SELF-IMAGES AND ATTITUDES TOWARDS PARTICIPATION

IN PHYSICAL ACTIVITIES AMONG ELEVEN TO SIXTEEN YEAR OLD GIRLS IN A KENYA SECONDARY SCHOOL.

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SELF-IMAGES AND ATTITUDES TOWARDS PARTICIPATION IN PHYSICAL ACTIVITIES
AMONG 11 TO 16 YEAR OLD GIRLS IN A KENYA SECONDARY SCHOOL

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P.D. Kelly.
Teachers have clearly choices to make. First of all they must decide whether there should be a place in their education system for physical activities. If the answer is yes, should participation in physical activities be used for moral education? If they make the decision to use participation in physical activities for moral education, to what level of moral development should the subject be taken? Kohlberg (1969) based his theory of moral education on cross-cultural research which revealed to him twenty-eight basic aspects of morality which are to be found in any culture. These twenty-eight basic aspects suggested to him six stages of moral development occurring at three levels.

The first level, the pre-conventional level, is subdivided into:

Stage 1 - The action determines the goodness or badness of the action, regardless of the meaning of the action to the actor or the value of the consequences.

Stage 2 - Right action is action which tries to satisfy the actor's needs and possibly the needs of others.

The second level, the conventional level, is subdivided into:

Stage 3 - The expectation of others and the meaning of the action become important regardless of the immediate consequences of the action.

Stage 4 - The maintenance of law and order. Rules and regulations to be obeyed and not queried.

The third level, the post-conventional level, is subdivided into:
Stage 5 - Laws can be changed through rational consideration of their utility. Outside the law, free agreement and contract are the binding elements of obligation.

Stage 6 - 'Right' is defined by the decision of the conscience in accord with self-chosen ethical principles, these principles being based on logical comprehensiveness, universality, and consistency.

Many teachers of physical education structure their coaching to include up to Stage 4 of moral development - respect for the rules and regulations. If teachers wish to use physical activities to teach beyond Stage 4, objectives other than winning must be envisaged. Cratty (1975) has developed new games and adapted old ones to teach children consciously and deliberately about moral concepts such as ganging up, controlling anger, cheating, trust and sportsmanship.

This use of games to teach moral concepts can be illustrated by the People's Republic of China, who, in the last years of the Chairmanship of Mao Tse Tung, used sport to teach 'friendship first, competition second' (Orlick 1973).

When children begin to play with other children, they usually start with traditional games and they make up their own rules upon which they agree. There may be endless disputes on what is allowed and what is not allowed, what is fair and what is unfair, but children set their own standards. The standards do not seem to come from parents or teachers. Furthermore there appears to be little cheating by young children. Piaget (1965) claims that they often wish to alter the rules to their advantage but they do not break them with dishonest intent.

Inevitably the play of children comes under the influence of adults, at school if not before. Their play becomes structured and they are introduced to competitive games and sports governed by rules devised
by adults. Although rules are devised to govern the competition, their effectiveness will depend on whether they are appropriate or not.

It is clear that in physical activities, the rules of normal life can be replaced by other rules. In some sports the rules not only differ from those in similar situations in ordinary life, they even contradict them. Personal assault, throwing missiles at people and stealing are all forbidden in ordinary life, but in combat sports assault is the essence of the activity; in cricket and baseball we hurl missiles at opponents; and in many team games we try to steal the ball from our opponents. If sport is, as it appears to be in some of its forms, legalised immorality and ritualised aggression, how can it ever be used to inculcate virtues? Will not children who are encouraged to deceive in sport, whether within the rules or against the rules, tend to think that deception is acceptable in ordinary life as well, or at least be confused if they are told the opposite? Is it possible that the Muscular Christians who encouraged sport in the British public schools played under the Radical Ethic (see page 5) were wrong in thinking that team games promoted moral qualities?

