATHLETE (I'd play more sports but I wouldn't want to be known as an athlete)	-.59	.49
NOT POPULAR (I'd play more sports but the girls (boys) in sports are not popular)	-.55	.67
BOYS PREFER (I'd play more sports but boys (girls) prefer girls (boys) who don't play sports)	-.56	.50
DIRTY (I'd play more sports but I'd get too dirty)	-.53	.62
HURT (I'd play more sports but I'm afraid of getting hurt)	-.51	.29
WRONG SEX (I'd play more sports but they are mostly for boys (girls))	-.49	.37
PHYSIQUE (I'd play more sports but I don't have the physique needed)	-.44	.51
SOCIAL (I'd play more sports but sports will not help me socially)	-.47	.46
UNIFORM (I'd play more sports but I won't wear the ugly uniforms worn in some sports)	-.45	.37

Error Factors

The Scree Test for real factors is a conservative statistical technique which, in this case, excluded three interpretable factors having eigenvalues above 1.0. These three factors have been briefly reported here as they may prove to be valuable in future research as a means of reducing the large number of identified variables.

Factor: Opportunities

The Opportunities Factor accounted for an additional 3.1% of the common variance for the female sample and 2.1% for the male sample. The variables loading most heavily on this factor (See Appendices I and L) were the following:

AFFORD (I'd play more sports if I could afford it)

EQUIPMENT (I'd play more sports but I don't have
the necessary equipment)

FAR AWAY (I'd play more sports but I live too far
away from sports facilities)

NO HELP (I'd play more sports but few people will
take the time to help me when I'm learning
a new sport)

OPPORTUNITIES (I'd play more sports but opportunities
for me to play are limited)

The above variables all relate to the restricting of opportunities for sports participation encompassing basic problems such as lack of money or equipment, the problem of travelling, or program emphasis problems such as opportunities

restricted because of low ability level, or more generally a limited supply of desired opportunities.

Factor: Health

The Health Factor accounted for an additional 2.6% and 2.0% of the common variance for the female and male groups respectively. The variables most responsible for this factor (See Appendices I and L) were the following:

HEALTH (I'd play more sports but for health reasons I can't)

UNABLE (I'd play more sports but I'm physically unable)

This factor summarizes the various health problems which may inhibit sports participation.

Factor: Autonomy

The fifth factor, Autonomy, accounted for an additional 2.2% and 2.5% of the common variance within the female and male data respectively. The following variables received the highest loadings on this factor:

UPTIGHT (I'd play more sports but even when we play for fun, the other kids get uptight about playing well)

RULES (I'd play more sports but I don't like all the rules and regulations of organized sports)

FOOL AROUND (I'd play more sports but I don't like how I can't fool around in organized sports)

DEVOTE TIME (I'd play more sports but coaches
expect you to devote too much time)

SERIOUSNESS (I'd play more sports but some players
are so serious, they try to injure
others)

COMPETITIVE (I'd play more sports but I don't like
the competitive emphasis)

COMMIT (I'd play more sports but I don't like being
committed to things)

The common element in the above variables appears to be the imposition of something on the participant; the imposition of undesirable behaviour by other players, the imposition of rules or restrictions on behaviour, an imposed attitude toward the activity, or an imposed time commitment. Thus, the factor appears to comprise the personality need for autonomy.

Summary of Factor Analysis

The factor analysis yielded two factors which were interpreted as being the same for both the male and female samples. These factors were labelled Self Esteem/Competitive Threat and Socio-Cosmetic. The variables loading on Factor Self Esteem/Competitive Threat were important reasons for not playing more sports, particularly for the females, whereas the variable loading on Factor Socio-Cosmetic were not. Consequently, Factor Self Esteem/Competitive Threat was considered to be a very important factor limiting sports participation by high school students, while factor Socio-

Cosmetic was considered to be an unimportant factor influencing sports participation for high school students.

Three additional factors were also generated by the Factor Analysis and were the same factor for both males and females. These factors, labelled Opportunities, Health, and Autonomy did not meet the Scree Test for real factors, but did have eigenvalues exceeding 1.0.

Integration of Findings

It was indicated in the introduction to this thesis that Canadians could greatly benefit from increased participation in sport activities. There have been efforts in both the public and private sectors to motivate more Canadians to participate in sports. In particular, Sport Canada has created a special section to encourage sports for women, the major group in our society traditionally excluded from sports. Efforts such as these have been aimed at the goal of 'sports for all' regardless of age, sex, ethnic background, social status, etc. However, it was found in the present research that one third of the males and two thirds of the females did not consider themselves to be sport participants. Why then is there not greater sports participation by high school students and why is the proportion of female participants only half that of the male group?

The single most important reason found for both Males

and Females not playing more sports was the lack of fun in sports. Although this feeling was similarly held by both Female Sport Participants and Non Sport Participants, in the Male group, the Non Sport Participants felt significantly more limited because of a lack of fun in sports.

Seriousness in sports, not enough time for sports, and interference with studies were other important reasons why both Males and Females thought they were not playing more sports.

The results of the Factor Analysis indicated that other important reasons for both Males and Females not playing more sports could be collectively described as low self esteem in sport situations and other negative perceptions related to the competitive emphasis in sports. These reasons included feeling not good enough to play or feeling uncomfortable playing because of one's skill level, as well as expectations of sitting on the bench or being laughed at. These reasons together formed the major portion of the factor labelled Self Esteem/Competitive Threat. It was also on these aspects of sports participation that the Females were found to be significantly more negatively influenced than the Males.

The Factor Analysis generated a second factor labelled Socio-Cosmetic which was composed of variables related to the negative effects on one's social image due to sports participation and the dishevelled effect of physical activity.

None of the variables responsible for the Socio-Cosmetic factor were found to have any significant effect on sports participation by either Males or Females.

The results of multiple T-tests comparing Sport Participants and Non Sport Participants revealed that the Non Sport Participants of both sexes felt significantly more inhibited by the variables most strongly associated with the Self Esteem-Competitive Threat factor. This included a group of variables related to aggression which also loaded on this factor.

Implications

Evidently, fun has a very important role to play in motivating sports participation. These students, both male and female, said they would play more sports if it was just for fun. It could be speculated that "just for fun" means free from any obligation to perform well. This speculation was supported in the literature (Bouet and Orlick, 1974; Orlick, 1974). However, it is not clear exactly what constitutes "just for fun" sports. For instance, to what extent can "just for fun" sports be organized? What is the optimal amount of recording and scheduling? How flexible and uncommitted can a group of participants be and still maintain high participation levels?

The author would speculate that in an organized activity

where flexibility is limited by the need for other participants or by available facility time that a commitment or decrease in personal freedom is necessary for the sport opportunity to exist. However, within the game itself, an unlimited degree of flexibility in the rules and in the behaviour of the participants is possible. There is, for instance, a vast difference in the rules and the actual behaviour of youngsters playing street hockey and the same youngsters playing organized hockey. Although, in both cases, all of the players are trying hard to play the game, there are some differences which perhaps make street hockey more "just for fun" than organized hockey, which is often taken quite seriously.

In street hockey, allegiance to a certain team lasts, at the longest, for the duration of the game. No records are kept, everyone plays all the time, no one is locked into just one position, no one feels the necessity of playing past the saturation point and if the situation calls for it, the rules can be modified at the participants' will.

In organized sport, the lack of flexibility is apparent throughout. Once a player is assigned to a certain team, he or she is on that team for the season. Records are kept and tangible rewards offered by the organizers according to what they deem to be desirable results. Many players spend the majority of the game as spectators and there is always the

threat of being taken out of the play when one wants to stay in. Players are assigned positions in the game which often follow them for the rest of their playing years. Schedules are sometimes drawn up which force poor teams to stop playing too soon or force the better teams to continue playing a concentrated number of games over a long season irrespective of the players' saturation point. Flexibility in the set up and rules of any individual game are severely limited as all games must be played under the same conditions for comparison purposes.

These comparisons could be discussed further, but have been used only as an illustration of some aspects the author feels are elements of sports "just for fun". Many of the fun things found in street hockey could be directly transplanted into organized hockey without losing any of its positive qualities. Organized sport, in general has a great deal of merit and there is no suggestion here to eliminate it. The author does feel, however, that most organized sports have been structured in a way which makes it difficult for them to be "just for fun".

Perhaps the structure and emphasis apparent in organized sport for children can be partially attributed to the 19th century British philosophy that Britain's battles were won on the playing fields of Eton. Sports for the British school boy were not just for fun; they were part of his training for life.

If one learned to take the blows on the field, presumably one would also be able to take the blows in life. One can still hear people saying today that competitive sports are good practice for survival in our competitive society. This is certainly an adult philosophy, as no child plays sports to prepare himself for life. He or she is living now and wants to have fun now. It is exactly this that the high school students in the present research have said. Clearly, for today's youth, if they are to be motivated to greater sports participation, then the opportunities must be fun.

What can be done to make sports more fun? Fun in sports was described by Bouet and Orlick (1974) as spontaneous, free from extrinsic pressures and friendly. The present research gives further clues. The respondents felt negatively about 'up tight' play and a continuous need to perform well with few opportunities to 'fool around' and to learn or improve skills. If the goals of organized sports became fun, the positive development of all players both as performers and as people, an intrinsically rather than extrinsically rewarding experience and the development of friendship among the participants, then the structure of sports could be modified to meet these goals. To illustrate this, the hockey example will be continued.

In street hockey, playing is intrinsically satisfying. There is no need for trophies. If organized sports are to

become intrinsically satisfying, then trophies, money, or other tangible rewards are not necessary and in many cases, not desirable. Players know how well they are playing in each game without having a number attached to it and a tally kept until the end of the season.

If the trophies are replaced at the end of the year by a league celebration with social recognition of individual improvement, good effort, sportsmanship, etc., then there would be little need for win-loss records to be kept throughout the season. The fact that children persist in playing street hockey illustrates that records are not necessary to make the game interesting for them, although it does make for a dull spectator sport. Also, the elimination of standings allows for greater flexibility in the rules of any particular game. It would no longer be necessary to ensure that every game be played under identical circumstances as comparisons in performance would not be drawn from one game to another. Any rule change would be instantly possible if the players and coaches agreed to it. This would have the added benefit of increasing the potential for cooperation between the two teams as well as the feeling of friendship.

Friendship, or making new acquaintances, was one aspect of fun mentioned in the literature (Bouet and Orlick, 1974). It is felt that this particular aspect of fun has been steadily eroding in sports in recent years. Christie Blatchford, a

sports columnist for "The Globe and Mail" wrote that you have to hate a little if you want to win (Globe and Mail, 1976). This philosophy, apparent in many adult sports, can only be detrimental if supported in children's sports. The idea of hating the opposition is an absurdity in any game where fun is the major motive for participation. Certainly, few new friendships will be generated out of hateful encounters.

If developing new friendships is a goal in organized sports, perhaps we should be promoting the idea of playing a game with rather than against another team. This philosophy is quite prevalent in many recreational sports. For example, Harry may tell his wife he is going to play squash with his friend, George. People golf with their friends or play cards with their friends. The example of street hockey also illustrates this point. All of the children are playing together. Although in all of these examples, the players may be trying their hardest, the situation is such that friendship is usually strengthened. It is, after all, just for fun.

The structure and atmosphere of most organized team sports hinders rather than enhances new friendships. Modification of the structure itself could change this. For example, before the game, the two coaches could be required to choose two new teams from a pool of players formed by the original two teams. In this way, a schedule could be maintained

and teams and coaches would still be together, but there would be an opportunity to play with other people each week. Also, the opposition would no longer be comprised totally of strangers but would be, in part, friends from one's own team, thus engendering a greater feeling of friendship in the game. Although a modification like the one presented would do little for the coaches' and the parents' egos, it would do a lot towards the promotion of friendship.

One would also expect the games to be less violently aggressive if the suggested rule modification was adopted. Since aggression was found to be a reason for not playing more sport, any move to lessen its occurrence would probably increase participation.

The concept of playing just for fun may also be linked to the major factor found in the data labelled Self-Esteem/Competitive Threat. This factor has been interpreted as meaning that people with low self-esteem in sports situations feel threatened in competitive sport environments.

The scoring on the variables responsible for the Self Esteem/Competitive Threat factor indicated that females are more affected by low self esteem in sports situations than are males. Past psychological research (McCandless and Evans, 1973; Hyland, 1975) suggested that, as a result of experiencing a different socialization process in childhood, females tend to be less achievement oriented, less disposed to physical

assertiveness and more sensitive to criticism or negative evaluation than males. In a competitive sport environment, as it often exists today, one can expect strong pressure to achieve, pressure to illustrate assertiveness through physical actions and a great deal of evaluation. Competitive sport, therefore, presents a threatening environment to the female who has evaluated her ability, and perhaps her desire to achieve and be aggressive in sports, as low.

If people with low self esteem in sports situations are avoiding sports participation because they feel threatened in a competitive environment, then reducing this conflict requires either changing the environment or the people. In order to find the best solution, one must decide if the sport is too achievement oriented, aggressive and critical of performance or if the person is not achievement oriented enough, not aggressive enough and too sensitive to evaluation by others.

It would not be wise to generalize on this point. For instance, in sports for boys, there may be an unnecessary amount of pressure on the boy to perform well as proof of his manhood or to satisfy his parents' ego. In this case, probably it is the pressure which should be reduced. On the other hand, in sports for girls, the pressure to perform well may be minimal but the perceived threat is great. Perhaps, in this case, the female needs to develop more confidence in

her sports ability and learn not to be intimidated by other's negative evaluations.

The findings of this research suggest that most high school students, regardless of sex, would play more sports if they were less competitive, if there was less need to always perform well, and less fear of sitting on the bench. The relatively lower female participation is apparently due to greater sensitivity to these threats in the sport environment as opposed to conflicts with feminine image, social status or cosmetic problems. These findings suggest that everyone would benefit from some decrease in the competitive emphasis in sports and that female sports participation would be further enhanced if female attitudes towards themselves as sport participants could become more positive. The changing of these attitudes could be facilitated by educational campaigns which produce positive images of females enjoying sports. The key to such efforts is to depict females of average sports ability in all age groups feeling good about their own skill level and enjoying just playing.

Change in the competitive emphasis in sports is difficult to bring about as it involves modifying the behaviour of a large number of people. Perhaps the most constructive technique is for all of the people concerned to meet and discuss their expectations of the sport. For instance, a coach, the team members and the parents could meet and try to

come to an agreement about how they think they should all behave during the game. They may decide that parents should not scream criticisms at either the players or the referee. They may decide that the players should always be honest and not deliberately break any rules. Once they have committed themselves to their group and personal goals and the way they hope to achieve them, they should agree to meet in the future to evaluate how well they have done and to alter their course if it seems appropriate. This method has proven to be highly successful in the past under a very democratic leadership style (Botterill, 1975).

The above strategy for controlling the competitive situation merely changes the emphasis in the game. Many other, more dramatic changes are also possible. For instance, the creation of entirely new sports to meet specific needs have the advantages of no traditional organization or behaviour models. Ringette is an example of a competitive sport designed to provide a skating sport that would appeal to females.

It is also possible that sports and games which control competition may prove to be popular and beneficial, particularly among young children and females. Research has already shown that cooperative and non competitive games can be highly successful with children (McNally and Orlick, 1975; Globe and Mail, April 5, 1976). It is suggested that research with

both of these styles of sports and games continue and that the age groups be extended. Young and middle aged women in particular may be attracted to non competitive sports which allow them to enjoy moving in a situation other than a fitness class.

The research presented here confirms most of the past research on non participation in sport and tends to disprove some of the common but unsubstantiated reasons given for female non participation in sports. If this particular style of research is continued, it is recommended that first, the questionnaire and response format be reviewed prior to further use. In particular, future research is needed to learn precisely what each response on the scale means. Development and refinement of this instrument would certainly be valuable as a tool for coaches, teachers, or recreation staff wishing to evaluate programs.

This particular research approach is essentially negative, but it does point in some positive directions for more concrete future research. Few of the possible strategies for increasing fun in sports have been tapped. A "just for fun" sport program could be developed for use by YM-YWCA's, municipal recreation departments, or in intramural programs. Such a program could rely heavily on non competitive sports where the structure of the game allows for good personal performance but significantly decreases the competition

between groups. Development of a program or sport optimally reliant on intrinsic motivation would be beneficial. Perhaps this could be achieved by integrating into sports elements that make people feel good in other settings. For example, touching or holding other people in a liking, helping or friendly capacity are reinforcing behaviours. An example of this comes from a 5 year old's reaction to a series of cooperative games. He said, "I hope we're going to play some more of them holdin' hand games".

Improvement and learning are also intrinsically satisfying experiences which could be used to great advantage in sports. The author has often heard people say that they enjoyed their team practices more than the actual games which may indicate the importance of good practice and learning sessions. The respondents in this research also mentioned a dearth of opportunities to learn a new sport. Development of an enjoyable way of learning a new sport and continued improvement in a familiar sport would probably help to make the individual feel better about his or her sports ability and encourage positive feelings about the sport experience.

This and past research in the psychological aspects of sports illustrate that people are motivated by experiences which would usually be considered positive in terms of human development. It is, therefore, thought that the continuous search for and provision of positive opportunities in sports is the key to increased sports participation in the future.

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

Despite campaigns both in the public and private sector to get people involved in sports or some other form of physical activity, a small percent of Canadians participate regularly in sports and physical activities (Burgess, 1973). This lack of participation in sports is even more evident in the case of females (Bailey, 1974; Heit and Malpass, 1975). In order to become more effective in increasing participation levels in sport, particularly for females, it would be helpful to learn more about why people do not play more sports. The purpose of this study was to investigate why one group of people, high school students, do not play more sports and secondly, to test the data for a possible factor structure.

The subjects for this study were drawn from a student population attending secondary school in southern Ontario. The sample included 310 females and 403 males, where a complete class was used as the sampling unit in the randomized block design.

A questionnaire containing an exhaustive list of possible reasons for not playing more sports was constructed primarily from the related literature and the results of

pilot testing. The questionnaire was designed to assess the relative importance of reasons for not playing more sports. The questionnaire was then administered to the subjects in their normal classroom setting.

The resulting data was analysed for the relative importance of each reason, for not participating more, for similarities and differences in the responses of males versus females, for sports participants and non participants, for relationships among the reasons and for the possibility of factors emerging from the data.

Conclusions

Within the limitations of this study, the following conclusions were drawn:

1. The major reason given by both male and female high school students for not playing more sports was that available sport opportunities were not enough fun.
2. Other important reasons that high school females gave for not playing more sports were: over concern by other players for performance, lack of time for sports, lack of attractive, appropriate sport opportunities, a feeling of not being good enough to play, an expectation that the coach would demand too much time, a fear that

studies would be negatively affected, the seriousness of other players, and an uncomfortable feeling of being judged in sports.

3. Other important reasons that high school males gave for not playing more sports were: lack of time for sports, an over concern by other players for performance, lack of attractive, appropriate sport opportunities, an expectation that the coach would demand too much time, the seriousness of other players, and a fear that studies would be negatively affected.
4. Major differences between the reasons given by high school females compared to high school males for not playing more sports were that the females felt more inhibited ($p \leq .001$) in their sports participation because of feeling not good enough to play sports and because of an uncomfortable feeling of being judged in sports.
5. Two factors emerged from the reasons given by high school girls for not playing more sports. The first factor was labelled Self Esteem/Competitive Threat. The females were found to be strongly limited in their sports participation because of this factor. The second factor produced by

- the data was labelled Socio-Cosmetic. This factor was found to have no limiting effect on sports participation by high school females.
6. Two factors emerged from the reasons given by high school males for not playing more sports. The first factor, labelled Self Esteem/Competitive Threat, was found to be an important reason why high school boys do not play more sports. The second factor, labelled Socio-Cosmetic, was found to have no limiting effect on high school male sports participation.
 7. The females were found to feel significantly more inhibited in their sports participation because of variables ($p \leq .001$) most responsible for the Self Esteem/Competitive Threat factor. Therefore, the Competitive Emphasis factor is a much more important factor limiting female sports participation.
 8. Both Male and Female Non Sport Participants compared to Sport Participants felt significantly ($p \leq .001$) more restricted in their sports participation because of the competitive emphasis, aggressiveness, and feeling inferior or being made to feel inferior in sports.

Recommendations

The finding that sports are not perceived as being enough fun by high school students and that this is the major reason why they are not playing more sports suggest that a new approach is needed if increased participation in sports is the desired goal.

In order to discover a suitable new approach, the people who are responsible for shaping the sports environment must become more aware of what will produce the most satisfying sport experience for the participants and then be willing to provide it. One effective means of obtaining this information is to simply have a discussion with the participants and ask them what they would like to achieve. Such an approach to sports can lead not only to exciting new innovations in sport and improved communications among administrators, coaches and players, but should also give the players a greater feeling of belonging; something particularly needed by females.