The situation is not helped at all by the differing views on the breaking of rules in sport. For some, keeping to the rules is right because breaking them has bad consequences. In the short term, there is a penalty given against the offender or his team. In the long term, breaking one rule may lead to breaking other rules, until the game becomes unplayable. However, there are instances when it appears to the player, and perhaps to the coach and to others too, that breaking the rule would have a good consequence in the short term despite the penalty imposed, and that the long-term consequences are either unforeseeable or irrelevant. An example of this is stopping the ball going into the goal with the foot in hockey thus preventing a certain goal. The penalty
imposed, a penalty flick, is not guaranteed to produce a goal. In this instance, is breaking the rule acceptable? The subject can be extended by introducing cheating. In the above case, although a rule was broken, there was no intention to avoid the penalty or to 'beat the system'. This is often called a 'professional foul'. But it is possible to break the rules with the intention of not being found out. The penalties are usually the same, but are the offences similar? Should there be differential penalties? Would it be possible to detect the difference? Some would argue that the system of rules are there to be exploited. If they can be beaten, they are defective or the persons enforcing them are inefficient. 'Cheating' then becomes a technical term, not a moral term. Should we therefore agree with a well known English cricketer who claims that the umpires are there to give decisions, and he therefore does not think it wrong not to 'walk' out when caught out. Should schoolboy cricketers be encouraged to 'walk' when they know they are out?
The philosophy of participation in physical activities has been investigated by Scott (1973) and his ideas have been expanded by Kerr (1977). Basically they have tried to analyse the way that physical activities are undertaken and, from this analysis, they have divided participation into types, each type being the product of a different ethical foundation. It is suggested that there are three main types based on the Radical Ethic, the Lombardian Ethic, and the ethic of the Counter Culture.

**The Radical Ethic**

This is the conception of games playing as developed in the English Public Schools in the mid-19th Century when games were used as a major vehicle for social and moral reinforcement. Various qualities such as self-discipline, team spirit, courage, endurance, and a sense of 'fair play' were fostered by playing games, all of which culminated in the ideal of the Muscular Christian. Within the Radical Ethic, the worth or value attached to a successful outcome (winning) stands in direct relation to the manner of achievement. The winning of the game is subservient to the playing of the game. To have a good game and to play well is the foremost aim. In order to have a good game, all players must have a respect for the rules and must act responsibly towards these rules; they must co-operate effectively with others in order to function effectively within the competitive framework. The desire to win is also an essential prerequisite for the game to be played well. The Radical Ethic thus recognises that playing well and winning are complementary and mutually conditioning aims. It is, of course, possible to have a good game and play well without winning, as conversely, it is possible to have a bad game and win. The value attached to the manner of achievement, then, is greater than that
attached to the end result of winning. In order to play well and compete efficiently, the Radical Ethic recognises that players must display certain qualities such as respect for others, corporate loyalty, and a respect for the rules.

The Lombardian Ethic

This way of participating in physical activities has been named after an American football coach who, on being asked "Is winning everything to you?" is reputed to have answered "Winning isn't everything, it's the only thing". The Lombardian Ethic has stripped competitive activities of the moral and social values accruing from participation. The emphasis is purely on the achievement of a satisfactory end result which justifies any means of achievement. Therefore, in contrast with the Radical Ethic, where the manner of the achievement is considered to be of paramount importance, the Lombardian Ethic focuses on the necessity of winning. It recognises that all movements within the activity must be directed towards the attempt to win and that any movement not so motivated is inappropriate and counter-productive.

It is clear that the emphasis on winning in some competitive physical activities has increased in direct proportion to the interest and involvement of external factors standing outside the activity, e.g. commercialisation, professionalism, politics, nationalism, etc. As a consequence of this, some competitive activities lose their 'unreality', their 'non-seriousness', and their playful nature. Dominated by the work ethic (See Weber 1958) and endowed with this artificial importance, physical activities become very real and intensely serious activities. The only measurable yardstick for the success of the competitive activity is the winning; although, in itself, the winning is of little value intrinsically. However, the consequence of
this winning in terms of the external factors noted above is of far greater significance. The moral and social values thought to accrue from the actual playing of the activity stand in inverse proportion to the emphasis placed on winning. The specific rule framework of the activity becomes the only sanction on the individual's behaviour; basic moral tenets which, by common consent, govern all human activities, cease to apply within the realm of the activity. Indeed an examination of competitive activities in contemporary society forcibly illustrates that, such is the seriousness and the over-emphasis on winning, that the specific rules do not act as parameters governing behaviour within the activity. Blatant disregard of the rules is often considered necessary and justified if it forestalls defeat. The individual player is only valued in so far as he contributes to a successful outcome. His effectiveness and worth are synonymous with his single-minded dedication and contribution to winning. His own motives for playing the activity, the meaning of the activity for him, his personal and private experiences and feelings, aesthetic satisfaction, etc., are all of no consequence if they neither contribute to, nor detract from, the main aim of winning. For a wider discussion on this ethic, the reader is referred to Merton's "Social Theory and Social Structure" (Merton 1958). In this book, Merton places the ends-means dilemma in a cultural context in which the disproportionate emphasis on 'ends' can and does attenuate loyalty to appropriate means.