The success of a democratic approach to sports, such as the one recommended, is dependent on the leadership style of the person initiating the discussion. The leader must be able to effectively bring out ideas by encouraging all suggestions and assist the group in coming to a consensus of opinions and specific recommendations.

By involving the players in structuring their own sport

environment, most of the negative elements currently found in sports could be removed. For instance, the majority of students in this study were very negative about the competitive emphasis in sports. If they agreed that the competitive emphasis should be reduced, they could suggest ways of counteracting it, specific to their situation. Perhaps they would suggest that, in basketball, before a winner can be declared, the two scores must be within 4 points of each other at some point during the second last minute of play. One effect of this rule would be to reduce the competition during all of the game except the last minute. Such a seemingly obscure rule could be introduced if everyone was aware of why it was being used and was agreeable to try it. Leaders and researchers might also attempt to come up with new strategies and approaches which are more in line with what high school students indicate they want.

Future research is needed to develop sport programs that allow for optimal flexibility, learning opportunities, friendship development, sportsmanship and other intrinsically satisfying and desirable attributes. In order to do this, researchers will first have to develop more sophisticated means of measuring both behaviour and satisfaction. This would appear to be one of the major areas for improvement if participation is to be increased in the future.

In conclusion, the sport environment is a totally contrived situation structured to reinforce certain behaviours

and produce certain affects. However, some of the behaviours and affects being produced by many sport environments now are not those which facilitate mass participation in sport. If increased participation levels in sport is a worthy objective, then sports must be restructured to reinforce desirable behaviours and positive experiences for everyone who would like to play more sports.

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APPENDIX A

SPORT QUESTIONNAIRE

At the university of Ottawa we are conducting research on sport. In order for this research to be of value we need your full cooperation. You can be of great assistance simply by being completely honest in answers.

All of your responses are to be marked in pencil on the answer sheet. Otherwise the computer will not mark your paper. Do not put any other marks on the paper. Only put one pencil mark for each question and keep the mark inside the box.

PART A

1. What Grade are you in? For your answer use the following codes:

Grade 9 - 1	Find #1 on the answer sheet and fill in
" 10 - 2	the correct code number:
" 11 - 3	
" 12 - 4	1 <u>0 1 2 3 4 5 6 7 8 9</u>
" 13 - 5	

2. Identify your sex. Male - 0
Female - 1

3. How old are you? Fill in the last digit of your age. For example, if you are 16, fill in the 6. If you are 19 or over fill in 9.

4. How tall are you?
- | | |
|------------------|------------------|
| Under 5' - 0 | 5'7" to 5'9" - 3 |
| 5' to 5'3" - 1 | 5'10" to 6' - 4 |
| 5'4" to 5'6" - 2 | Over 6' - 5 |

5. How much do you weigh?

Under 100 lbs. - 0	131 - 160 lbs - 2	191 - 220 lbs. - 4
100 - 130 lbs. - 1	161 - 190 lbs. - 3	Over 220 lbs. - 5

6. Organized sport in this study means any sport where you have to "join-up" or "try-out" for the sport, and there is a schedule involved, but does NOT include Intramural Sports.

How many organized sports have you played in the last year?

No organized sport - 0	Two organized sports - 2 etc.
One organized sport - 1	If you played 9 or more answer - 9

7. How many sports other than organized sport have you participated in regularly in the past year? (e.g. intramurals, skiing etc.)

None - 0	2 sports - 2 etc.
1 sport - 1	If 9 or more answer - 9

8. Does your mother play any sports? No - 0 Yes - 1
 9. Was your mother ever active in sports? No - 0 Yes - 1
 10. Does your father play any sports? No - 0 Yes - 1
 11. Was your father ever active in sports? No - 0 Yes - 1
 12. What kind of sport do you prefer?

Individual - 0 Team - 1 Either - 2 None - 3

13. Do you consider yourself to be an active sports participant?

No - 0 Yes - 1

14. How much sports would you like to participate in?

Less than now - 0 The same as now - 1 More than now - 2

15. Do you ride a bus to school?

No - 0 Yes - 1

PART B

These are some possible reasons why you might not play more sports. You are to read each one and decide how much it influences you and how much you think it influences others of your own sex.

For example, "I'd play more sports but I don't like exercising."

Decide how much this reason influences you and how much you feel it influences others. Use the following scale:

This is not a reason		This is a very important
why I don't play	0 1 2 3 4 5 6 7 8 9	reason why I don't
more sports.		play more sports

You can answer anywhere along the scale.

If you don't play sports because you hate exercising, this would be an important reason why you don't play more sports. You would therefore answer somewhere on the right part of the scale depending on how important this reason is to you.

If you love exercising then this is not a reason why you don't play more sports. You would therefore answer somewhere on the left side of the scale.

Now think of how most others of your own sex are influenced by this reason. Answer on the line below your first answer. Use the same scale.

Remember you have TWO answers for each reason. One for yourself and one for others of your own sex.

Begin answering at #21.

21. I'd play more sports but it would take up too much time.

23. I'd play more sports but hard physical training is unacceptable for me.

25. I'd play more sports if there were more opportunities to play just for fun.
27. I'd play more sports but I don't like exerting myself.
29. I'd play more sports but I think the coaches expect too much.
31. I'd play more sports but it is too hard to learn a new sport.
33. I'd play more sports but not enough of my friends play sports.
35. I'd play more sports but I would probably be a bench warmer.
37. I'd play more sports but the people in sports are too aggressive for me.
39. I'd play more sports if I could afford it.
41. I'd play more sports but for health reasons I can't.
43. I'd play more sports but I'm afraid of getting hurt.
45. I'd play more sports but I don't like to sweat.
47. I'd play more sports but I don't like all the rules and regulations of organized sports.
49. (Girls only) I'd play more sports but I don't like the type of girl who plays a lot of sports.

(Boys only) I'd play more sports but I don't like the type of guy who plays a lot of sports.
51. I'd play more sports but I won't wear the ugly uniforms worn in some sports.
53. I'd play more sports but I think it would harm my image.
55. I'd play more sports if I knew all the rules.
57. I'd play more more sports but sports are too rough.
59. I'd play more sports but I don't have the necessary equipment.
61. I'd play more sports but it takes too long to get cleaned up after playing.
63. I'd play more sports but people would only laugh at me.
65. I'd play more sports but I'm too out of shape to enjoy them.
67. I'd play more sports but I wouldn't want to be known as an athlete.
69. I'd play more sports but no team would benefit from having me on their team.
71. I'd play more sports if they were better organized.
73. I'd play more sports but it wrecks up my hair.

75. I'd play more sports but my studies are too important.
77. I'd play more sports but even when we play for fun the other kids get up tight about playing well.
79. I'd play more sports but I don't want to have the physique needed.
81. I'd play more sports but I don't like a lot of running
83. I'd play more sports but some players are so serious they try to injure others.
85. (Girls only) I'd play more sports but they are mostly for boys.
(Boys only) I'd play more sports but they are mostly for girls.
87. I'd play more sports but coaches expect you to devote too much time.
89. I'd play more sports but I'm not good enough.
91. I'd play more sports but ^{sports} will not help me socially
93. (Girls only) I'd play more sports but girls can never be as good as boys in sports.
(Boys only) I'd play more sports but boys can never be as good as girls in sports.
95. I'd play more sports but I don't like being committed to things.
97. I'd play more sports but when I'm learning a new sport I think that no one will want to play with me.
99. (Girls only) I'd play more sports but boys prefer girls who don't play sports.
(Boys) I'd play more sports but girls prefer boys who don't play sports.
101. I'd play more sports but I don't get along with coaches.
103. I'd play more sports but I live too far away from the sports facilities.
105. (Girls) I'd play more sports but the girls in sports are not popular.
(Boys) I'd play more sports but the boys in sports are not popular.
107. I'd play more sports but my parents discouraged me.
109. I'd play more sports but I don't like the competitive emphasis.
111. I'd play more sports but I'm physically unable.
113. I'd play more sports but I'd feel uneasy because I feel I am being judged
115. I'd play more sports but I'd get too dirty.
117. I'd play more sports but I don't think I'd ever want to be good at sports.

- 119. I'd play more sports but I'm not aggressive enough to play sports seriously.
- 121. I'd play more sports but I don't like how I can't fool around in organized sports.
- 123. I'd play more sports but I don't like being seen nude in the chang room.
- 125. I'd play more sports but opportunities for me to play are limited.
- 127. I'd play more sports but few people will take the time to help me when I'm learning a new sport.
- 129. I'd play more sports but they already take up a lot of my time.

PART C

Write on the back of your answer sheet the SINGLE MOST IMPORTANT REASON why you don't play more sports.

T H A N K Y O U !

APPENDIX B

RESPONSE FORM



NE RIEN INSCRIRE A GAUCHE DE CETTE LIGNE UTILISER UN CRAYON A MINE 'HB'

MAKE NO MARKS TO THE LEFT OF THIS LINE USE AN 'HB' LEAD PENCIL

1	0	1	2	3	4	5	6	7	8	9
2	0	1	2	3	4	5	6	7	8	9
3	0	1	2	3	4	5	6	7	8	9
4	0	1	2	3	4	5	6	7	8	9
5	0	1	2	3	4	5	6	7	8	9
6	0	1	2	3	4	5	6	7	8	9
7	0	1	2	3	4	5	6	7	8	9
8	0	1	2	3	4	5	6	7	8	9
9	0	1	2	3	4	5	6	7	8	9
10	0	1	2	3	4	5	6	7	8	9
11	0	1	2	3	4	5	6	7	8	9
12	0	1	2	3	4	5	6	7	8	9
13	0	1	2	3	4	5	6	7	8	9
14	0	1	2	3	4	5	6	7	8	9
15	0	1	2	3	4	5	6	7	8	9
16	0	1	2	3	4	5	6	7	8	9
17	0	1	2	3	4	5	6	7	8	9
18	0	1	2	3	4	5	6	7	8	9
19	0	1	2	3	4	5	6	7	8	9
20	0	1	2	3	4	5	6	7	8	9
21	0	1	2	3	4	5	6	7	8	9
22	0	1	2	3	4	5	6	7	8	9
23	0	1	2	3	4	5	6	7	8	9
24	0	1	2	3	4	5	6	7	8	9
25	0	1	2	3	4	5	6	7	8	9
26	0	1	2	3	4	5	6	7	8	9
27	0	1	2	3	4	5	6	7	8	9
28	0	1	2	3	4	5	6	7	8	9
29	0	1	2	3	4	5	6	7	8	9
30	0	1	2	3	4	5	6	7	8	9
31	0	1	2	3	4	5	6	7	8	9
32	0	1	2	3	4	5	6	7	8	9
33	0	1	2	3	4	5	6	7	8	9
34	0	1	2	3	4	5	6	7	8	9
35	0	1	2	3	4	5	6	7	8	9
36	0	1	2	3	4	5	6	7	8	9
37	0	1	2	3	4	5	6	7	8	9
38	0	1	2	3	4	5	6	7	8	9
39	0	1	2	3	4	5	6	7	8	9
40	0	1	2	3	4	5	6	7	8	9
41	0	1	2	3	4	5	6	7	8	9
42	0	1	2	3	4	5	6	7	8	9
43	0	1	2	3	4	5	6	7	8	9
44	0	1	2	3	4	5	6	7	8	9
45	0	1	2	3	4	5	6	7	8	9
46	0	1	2	3	4	5	6	7	8	9
47	0	1	2	3	4	5	6	7	8	9
48	0	1	2	3	4	5	6	7	8	9
49	0	1	2	3	4	5	6	7	8	9
50	0	1	2	3	4	5	6	7	8	9
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54	0	1	2	3	4	5	6	7	8	9
55	0	1	2	3	4	5	6	7	8	9

56	0	1	2	3	4	5	6	7	8	9
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66	0	1	2	3	4	5	6	7	8	9
67	0	1	2	3	4	5	6	7	8	9
68	0	1	2	3	4	5	6	7	8	9
69	0	1	2	3	4	5	6	7	8	9
70	0	1	2	3	4	5	6	7	8	9
71	0	1	2	3	4	5	6	7	8	9
72	0	1	2	3	4	5	6	7	8	9
73	0	1	2	3	4	5	6	7	8	9
74	0	1	2	3	4	5	6	7	8	9
75	0	1	2	3	4	5	6	7	8	9
76	0	1	2	3	4	5	6	7	8	9
77	0	1	2	3	4	5	6	7	8	9
78	0	1	2	3	4	5	6	7	8	9
79	0	1	2	3	4	5	6	7	8	9
80	0	1	2	3	4	5	6	7	8	9
81	0	1	2	3	4	5	6	7	8	9
82	0	1	2	3	4	5	6	7	8	9
83	0	1	2	3	4	5	6	7	8	9
84	0	1	2	3	4	5	6	7	8	9
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86	0	1	2	3	4	5	6	7	8	9
87	0	1	2	3	4	5	6	7	8	9
88	0	1	2	3	4	5	6	7	8	9
89	0	1	2	3	4	5	6	7	8	9
90	0	1	2	3	4	5	6	7	8	9
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93	0	1	2	3	4	5	6	7	8	9
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95	0	1	2	3	4	5	6	7	8	9
96	0	1	2	3	4	5	6	7	8	9
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103	0	1	2	3	4	5	6	7	8	9
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164	0	1	2	3	4	5	6	7	8	9
165	0	1	2	3	4	5	6	7	8	9

APPENDIX C

VARIABLE MEANS AND STANDARD DEVIATIONS FOR FEMALES

VARIABLE MEANS AND STANDARD DEVIATIONS FOR FEMALES (310)

RANK	VARIABLE	MEAN	S.D.
1.	NO FUN (if there were more opportunities to play just for fun)	5.38	3.13
2.	UPTIGHT (but even when we play for fun the other kids get uptight about playing well)	4.10	3.04
3.	TIME (but it would take up too much time)	3.74	3.04
4.	OPPORTUNITIES (but opportunities for me to play are limited)	3.56	3.19
5.	NOT GOOD (but I'm not good enough)	3.47	2.91
6.	DEVOTE TIME (but coaches expect you to devote too much time)	3.42	2.92
7.	STUDIES (but my studies are too important)	3.38	3.02
8.	SERIOUSNESS (but some players are so serious they try to injure others)	3.36	3.02
9.	JUDGED (but I'd feel uneasy because I feel I am being judged)	3.23	3.01
10.	COMPETITIVE (but I don't like the competitive emphasis)	2.99	3.10
11.	EQUIPMENT (but I don't have the necessary equipment)	2.96	2.88
12.	BENCH (but I would probably be a bench warmer)	2.77	2.84
13.	FAR AWAY (but I live too far away from sport facilities)	2.74	3.28
14.	ORGANIZATION (if they were better organized)	2.68	2.81
15.	BENEFIT (but no team would benefit from having me on their team)	2.66	2.84
16.	AFFORD (if I could afford it)	2.60	3.01
17.	ALREADY TIME (but they already take up a lot of my time)	2.59	3.16
18.	NO HELP (but few people will take the time to help me when I'm learning a new sport)	2.58	2.82
19.	FRIENDS (but not enough of my friends play sports)	2.53	2.96

RANK	VARIABLE	MEAN	S.D.
20.	NOT AGGRESSIVE (but I am not aggressive enough to play sports seriously)	2.45	2.76
21.	COACH (but I think the coaches expect too much)	2.39	2.73
22.	KNOW RULES (if I knew all the rules)	2.23	2.50
23.	TOO AGGRESSIVE (but the people in sports are too aggressive for me)	2.21	2.55
24.	COMMIT (but I don't like being committed to things)	2.17	2.65
25.	FOOL AROUND (but I don't like how I can't fool around in organized sports)	2.15	2.65
26.	WRONG SEX (but they are mostly for boys)	2.01	2.89
27.	RUN (but I don't like a lot of running)	2.00	2.53
28.	SHAPE (but I'm too out of shape to enjoy them)	1.94	2.43
29.	PLAY WITH ME (but when I'm learning a new sport I think that no one will want to play with me)	1.77	2.46
30.	LAUGH (but people would only laugh at me)	1.75	2.49
31.	ROUGH (but sports are too rough)	1.69	2.26
32.	RULES (but I don't like all the rules and regulations of organized sports)	1.65	2.39
33.	TRAINING (but hard physical training is unacceptable to me)	1.55	2.31
34.	HEALTH (but for health reasons I can't)	1.54	2.89
35.	PHYSIQUE (but I don't have the physique needed)	1.46	2.10
36.	UNABLE (but I am physically unable)	1.38	2.43
37.	HURT (but I'm afraid of getting hurt)	1.26	2.04
38.	ASSOCIATE (but I don't like the type of girl who plays a lot of sports)	1.18	2.02
39.	EXERT (but I don't like exerting myself)	1.14	1.87
40.	UNIFORM (but I won't wear the ugly uniform worn in some sports)	1.13	2.10
41.	NUDE (but I don't like being seen nude in the change rooms)	0.99	2.08

RANK	VARIABLE	MEAN	S. D.
42.	PARENTS (but my parents discouraged me)	0.95	2.13
43.	GOOD (but I don't think K'd ever want to be good at sports)	0.95	1.83
44.	BOYS PREFER (but boys prefer girls who don't play sports)	0.89	1.79
45.	LEARN (but its too hard to learn a new sport)	0.88	1.68
46.	LIKE COACH (but I don't get along with coaches)	0.84	1.80
47.	ATHLETE (but I wouldn't want to be known as an athlete)	0.82	1.88
48.	SOCIAL (but sports will not help me socially)	0.73	1.55
49.	CLEANED (but it takes too long to get cleaned up after playing)	0.69	1.54
50.	SEX (but girls can never be as good as boys in sports)	0.69	1.76
51.	SWEAT (but I don't like to sweat)	0.49	1.27
52.	NOT POPULAR (but the girls in sports are not popular)	0.48	1.22
53.	IMAGE (but I think it would harm my image)	0.46	1.34
54.	HAIR (but it wrecks up my hair)	0.34	1.23
55.	DIRTY (but I'd get too dirty)	0.33	0.94

APPENDIX D

VARIABLE MEANS AND STANDARD DEVIATIONS FOR MALES

VARIABLE MEANS AND STANDARD DEVIATIONS FOR MALES (403)

RANK	VARIABLE	MEAN	S.D.
1.	NO FUN (if there were more opportunities to play just for fun)	4.78	3.21
2.	TIME (but it would take up too much time)	4.08	3.14
3.	UPTIGHT (but even when we play for fun the other kids get up tight)	3.33	3.18
4.	OPPORTUNITIES (but opportunities for me to play are limited)	3.19	3.24
5.	DEVOTE TIME (but coaches expect you to devote too much time)	3.18	3.02
6.	SERIOUSNESS (but some players are so serious they try to injure others)	3.13	3.05
7.	STUDIES (but my studies are too important)	3.06	3.00
8.	ALREADY TIME (but they already take up a lot of my time)	2.95	3.36
9.	EQUIPMENT (but I don't have the necessary equipment)	2.83	2.87
10.	ORGANIZATION (if they were better organized)	2.73	3.08
11.	BENCH (but I would probably be a bench warmer)	2.54	2.87
12.	COACH (but I think the coaches expect too much)	2.48	2.78
13.	AFFORD (if I could afford it)	2.48	3.11
14.	NOT GOOD (but I'm not good enough)	2.46	2.72
15.	COMMIT (but I don't like being committed to things)	2.44	2.77
16.	NO HELP (but few people will take the time to help me when I'm learning a new sport)	2.36	2.74
17.	JUDGED (but I'd feel uneasy because I feel I am being judged)	2.35	2.64
18.	FAR AWAY (but I live too far away from the sports facilities)	2.34	3.04
19.	FRIENDS (but not enough of my friends play sports)	2.15	2.72

RANK	VARIABLE	MEAN	S.D.
20.	NOT AGGRESSIVE (but I am not aggressive enough to play sports seriously)	2.02	2.72
21.	PLAY WITH ME (but when I'm learning a new sport I think that no one will want to play with me)	2.00	2.56
22.	COMPETITIVE (but I don't like the competitive emphasis)	1.99	2.70
23.	FOOL AROUND (but I don't like how I can't fool around in organized sports)	1.97	2.59
24.	KNOW RULES (if I knew all the rules)	1.85	2.44
25.	BENEFIT (but no team would benefit from having me on their team)	1.82	2.61
26.	ASSOCIATE (but I don't like the type of boy who plays a lot of sports)	1.76	2.59
27.	TOO AGGRESSIVE (but the people in sports are too aggressive for me)	1.74	2.50
28.	RULES (but I don't like all the rules and regulations of organized sports)	1.73	2.49
29.	RUN (but I don't like a lot of running)	1.62	2.38
30.	TRAINING (but hard physical training is unacceptable for me)	1.50	2.31
31.	SHAPE (but I'm too out of shape to enjoy them)	1.50	2.22
32.	LAUGH (but people would only laugh at me)	1.36	2.39
33.	LIKE COACH (but I don't get along with coaches)	1.33	2.22
34.	EXERT (but I don't like exerting myself)	1.18	1.93
35.	ROUGH (but sports are too rough)	1.10	1.89
36.	LEARN (but it is too hard to learn a new sport)	1.04	1.86
37.	HEALTH (but for health reasons I can't)	1.03	2.36
38.	SOCIAL (but sports will not help me socially)	1.01	1.83
39.	PHYSIQUE (but I don't want to have the physique needed)	1.00	1.86