The Counter Culture

The Counter Culture is a modern ethic adapted initially as a reaction to the worse excesses of the Lombardian Ethic. The individual participant is elevated in that his experience and the meanings and feelings that he derives from participating are the central focus and provide the chief motive for undertaking the activity. In its simplest form, the
activity is regarded as pure fun and enjoyment, a love of moving and exercising skill along with other people. Participation becomes basically a social event and proponents of this approach would encourage mixed activities and a loosening of competitive structure such as leagues and knock-out competitions. The process of participation is everything, the end result unimportant.

Through authentic involvement, competitive activities in general can be an ideal vehicle for the realisation of self: the participant can come face to face with the ultimate realities, can actualise his potentialities, and ultimately can 'be'. In physical activities, the participant turns away from the world of practical demands and all that characterises daily life in order to come to terms with what is ultimately real. Physical activities should be freely chosen, freely engaged in and the rules freely accepted - one is free from the everyday world and, most important, one is free to be oneself. Both sport and yoga require that you conform to a set of rules; by conforming to these rules you 'stretch' and 'grow'. This is the elusive and mystical 'inner' game, in contrast with the outer game which comprises such physical attributes as grace, skill, strength, flexibility, power and co-ordination.

Also implied in the concept of 'play' versus everyday demands (Alltag) is a connection with the theory of Charisma as developed by Weber (Weber 1947, 1968), in which modern man strives for release, a form of ecstasy, from the demands of routine, bureaucratic existence. For a discussion, see Dow (1978).

Using the Three Ethos, it is possible to interpret some of the research findings on the psychological effects of participation in physical activities. An interesting study of this relationship was made by Schendel (1965). He administered the California Psychological Inventory to 334 9th grade, 12th grade and college teams sport
That, while both 9th and 12th grade athletes generally possessed desirable personal-social psychological characteristics to a greater extent than did the respective non-participant groups, at the college level the situation was reversed and it was the non-participant group which possessed the desirable characteristics to a greater extent than did the athletes.

That less able athletes at 12th grade and college level possessed desirable psychological characteristics to a greater extent than did athletes of greater ability.

Athletes appeared to be more conventional in their response to social situations than non-participants.

Athletes appeared to be more social than non-participants.

Further examples from the literature can be taken. Jones, James and Williamson (1973) studied 205 college athletes. It was found that traditional sports orientations were associated with positive personal attributes. The authors proposed that traditional attitudes towards sports (Radical Ethic) were responsible for the beneficial results for the participants. Klein (1974) looked into the subject of body contact games. Although it was asserted that participation in body contact games
resulted in improved moral character and physical health, Klein found that for some players, the intense competition (Lombardian Ethic) reinforced aggression, exacted a severe toll in physical injury, and produced response patterns in the participants which he considered harmful. Le Jeune (1975) investigated children's play. The author found that if the play was co-operative (Counter Culture or Radical Ethic), the child's response was one of wholesome pleasure. But if the child's play was competitive (Lombardian Ethic), there was a shift towards anxiety and dissent amongst the participants and the competition produced a tendency towards violence in the children's behaviour.

McCleary et al. (1963) studied the teaching of sport in schools. Criticism was leveled at methods of teaching sport which stressed competition rather than co-operation. They found that distinctions and honours were given to successful pupils, but the 'badge of failure' was the reward to the remainder (Lombardian Ethic). It was felt that this situation 'does not only make the social life of competent children unhappy and unfruitful while they are young, but it destroys those impulses towards friendly co-operative effort which might have made their lives as adults happier and more wholesome.'