RANK	VARIABLE	MEAN	S.D.
40.	PARENTS (but my parents discouraged me)	1.00	2.18
41.	ATHLETE (but I wouldn't want to be known as an athlete)	0.94	2.03
42.	UNIFORM (but I won't wear the ugly uniform worn in some sports)	0.89	1.96
43.	HURT (but I'm afraid of getting hurt)	0.87	1.78
44.	UNABLE (but I'm physically unable)	0.86	1.96
45.	WRONG SEX (but they are mostly for girls)	0.86	1.91
46.	CLEANED (but it takes too long to get cleaned up after playing)	0.85	1.75
47.	GOOD (but I don't think I'd ever want to be good at sports)	0.83	1.86
48.	NUDE (but I don't like being seen nude in the change room)	0.80	2.00
49.	BOYS PREFER (but girls prefer boys who don't play sports)	0.78	1.81
50.	NOT POPULAR (but the boys in sports are not popular)	0.62	1.44
51.	IMAGE (but I think it would harm my image)	0.59	1.67
52.	SWEAT (but I don't like to sweat)	0.54	1.60
53.	HAIR (but it wrecks up my hair)	0.51	1.76
54.	DIRTY (but I'd get too dirty)	0.49	1.51
55.	SEX (but boys can never be as good as girls in sports)	0.35	1.31

APPENDIX E

VARIABLE CORRELATION MATRIX

VARIABLE CORRELATION MATRIX

	<u>Time</u>	<u>Training</u>	<u>No Fun</u>	<u>Exert</u>	<u>Coach</u>	<u>Learn</u>	<u>Friends</u>	<u>Bench</u>	<u>Too Aggressive</u>	<u>Afford</u>	<u>Health</u>	<u>Hurt</u>	<u>Sweat</u>	<u>Rules</u>
Time	1.00													
Training	0.07	1.00												
No Fun	0.10	0.17	1.00											
Exert	0.12	0.37	0.42	1.00										
Coach	0.10	0.16	0.29	0.23	1.00									
Learn	0.14	0.17	0.10	0.26	0.25	1.00								
Friends	0.22	0.17	0.21	0.24	0.25	0.27	1.00							
Bench	0.14	0.21	0.25	0.20	0.29	0.23	0.34	1.00						
Too Aggressive	0.19	0.27	0.24	0.30	0.41	0.31	0.33	0.37	1.00					
Afford	0.12	0.10	0.11	0.09	0.17	0.22	0.24	0.09	0.12	1.00				
Health	0.01	0.40	0.01	0.10	0.08	0.04	-0.01	0.02	0.16	0.11	1.00			
Hurt	0.11	0.27	0.07	0.23	0.33	0.31	0.23	0.32	0.38	0.18	0.28	1.00		
Sweat	0.16	0.28	0.03	0.30	0.16	0.45	0.25	0.25	0.25	0.23	0.08	0.33	1.00	
Rules	0.11	0.17	0.23	0.20	0.30	0.28	0.25	0.16	0.35	0.22	0.07	0.23	0.30	1.00
Associate	0.17	0.19	0.12	0.19	0.23	0.23	0.23	0.17	0.38	0.15	0.17	0.24	0.38	0.37
Uniform	0.15	0.12	0.01	0.19	0.12	0.10	0.32	0.20	0.26	0.17	0.03	0.11	0.32	0.36
Image	0.04	0.21	0.05	0.25	0.18	0.35	0.22	0.15	0.33	0.17	0.11	0.21	0.42	0.23
Know Rules	0.10	0.09	0.24	0.24	0.19	0.32	0.33	0.28	0.28	0.29	0.01	0.27	0.21	0.22
Rough	0.08	0.27	0.26	0.29	0.30	0.30	0.30	0.34	0.55	0.17	0.18	0.44	0.34	0.41
Equipment	0.17	0.01	0.18	0.23	0.23	0.27	0.21	0.19	0.23	0.43	0.05	0.23	0.22	0.21
Cleaned	0.14	0.15	0.09	0.17	0.25	0.35	0.29	0.16	0.23	0.27	0.03	0.23	0.45	0.30
Laugh	0.14	0.11	0.10	0.16	0.25	0.14	0.35	0.44	0.44	0.08	0.02	0.42	0.27	0.28
Shape	0.08	0.25	0.20	0.31	0.21	0.11	0.21	0.32	0.31	0.14	0.11	0.35	0.15	0.26
Athlete	0.13	0.13	0.09	0.26	0.23	0.14	0.19	0.11	0.27	0.10	0.08	0.17	0.24	0.17
Benefit	0.16	0.26	0.18	0.19	0.26	0.16	0.25	0.51	0.41	0.00	0.13	0.33	0.16	0.29
Organization	0.06	0.07	0.23	0.05	0.19	0.11	0.15	0.01	0.11	0.21	0.03	0.01	0.14	0.21
Hair	0.11	0.15	0.02	0.22	0.17	0.26	0.18	0.10	0.14	0.19	0.06	0.18	0.45	0.10
Studies	0.11	0.11	0.12	0.19	0.08	0.17	0.06	0.07	0.14	0.17	0.13	0.14	0.02	0.13
Up Tight	0.12	0.17	0.37	0.23	0.35	0.15	0.25	0.30	0.42	0.13	0.04	0.25	0.15	0.37
Physique	0.11	0.31	0.07	0.37	0.20	0.24	0.19	0.16	0.23	0.18	0.11	0.15	0.31	0.24
Run	0.14	0.38	0.20	0.35	0.22	0.23	0.10	0.24	0.31	0.13	0.15	0.34	0.24	0.22
Seriousness	0.08	0.20	0.23	0.20	0.29	0.18	0.11	0.24	0.31	0.18	0.10	0.20	0.14	0.30
Wrong Sex	0.07	0.10	0.17	0.13	0.19	0.15	0.38	0.18	0.16	0.17	0.00	0.20	0.19	0.13
Devote Time	0.33	0.15	0.22	0.32	0.35	0.22	0.24	0.19	0.28	0.25	0.06	0.18	0.16	0.28
Not Good	0.16	0.21	0.20	0.21	0.19	0.22	0.27	0.52	0.38	0.04	0.07	0.34	0.11	0.23
Social	0.12	0.07	0.07	0.23	0.22	0.08	0.13	0.15	0.15	0.22	0.15	0.17	0.21	0.15
Sex	0.03	0.14	0.13	0.22	0.23	0.19	0.23	0.29	0.23	0.16	0.11	0.32	0.22	0.09
Commit	0.20	0.15	0.20	0.23	0.22	0.22	0.19	0.28	0.34	0.08	0.09	0.22	0.09	0.29
Play With Me	0.04	0.21	0.18	0.22	0.14	0.19	0.29	0.31	0.31	0.12	0.03	0.22	0.10	0.19
Boys Prefer	0.06	0.16	0.07	0.14	0.11	0.15	0.13	0.14	0.15	0.16	0.10	0.19	0.32	0.18
Like Coach	0.13	0.09	0.07	0.17	0.32	0.24	-0.00	0.03	0.17	0.19	0.13	0.18	0.14	0.23
Far Away	0.10	0.07	0.10	0.08	0.18	0.15	0.06	0.12	0.16	0.32	0.11	0.18	0.16	0.14
Not Popular	0.06	0.14	0.01	0.19	0.16	0.21	0.18	0.15	0.11	0.25	0.02	0.15	0.40	0.17
Parents	0.15	0.10	0.04	0.25	0.17	0.18	0.13	0.19	0.20	0.18	0.09	0.26	0.25	0.12
Competitive	0.09	0.13	0.25	0.15	0.24	0.20	0.19	0.38	0.40	0.04	0.00	0.32	0.16	0.36
Unable	-0.01	0.35	0.13	0.14	0.10	0.04	0.01	0.11	0.32	0.15	0.56	0.22	0.09	0.09
Judged	0.13	0.13	0.28	0.17	0.34	0.17	0.26	0.34	0.45	0.17	0.11	0.28	0.17	0.33
Dirty	0.14	0.12	0.05	0.22	0.21	0.26	0.21	0.13	0.21	0.09	0.08	0.27	0.32	0.07
Good	0.14	0.22	0.20	0.27	0.27	0.09	0.12	0.14	0.31	0.12	0.20	0.13	0.17	0.29
Not Aggressive	0.09	0.19	0.26	0.18	0.27	0.23	0.21	0.33	0.51	0.02	0.13	0.31	0.12	0.34
Fool Around	0.04	0.13	0.31	0.13	0.34	0.22	0.24	0.26	0.25	0.17	0.05	0.12	0.14	0.44
Nude	0.03	0.11	-0.01	0.05	0.14	0.07	0.18	0.09	0.28	0.08	0.13	0.26	0.10	0.03
Opportunities	0.20	0.10	0.09	0.02	0.17	0.19	0.18	0.21	0.20	0.20	0.02	0.12	0.06	0.13
No Help	0.13	0.15	0.24	0.10	0.19	0.15	0.18	0.34	0.31	0.20	0.09	0.15	0.12	0.17
Already Time	0.16	-0.09	0.08	-0.05	0.00	-0.01	-0.04	-0.10	-0.05	0.14	-0.01	-0.06	-0.03	0.03