To sum up, research into sport played under the Radical Ethic has shown that some beneficial results can be gained. These are basically as outlined over time by educationalists and others looking for benefits from healthy, sporting competition. With the increase in physical activities under the Lombardian Ethic, it became evident that stress was increased for some participants and that undesirable effects were being observed as a result. This has produced an increase in research into the negative effects of such competition. An example of this is Tutko and Burns (1976) who are of the opinion that if sport has the ability to build character, it also has the capacity to damage it. They
support their argument with evidence from Little League Baseball in the United States. It has been found that continuous failure in competition produces a feeling of failure and rejection amongst the players leading to detrimental effects in social interaction and schoolwork. There has been little research into the third category, sport based on the Counter Culture. It is therefore difficult to justify this category from the research literature, but it is anticipated that greater interest will be given to this form of participation in physical activities and it is expected that research papers on this topic will be produced with increasing frequency in the future.

They suggest that players are misled by their genes. Holmes and Scow (1971) stated how American football was used as a significant device for assimilation of immigrants into mainstream society. Coley (1971) looked into the role of sport and games in the social development of early Australia. Massard (1971) writes of skulls in Northern Canada, estimating evidence of their co-operative culture being reflected in co-operative games. Sutton-Smith and Roberts (1970) propose that in some cultures learn all these sorts of interplay, aggravation, alienation and feel play that their teachers will not want them but that are most important in successful human inter-relationships in marriage, business and war. Wool (1948) in his study of children's activities, suggested that play began by emphasizing skill and ability, but changed with time towards a greater emphasis on feelings. This emphasis on emotions was thought to be a good introduction to effective participation in the United States economy. Thompson (1976) who made a comprehensive review of the literature on sport as a socialising agent concluded:

"There is overwhelming evidence that the ideological dissatisfaction and value structure of sport are in harmony with those of the dominant culture. . . . There is 'transmission' support for the notion that sport has a vital role to play.
Physical activities have also been used to teach social accomplishments and modes of behaviour, and to develop traits of character. Those who promoted, organised and institutionalised physical activities had manifest intentions of using them as a form of socialisation. Those who took part in the activities often recognised and accepted these intentions. Therefore, sport and other physical activities inevitably reflected some of the values of the society in which they were practised. Writers such as Goree (1901), Piaget (1962) and Sutton Smith (1971), have all supported the importance of participation as a socialising agency. They suggest that players are moulded by their games. Eisenman and Denney (1951) showed how American football was used as a significant device for enculturation of immigrants into American society. Daly (1971) looked into the role of sport and games in the social development of early Australia. Glassford (1971) writing of Eskimos in Northern Canada, collected evidence of their co-operative culture being reflected in co-operative games. Sutton Smith and Roberts (1970) propose that in games children learn all those arts of trickery, harrassment, divination and foul play that their teachers will not teach them but that are most important in successful human inter-relationships in marriage, business and war. Webb (1969) in his study of children's attitudes, suggested that play began by emphasising skill and fairness, but changed with time towards a greater emphasis on winning. This emphasis on winning was thought to be a good introduction to effective participation in the United States economy. Thompson (1976) who made a comprehensive review of the literature on sport as a socialising agent concluded:

"There is overwhelming evidence that the ideological characteristics and value structure of sport are in harmony with those of the dominant culture...... There is tremendous support for the notion that sport has a vital role to play"
Kohlberg (1969) points out that most teachers are not fully aware that they must deal with issues of social education. Consequently, they may have no clear views on the subject, and probably have never had any training or education in it. The school is itself a social institution and its teachers educate pupils in social behaviour through what has become to be known as the 'hidden curriculum'. In this regard, the teacher of physical education is in a particularly influential position. Much of his teaching concerns competitive human relationships and his subject matter is more highly charged with emotion than most other areas of the curriculum. Because group loyalty and subordination of personal interests to team interests are obvious requirements for victory in team activities and in representative school contests, they do not have to be explained and are seldom questioned. Similarly the enforcement of the rules within a team activity emphasises collective responsibility, collective punishment and collective reward. Teachers of team activities may wish to concentrate on teaching the techniques of their activity and specialise in their particular problems of 'motor learning'. Some would deny that they have any responsibility for the social behaviour and the social education of their players. But the presence of the 'hidden curriculum' makes it difficult for the teacher not to be held responsible for some aspects of social education involved in the participation in physical activities.
There are some who would argue that participation in physical activities should be discouraged in schools because it interferes with academic progress and distracts children from the more important parts of the curriculum. Others would reply that participation in physical activities encourages academic achievement and that there is a positive correlation between success on the sportsfield and success in academic studies. The subject is complex but of sufficient interest to attract increasing investigation through research.