	<u>Associate</u>	<u>Uniform</u>	<u>Image</u>	<u>Know Rules</u>	<u>Rough</u>	<u>Equipment</u>	<u>Cleaned</u>	<u>Laugh</u>	<u>Shape</u>	<u>Athlete</u>	<u>Benefit</u>	<u>Organization</u>	<u>Hair</u>	<u>Studies</u>
Associate	1.00													
Uniform	0.29	1.00												
Image	0.42	0.30	1.00											
Know Rules	0.15	0.15	0.14	1.00										
Rough	0.35	0.26	0.40	0.39	1.00									
Equipment	0.15	0.17	0.14	0.39	0.31	1.00								
Cleaned	0.34	0.31	0.45	0.22	0.29	0.29	1.00							
Laugh	0.28	0.23	0.19	0.29	0.33	0.23	0.36	1.00						
Shape	0.20	0.17	0.19	0.27	0.44	0.30	0.21	0.39	1.00					
Athlete	0.30	0.16	0.48	0.27	0.23	0.18	0.30	0.20	0.21	1.00				
Benefit	0.18	0.16	0.15	0.30	0.39	0.25	0.14	0.48	0.36	0.14	1.00			
Organization	0.08	0.19	0.17	0.19	0.12	0.14	0.14	0.03	0.06	0.21	0.06	1.00		
Hair	0.26	0.21	0.56	0.10	0.24	0.12	0.57	0.12	0.11	0.41	0.08	0.11	1.00	
Studies	0.12	0.06	0.11	0.21	0.33	0.23	0.09	0.12	0.19	0.09	0.14	0.10	0.01	1.00
Uptight	0.27	0.25	0.13	0.40	0.40	0.26	0.19	0.36	0.30	0.21	0.42	0.29	0.03	0.24
Physique	0.34	0.20	0.36	0.22	0.28	0.22	0.30	0.18	0.26	0.40	0.19	0.17	0.37	0.05
Run	0.19	0.17	0.18	0.19	0.35	0.21	0.24	0.31	0.42	0.21	0.31	0.09	0.23	0.16
Seriousness	0.20	0.17	0.15	0.22	0.34	0.20	0.17	0.21	0.17	0.16	0.28	0.27	0.13	0.20
Wrong Sex	0.25	0.32	0.23	0.26	0.33	0.16	0.32	0.21	0.16	0.20	0.18	0.11	0.25	0.11
Devote Time	0.23	0.25	0.18	0.32	0.23	0.34	0.26	0.24	0.25	0.28	0.31	0.28	0.15	0.24
Not Good	0.16	0.16	0.09	0.33	0.36	0.27	0.14	0.49	0.39	0.09	0.72	-0.01	0.00	0.13
Social	0.25	0.16	0.28	0.17	0.30	0.30	0.24	0.10	0.12	0.31	0.10	0.09	0.26	0.12
Sex	0.14	0.19	0.16	0.23	0.35	0.19	0.00	0.22	0.18	0.15	0.16	0.05	0.13	0.06
Commit	0.21	0.17	0.11	0.20	0.27	0.23	0.13	0.25	0.23	0.10	0.33	0.14	0.04	0.18
Play With Me	0.15	0.12	0.15	0.30	0.23	0.20	0.15	0.37	0.16	0.17	0.38	0.07	0.00	0.13
Boys Prefer	0.23	0.30	0.32	0.21	0.20	0.09	0.35	0.20	0.05	0.32	0.13	0.14	0.31	0.06
Like Coach	0.26	0.16	0.22	0.11	0.14	0.19	0.27	0.07	0.10	0.18	0.08	0.22	0.17	0.09
Far Away	0.09	0.00	0.05	0.15	0.14	0.29	0.12	0.13	0.13	0.05	0.08	0.16	0.06	0.12
Not Popular	0.18	0.28	0.34	0.15	0.16	0.16	0.45	0.15	0.06	0.36	0.05	0.23	0.51	-0.01
Parents	0.10	0.15	0.20	0.13	0.29	0.25	0.17	0.06	0.10	0.14	0.17	0.08	0.30	0.18
Competitive	0.29	0.10	0.10	0.19	0.32	0.25	0.21	0.36	0.30	0.17	0.38	0.02	0.12	0.12
Unable	0.18	0.07	0.18	0.11	0.25	0.08	0.09	0.18	0.24	0.18	0.27	0.12	0.09	0.14
Judged	0.27	0.15	0.07	0.23	0.36	0.28	0.15	0.45	0.23	0.17	0.43	0.11	0.04	0.10
Dirty	0.20	0.19	0.43	0.11	0.26	0.07	0.43	0.20	0.15	0.34	0.19	0.09	0.58	0.00
Good	0.27	0.26	0.25	0.17	0.29	0.05	0.25	0.12	0.23	0.30	0.24	0.17	0.30	0.13
Not Aggressive	0.25	0.22	0.12	0.25	0.43	0.21	0.20	0.33	0.32	0.15	0.40	0.07	0.07	0.18
Fool Around	0.21	0.29	0.22	0.22	0.32	0.30	0.29	0.26	0.23	0.15	0.27	0.21	0.13	0.07
Nude	0.11	0.12	0.13	0.03	0.15	0.07	0.19	0.21	0.08	0.13	0.05	0.01	0.13	0.09
Opportunities	-0.01	0.08	0.02	0.13	0.14	0.26	0.08	0.17	0.21	0.09	0.21	0.21	-0.00	0.16
No Help	0.15	0.12	0.08	0.35	0.27	0.34	0.07	0.31	0.20	0.08	0.27	0.17	-0.06	0.24
Already Time	-0.12	0.01	0.00	-0.02	-0.04	0.06	0.04	-0.03	-0.12	0.01	-0.04	0.21	0.06	0.17

	<u>Up Tight</u>	<u>Physique</u>	<u>Run</u>	<u>Seriousness</u>	<u>Wrong Sex</u>	<u>Devote Time</u>	<u>Not Good</u>	<u>Social</u>	<u>Sex</u>	<u>Commit</u>	<u>Play With Me</u>	<u>Boys Prefer</u>	<u>Like Coach</u>	<u>Far Away</u>
Up Tight	1.00													
Physique	0.30	1.00												
Run	0.26	0.42	1.00											
Seriousness	0.45	0.28	0.28	1.00										
Wrong Sex	0.24	0.21	0.29	0.23	1.00									
Devote Time	0.41	0.30	0.30	0.41	0.22	1.00								
Not Good	0.35	0.21	0.36	0.32	0.16	0.33	1.00							
Social	0.10	0.34	0.17	0.10	0.24	0.26	0.07	1.00						
Sex	0.17	0.25	0.27	0.19	0.36	0.15	0.20	0.26	1.00					
Commit	0.31	0.24	0.26	0.31	0.09	0.35	0.28	0.15	0.25	1.00				
Play With Me	0.39	0.13	0.15	0.24	0.28	0.27	0.38	0.13	0.19	0.28	1.00			
Boys Prefer	0.20	0.41	0.22	0.17	0.22	0.21	0.13	0.34	0.22	0.14	0.21	1.00		
Like Coach	0.20	0.25	0.15	0.16	0.13	0.26	0.02	0.24	0.07	0.26	0.06	0.13	1.00	
Far Away	0.16	0.04	0.16	0.16	0.10	0.19	0.09	0.11	0.04	0.12	0.13	-0.01	0.17	1.00
Not Popular	0.09	0.39	0.16	0.11	0.24	0.22	0.05	0.42	0.36	0.10	0.15	0.42	0.19	0.06
Parents	0.10	0.19	0.15	0.20	0.21	0.16	0.12	0.32	0.29	0.21	0.12	0.13	0.14	0.19
Competitive	0.36	0.20	0.22	0.31	0.14	0.30	0.40	0.12	0.10	0.36	0.28	0.09	0.06	0.14
Unable	0.14	0.18	0.27	0.20	0.03	0.14	0.22	0.11	0.12	0.09	0.18	0.08	0.02	0.19
Judged	0.40	0.19	0.24	0.26	0.17	0.34	0.38	0.14	0.21	0.33	0.30	0.09	0.14	0.24
Dirty	0.08	0.31	0.31	0.17	0.27	0.20	0.10	0.34	0.17	0.15	0.07	0.34	0.23	0.10
Good	0.26	0.30	0.19	0.31	0.24	0.31	0.22	0.22	0.16	0.18	0.22	0.18	0.27	0.05
Not Aggressive	0.37	0.20	0.27	0.34	0.15	0.24	0.44	0.07	0.23	0.34	0.31	0.15	0.09	0.13
Fool Around	0.35	0.15	0.20	0.32	0.22	0.30	0.27	0.15	0.19	0.30	0.26	0.17	0.27	0.10
Nude	0.09	0.13	0.18	0.17	0.17	0.09	0.09	0.08	0.07	0.15	0.12	0.19	0.14	0.04
Opportunities	0.21	0.09	0.15	0.15	0.15	0.23	0.26	0.01	0.05	0.06	0.14	-0.03	0.05	0.36
No Help	0.39	0.030	0.18	0.22	0.14	0.27	0.32	0.14	0.19	0.17	0.48	0.06	0.16	0.30
Already Time	0.11	0.01	0.04	0.11	0.03	0.20	-0.06	-0.00	0.00	0.02	-0.05	0.04	0.12	0.13

	<u>Not Popular</u>	<u>Parents</u>	<u>Competitive</u>	<u>Unable</u>	<u>Judged</u>	<u>Dirty</u>	<u>Good</u>	<u>Not Aggressive</u>	<u>Fool Around</u>	<u>Nude</u>	<u>Opportunities</u>	<u>No Help</u>	<u>Already Time</u>
Not Popular	1.00												
Parents	0.39	1.00											
Competitive	0.05	0.11	1.00										
Unable	0.06	0.14	0.09	1.00									
Judged	0.15	0.16	0.50	0.27	1.00								
Dirty	0.41	0.36	0.15	0.14	0.19	1.00							
Good	0.29	0.24	0.19	0.22	0.17	0.28	1.00						
Not Aggressive	0.08	0.15	0.47	0.22	0.46	0.14	0.37	1.00					
Fool Around	0.20	0.08	0.34	0.13	0.31	0.16	0.25	0.40	1.00				
Nude	0.17	0.14	0.13	0.20	0.20	0.22	0.07	0.19	0.15	1.00			
Opportunities	0.02	0.15	0.20	0.15	0.26	0.10	0.07	0.21	0.16	0.14	1.00		
No Help	0.11	0.14	0.20	0.16	0.38	0.01	0.14	0.27	0.28	0.09	0.40	1.00	
Already Time	0.03	0.06	-0.04	0.06	-0.01	0.05	0.02	-0.05	0.13	0.03	0.14	0.08	1.00

APPENDIX F

RESULTS OF T-TEST FOR SIGNIFICANT DIFFERENCES BETWEEN MALES AND FEMALES

RESULTS OF T-TEST FOR SIGNIFICANT DIFFERENCES BETWEEN MALES AND FEMALES

VARIABLES	DEGREES OF FREEDOM	T VALUE †
How many organized sports have you played in the past year? (excluding intramurals)	709	5.33***
How many sports other than organized sport have you participated in regularly in the past year? (including intramurals)	693	3.56***
How much sports would you like to participate in?	701	-4.66***

The following variables are all prefixed by the phrase "I'd play more sports"

but it would take up too much time	672	1.45
but hard physical training is unacceptable for me	663	-0.23
if there were more opportunities to play just for fun	670	-2.48*
but I don't like exerting myself	667	0.22
but I think the coaches expect too much	666	0.45
but it is too hard to learn a new sport	689	1.22
but not enough of my friends play sports	633	-1.69
but I would probably be a bench warmer	663	-1.05
but the people in sports are too aggressive for me	650	-2.55*
if I could afford it	668	-0.48
but for health reasons I can't	582	-2.49*
but I'm afraid of getting hurt	611	-2.71*
but I don't like to sweat	701	0.46
but I don't like all of the rules and regulations of organized sports	666	0.45
but I don't like the type of girl (boy) who plays a lot of sports	694	3.50***

† a negative t-value indicates a higher mean score by the Females

	DEGREES OF FREEDOM	T VALUE
but I won't wear the ugly uniforms worn in some sports	629	-1.60
but I think it would harm my image	697	1.08
if I knew all of the rules	651	-1.98 *
but sports are too rough	595	-3.70 ***
but I don't have the nedessary equipment	657	-0.66
but it takes too long to get cleaned up after playing	691	1.27
but people would only laugh at me	643	-2.16 *
but I'm too out of shape to enjoy them	626	-2.52 *
but I wouldn't want to be known as an athlete	682	0.84
but no team would benefit from having me on their team	629	-4.06 ***
if they were better organized	679	0.08
but it wrecks up my hair	697	1.47
but my studies are too important	656	-1.38
but even when we play for fun the other kids get uptight about playing well	674	-3.16 **
but I don't want to have the physique needed	618	-2.95 **
but I don't like a lot of running	627	-2.10 *
but some players are so serious they try to injure others	657	-1.05
but they are mostly for boys (girls)	506	-6.09 ***
but coaches expect you to devote too much time	667	-1.16
but I'm not good enough	631	-4.74 ***
but sports will not help me socially	694	2.19 *
but girls (boys) can never be as good as boys (girls) in sports	537	-3.01 **
but I don't like being committed to things	667	1.21
but when I'm learning a new sport I think that no one will want to play with me	669	1.25

	DEGREES OF FREEDOM	T VALUE
but boys (girls) prefer girls (boys) who don't play sports	665	-0.56
but I don't get along with coaches	696	3.25* *
but I live too far away from the sports facilities	633	-1.55
but the girls (boys) in sports are not popular	686	1.43
but my parents discouraged me	665	0.28
but I don't like the competitive emphasis	604	-4.54* * *
but I'm physically unable	580	-3.01* *
but I'd feel uneasy because I feel I am being judged	605	-4.17* * *
but I'd get too dirty	670	1.72
but I don't think I'd ever want to be good at sports	666	-0.73
but I'm not aggressive enough to play sports seriously	649	-2.15*
but I don't like how I can't fool around in organized sports	648	-0.87
but I don't like being seen nude in the change room	650	-1.18
but opportunities for me to play are limited	651	-1.53
but few people will take the time to help me when I'm learning a new sport	644	-0.90
but they already take up a lot of my time	652	1.57

* significant at the 0.05 level

** significant at the 0.01 level

*** significant at the 0.001 level

APPENDIX G

RESULTS OF T-TEST FOR SIGNIFICANT DIFFERENCES BETWEEN
FEMALE SPORT PARTICIPANTS AND NON SPORT PARTICIPANTS

RESULTS OF T-TEST FOR SIGNIFICANT DIFFERENCES BETWEEN FEMALE
SPORT PARTICIPANTS AND NON PARTICIPANTS

VARIABLE	DEGREES OF FREEDOM	T VALUE †
How many organized sports have you played in in the past year? (excluding intramurals)	158	-8.10***
How many sports other than organized sport have you participated in regularly in the past year? (in- cluding intramurals)	209	-5.81***
How much sports would you like to participate in?	257	0.19
The following variables are all prefixed by the phrase "I'd play more sports"		
but it would take up too much time	283	3.66***
but hard physical training is unacceptable for me	301	2.83**
if there were more opportunities to play just for fun	269	2.54*
but I don't like exerting myself	302	3.15**
but I think the coaches expect too much	286	2.48*
but it is too hard to learn a new sport	299	1.86
but not enough of my friends play sports	292	2.57*
but I would probably be a bench warmer	302	6.93***
but the people in sports are too aggressive for me	299	5.19***
if I could afford it	263	-1.85
but for health reasons I can't	287	1.60
but I'm afraid of getting hurt	292	5.49***
but I don't like to sweat	298	2.45*
but I don't like all of the rules and regulations of organized sports	301	3.26**

† a negative t-value indicates a higher mean score by the sport participants

	DEGREES OF FREEDOM	T VALUE
but I don't like the type of girl (boy) who plays a lot of sports	291	4.66***
but I won't wear the ugly uniforms worn in some sports	286	1.10
but I think it would harm my image	300	1.57
if I knew all of the rules	282	2.65**
but sports are too rough	300	5.06***
but I don't have the necessary equipment	278	1.30
but it takes too long to get cleaned up after playing	279	3.42***
but people would only laugh at me	289	7.14***
but I'm too out of shape to enjoy them	300	6.58***
but I wouldn't want to be known as an athlete	294	1.70
but no team would benefit from having me on their team	301	7.04***
if they were better organized	260	-1.86
but it wrecks up my hair	300	0.93
but my studies are too important	269	1.02
but even when we play for fun the other kids get uptight about playing well	284	2.78**
but I don't want to have the physique needed	294	1.29
but I don't like a lot of running	294	4.08***
but some players are so serious they try to injure others	273	3.09**
but they are mostly for boys (girls)	269	0.49
but coaches expect you to devote too much time	251	2.67**
but I'm not good enough	299	8.37***
but sports will not help me socially	280	1.16
but girls (boys) can never be as good as boys (girls) in sports	298	1.03
but I don't like being committed to things	294	3.73***

	DEGREES OF FREEDOM	T VALUE
but when I'm learning a new sport I think that no one will want to play with me	298	2.82**
but boys (girls) prefer girls (boys) who don't play sports	292	1.08
but I don't get along with coaches	280	-0.24
but I live too far away from the sports facilities	261	-1.60
but the girls (boys) in sports are not popular	298	0.68
but my parents discouraged me	297	1.85
but I don't like the competitive emphasis	293	5.98***
but I'm physically unable	270	1.65
but I'd feel uneasy because I feel I am being judged	277	4.19***
but I'd get too dirty	277	2.73**
but I don't think I'd ever want to be good at sports	302	2.99**
but I'm not aggressive enough to play sports seriously	300	5.89***
but I don't like how I can't fool around in organized sports	290	2.57*
but I don't like being seen nude in the change room	295	0.89
but opportunities for me to play are limited	259	0.67
but few people will take the time to help me when I'm learning a new sport	268	0.91
but they already take up a lot of my time	219	-5.59***

* significant at the 0.05 level

** significant at the 0.01 level

*** significant at the 0.001 level

APPENDIX H

RESULTS OF T-TEST FOR SIGNIFICANT DIFFERENCES BETWEEN
MALE SPORT PARTICIPANTS AND NON SPORT PARTICIPANTS

RESULTS OF T-TEST FOR SIGNIFICANT DIFFERENCES BETWEEN MALES
SPORT PARTICIPANTS AND NON SPORT PARTICIPANTS

VARIABLE	DEGREES OF FREEDOM	T VALUE †
How many organized sports have you played in in the past year? (excluding intramurals)	394	-11.03***
How many sports other than organized sport have you participated in regularly in the past year? (in- cluding intramurals)	383	-9.91***
How much sports would you like to participate in?	305	0.09
The following variables are all prefixed by the phrase "I'd play more sports"		
but it would take up too much time	311	2.28*
but hard physical training is unacceptable for me	305	1.39
if there were more opportunities to play just for fun	321	3.31***
but I don't like exerting myself	282	2.17*
but I think the coaches expect too much	299	2.77**
but it is too hard to learn a new sport	304	0.03
but not enough of my friends play sports	269	4.13***
but I would probably be a bench warmer	258	4.17***
but the people in sports are too aggressive for me	237	4.16***
if I could afford it	325	-0.66
but for health reasons I can't	343	-0.82
but I'm afraid of getting hurt	290	0.96
but I don't like to sweat	259	1.35
but I don't like all of the rules and regulations of organized sports	247	3.18**

† a negative t-value indicates a higher mean score by the sport participants

	DEGREES OF FREEDOM	T VALUE
but I don't like the type of girl (boy) who plays a lot of sports	265	2.85**
but I won't wear the ugly uniforms worn in some sports	348	-0.72
but I think it would harm my image	257	0.97
if I knew all of the rules	277	2.89**
but sports are too rough	261	2.29*
but I don't have the necessary equipment	297	1.68
but it takes too long to get cleaned up after playing	268	1.69
but people would only laugh at me	222	4.48***
but I'm too out of shape to enjoy them	247	3.73***
but I wouldn't want to be known as an athlete	241	2.57*
but no team would benefit from having me on their team	235	5.06***
if they were better organized	329	-0.94
but it wrecks up my hair	302	0.58
but my studies are too important	298	1.50
but even when we play for fun the other kids get uptight about playing well	295	2.26*
but I don't want to have the physique needed	282	1.15
but I don't like a lot of running	314	0.58
but some players are so serious they try to injure others	282	2.56*
but they are mostly for boys (girls)	367	-0.92
but coaches expect you to devote too much time	316	2.31*
but I'm not good enough	255	4.84***
but sports will not help me socially	271	1.83
but girls (boys) can never be as good as boys (girls) in sports	386	-2.16*
but I don't like being committed to things	259	5.65***

	DEGREES OF FREEDOM	T VALUE
but when I'm learning a new sport I think that no one will want to play with me	253	3.19**
but boys (girls) prefer girls (boys) who don't play sports	323	-0.28
but I don't get along with coaches	278	1.69
but I live too far away from the sports facilities	304	0.62
but the girls (boys) in sports are not popular	268	0.79
but my parents discouraged me	269	0.65
but I don't like the competitive emphasis	221	6.44***
but I'm physically unable	274	1.55
but I'd feel uneasy because I feel I am being judged	258	5.57***
but I'd get too dirty	287	0.47
but I don't think I'd ever want to be good at sports	301	1.76
but I'm not aggressive enough to play sports seriously	248	5.04***
but I don't like how I can't fool around in organized sports	271	3.42***
but I don't like being seen nude in the change room	283	0.78
but opportunities for me to play are limited	299	3.10**
but few people will take the time to help me when I'm learning a new sport	287	1.96
but they already take up a lot of my time	315	-3.34***

* significant at the 0.05 level

** significant at the 0.01 level

*** significant at the 0.001 level

APPENDIX I

ROTATED FACTOR MATRIX FOR FEMALE SAMPLE

ROTATED FACTOR MATRIX FOR FEMALE SAMPLE

VARIABLES	ERROR FACTORS				
	COMPETITIVE EMPHASIS	SOCIO- COSMETIC			
TIME	.125	.139	.200	-.023	.123
TRAINING	.222	.206	.014	.472	.076
NO FUN	.255	-.004	.144	.026	.369
EXERT	.236	.329	.069	.224	.131
COACH	.284	.223	.165	.088	.329
LEARN	.249	.370	.221	.005	.059
FRIENDS	.405	.308	.164	-.148	.071
BENCH	.643	.150	.117	.000	-.001
TOO AGGRESSIVE	.550	.221	.057	.250	.259
AFFORD	-.007	.267	.529	.036	.094
HEALTH	-.000	.063	.065	.693	.026
HURT	.461	.288	.162	.303	-.101
SWEAT	.190	.599	.117	.047	-.022
RULES	.296	.219	.058	.004	.478
ASSOCIATE	.239	.403	-.056	.134	.267
UNIFORM	.187	.374	.031	-.058	.259
IMAGE	.087	.647	-.025	.121	.128
KNOW RULES	.378	.205	.336	-.039	.142
ROUGH	.491	.336	.131	.241	.194
EQUIPMENT	.264	.196	.529	-.001	.120
CLEANED	.155	.642	.110	-.064	.143
LAUGH	.641	.208	.078	.000	.053
SHAPE	.462	.153	.105	.225	.105
ATHLETE	.089	.495	.025	.109	.214

ROTATED FACTOR MATRIX FOR FEMALE SAMPLE (Con't)

VARIABLES	COMPETITIVE EMPHASIS	SOCIO- COSMETIC	ERROR FACTORS		
BENEFIT	.682	.064	.045	.160	.146
ORGANIZATION	-.081	.152	.285	.003	.407
HAIR	-.041	.759	-.016	.051	.020
STUDIES	.130	.025	.288	.172	.168
UPTIGHT	.444	.071	.197	.036	.520
PHYSIQUE	.135	.512	.012	.196	.245
RUN	.333	.286	.117	.309	.124
SERIOUSNESS	.268	.132	.163	.157	.449
WRONG SEX	.230	.376	.151	-.047	.115
DEVOTE TIME	.231	.217	.320	.045	.468
NOT GOOD	.737	.019	.092	.104	.087
SOCIAL	.036	.461	.176	.116	.099
SEX	.279	.308	.139	.114	.005
COMMIT	.352	.113	.092	.103	.338
PLAY WITH ME	.461	.088	.170	.024	.160
BOYS PREFER	.091	.500	-.002	.027	.136
LIKE COACH	-.040	.276	.175	.102	.347
FAR AWAY	.090	.040	.507	.133	.060
NOT POPULAR	-.015	.673	.128	-.018	.073
PARENTS	.104	.364	.259	.152	-.002
COMPETITIVE	.546	.084	.018	.024	.278
UNABLE	.149	.062	.117	.659	.090
JUDGED	.523	.069	.191	.128	.273
DIRTY	.097	.623	.023	.113	.025

ROTATED FACTOR MATRIX FOR FEMALE SAMPLE (Con't)

VARIABLES					
	COMPETITIVE EMPHASIS	SOCIO- COSMETIC	ERROR FACTORS		
GOOD	.140	.318	-.029	.230	.409
NOT AGGRESSIVE	.551	.078	-.002	.182	.335
FOOL AROUND	.306	.175	.140	-.034	.468
NUDE	.152	.201	.064	.161	.034
OPPORTUNITIES	.233	-.032	.475	.050	.084
NO HELP	.382	-.037	.479	.058	.178
ALREADY TIME	-.204	-.017	.296	.024	.231

APPENDIX J

EIGENVALUES FOR FEMALE FACTORS

EIGENVALUES FOR FEMALE FACTORS

FACTOR		EIGENVALUES			
1	11.650	3.181	1.718	1.433	1.194
6	0.877	0.797	0.732	0.660	0.506
11	0.496	0.452	0.436	0.411	0.362
16	0.319	0.261	0.251	0.192	0.172
21	0.134	0.098	0.071	0.059	0.048
26	0.032	-0.005	-0.026	-0.042	-0.083
31	-0.092	0.112	-0.127	-0.139	-0.152
36	-0.182	0.189	-0.210	-0.221	-0.248
41	-0.265	0.275	-0.293	-0.311	-0.328
46	-0.340	0.347	-0.364	-0.383	-0.397
51	-0.406	0.422	-0.455	-0.474	-0.476

APPENDIX K

CUMULATIVE PROPORTION OF TOTAL VARIANCE
FOR FEMALE FACTORS

CUMULATIVE PROPORTION OF TOTAL VARIANCE
FOR FEMALE FACTORS

FACTORS					
1	0.211	0.269	0.300	0.326	0.348
6	0.364	0.379	0.392	0.404	0.413
11	0.422	0.430	0.438	0.446	0.452
16	0.458	0.463	0.468	0.471	0.474
21	0.477	0.478	0.480	0.481	0.482
26	0.482				

APPENDIX L

ROTATED FACTOR MATRIX FOR MALE SAMPLE

ROTATED FACTOR MATRIX FOR MALE SAMPLE

VARIABLES					
	COMPETITIVE EMPHASIS	SOCIO- COSMETIC	ERROR FACTOR		
TIME	-.072	.005	-.200	-.056	.176
TRAINING	.214	-.309	-.202	.034	.361
NO FUN	.271	.030	-.293	-.251	.119
EXERT	.218	-.443	-.090	-.051	.271
COACH	.168	-.192	-.458	-.107	.088
LEARN	.224	-.386	-.095	-.172	.057
FRIENDS	.243	-.192	-.102	-.308	-.088
BENCH	.571	-.126	-.195	-.098	.059
TOO AGGRESSIVE	.466	-.243	-.232	-.169	.150
AFFORD	-.000	-.124	-.034	-.500	.109
HEALTH	.004	-.223	-.021	-.106	.625
HURT	.305	-.515	-.024	-.201	.075
SWEAT	.145	-.637	-.032	-.000	.077
RULES	.178	-.344	-.380	-.061	.050
ASSOCIATE	.226	-.334	-.414	-.116	.046
UNIFORM	.039	-.454	-.208	-.279	.039
IMAGE	.104	-.632	-.082	-.058	-.092
KNOW RULES	.369	-.259	-.095	-.363	.055
ROUGH	.417	-.407	-.150	-.172	.166
EQUIPMENT	.203	-.195	-.104	-.546	.143
CLEANED	.173	-.605	-.178	-.174	.059
LAUGH	.647	-.381	-.077	-.078	.014
SHAPE	.398	-.412	-.075	-.108	.233

ROTATED FACTOR MATRIX FOR MALE SAMPLE (Con't)

VARIABLES	COMPETITIVE EMPHASIS	SOCIO- COSMETIC	ERROR FACTOR		
ATHLETE	.160	-.586	-.218	.008	-.036
BENEFIT	.693	-.193	-.094	-.129	.047
ORGANIZATION	.082	-.178	-.222	-.424	.091
HAIR	.035	-.591	.069	-.094	.026
STUDIES	.124	-.074	-.120	-.092	.372
UPTIGHT	.365	-.166	-.468	-.234	.205
PHYSIQUE	.301	-.450	-.182	-.098	.153
RUN	.184	-.456	-.060	-.044	.220
SERIOUSNESS	.310	-.179	-.505	-.164	.090
WRONG SEX	.074	-.496	-.170	-.109	.082
DEVOTE TIME	.160	-.168	-.586	-.225	.006
NOT GOOD	.743	-.110	-.123	-.151	.051
SOCIAL	.152	-.470	-.198	-.063	.126
SEXX	.017	-.483	.003	-.155	.159
COMMIT	.264	-.275	-.420	-.163	-.004
PLAY WITH ME	.508	-.261	-.263	-.278	.067
BOYS PREFER	-.051	-.561	-.256	-.062	.114
LIKE COACH	.122	-.348	-.410	-.206	.045
FAR AWAY	.131	-.147	-.105	-.414	.070
NOT POPULAR	.016	-.554	-.158	-.230	.038
PARENTS	.163	-.138	-.074	-.131	.198
COMPETITIVE	.454	-.050	-.480	-.038	.151
UNABLE	.276	-.163	-.028	-.093	.564

ROTATED FACTOR MATRIX FOR MALE SAMPLE (Con't)

VARIABLES	COMPETITIVE EMPHASIS	SOCIO- COSMETIC	ERROR FACTOR		
JUDGED	.560	-.063	-.360	-.185	.092
DIRTY	.078	-.530	-.095	-.081	.154
GOOD	.121	-.407	-.338	.061	.114
NOT AGGRESSIVE	.515	-.140	-.357	-.025	.226
FOOL AROUND	.334	-.147	-.462	-.071	.060
NUDE	.210	-.379	-.047	-.128	.091
OPPORTUNITIES	.251	-.009	-.120	-.452	.122
NO HELP	.371	-.019	-.303	-.425	.241
ALREADY TIME	-.050	-.038	-.193	-.197	.212

APPENDIX M

EIGENVALUES FOR MALE FACTORS

EIGENVALUES FOR MALE FACTORS

FACTOR	EIGENVALUES				
1	13.099	2.833	1.343	1.198	1.083
6	0.879	0.768	0.655	0.588	0.530
11	0.512	0.442	0.408	0.362	0.301
16	0.267	0.228	0.195	0.159	0.151
21	0.120	0.110	0.081	0.042	0.038
26	0.008	-0.006	-0.029	-0.054	-0.073
31	-0.094	-0.095	-0.124	-0.151	-0.160
36	-0.161	-0.179	-0.191	-0.206	-0.218
41	-0.239	-0.250	-0.289	-0.293	-0.297
46	-0.321	-0.325	-0.336	-0.346	-0.356
51	-0.370	-0.399	-0.401	-0.418	-0.454

APPENDIX N

CUMULATIVE PROPORTION OF TOTAL VARIANCE FOR MALE FACTORS

CUMULATIVE PROPORTION OF TOTAL VARIANCE
FOR MALE FACTORS

FACTORS					
1	0.238	0.289	0.314	0.335	0.355
6	0.371	0.385	0.397	0.408	0.417
11	0.427	0.435	0.442	0.449	0.454
16	0.459	0.463	0.467	0.470	0.472
21	0.475	0.477	0.478	0.479	0.480
26	0.480				