A review of the literature indicates the first obvious problem of how to measure satisfactorily physical and academic achievement. For academic achievement, educationalists might accept I.Q. scores, stream placement, C.E.E., 'O' and 'A' level examination results, or Grade Point Averages (U.S.A.) as relevant measures. For physical achievement, tests of physical ability could be used when and if available, but selection for teams tends to be the criterion most often used. This can in itself beg the question because it is crucial to know how teams are selected. Are they in fact a measure of ability? Is selection biased by academic achievement? Verbal methods of teaching team activities may not be appropriate to the lower stream members. Low streamers may have negative attitudes to school teams and indeed it is generally recognised that low streamers, particularly of low socio-economic background, are frequently more likely to be working at a part-time job than playing in school games on Saturday mornings. This may also be caused by a resistance to the authority of the school as manifest in school teams even to the extent of preferring sub-cultural activities such as playing for an unofficial school soccer team, or a club team, in preference to the school team, or simply eschewing any activity which is a formal part of the institution.
McIntosh (1966) established a definite positive association between academic and physical achievement when he compared the stream placement and sports team membership of 5,636 boys and 4,836 girls. The author was at pains to point out that the study did not show that boys and girls of low mental ability could not succeed in competitive sport, nor did it show what caused the association. Some possible reasons for the relationship were communication difficulties either with coaches or with dominant peer groups, cultural or sub-cultural influences which might encourage or discourage participation, and possibly biases in selection. Start (1966) found that whatever the school, the lowest 25% of the academic ability range is rarely represented in sports teams, and girls of low academic ability are even less likely to gain representation than their male counterparts. But other studies show that success in physical activities is possible with low academic achievers. An example of this is the study by Davies (1973) of the Tottenham Hotspur soccer players who represented some of the top achievers in soccer in Britain despite poor academic school performance. Another interesting line of enquiry was investigated by Coleman (1965) who looked into the subject of sport participation and status. He found that participation was a source of high status, and adolescents in their choice of ideal types tended to prefer physical ability to academic achievement.

In conclusion, the results suggest that participation exerts a positive influence on academic achievement. Coleman's data (Coleman 1961) indicate that participation is especially beneficial to boys who compete for several seasons in a major sport and are in the lower half of their class in I.Q. and are not doing college preparatory work.
But it is not possible from the research to discover what the academic achievement would have been without sport participation. It is still possible that participation in physical activities may have had a detrimental effect on school work. It is suggested that participation results in heightened self-image or self-concept, as well as social status. It is possible that an intelligent child may recognize the social advantages of being a games player and apply his intellectual ability to compensate for a lack of psycho-motor capacity and thereby achieve a standard of performance qualifying him for team membership.

It is probable that the truth about causes of academic and sporting achievement cannot be satisfactorily obtained from the statistics available.

It is probable that the truth about causes of academic and sporting achievement cannot be satisfactorily obtained from the statistics available.
Psychologists such as Maslow (1954) and Rogers (1959) stress the importance of fulfilling individual needs for healthy development. Their basic philosophy is that man's main goal in life should be to actualise his own potentialities, to become all that he can become, and that he should attain the status of a fully functioning person. It is thought that each individual has unique potentialities, and that no two people have the same needs, abilities or interests. As such, there is no justification for moulding students into some pre-determined shapes. How a person feels is more important than what he knows. In fact, how he feels about himself, that is his self-esteem and self-concept, will influence how and whether he will learn anything. It is also argued that no-one is better able, at least potentially, to determine how he learns best than the person himself. He is also best able to determine what is most meaningful to him to learn.

Esime (1972) states that one can view 'The Self' in two distinct ways. Firstly it can be viewed in a reflective sense. This means that an individual's perception of himself is formed through role experiences and reflective appraisals. The self in these terms is sometimes referred to as the 'social self'. Mead (1934) would say that the individual would conceive of himself as he believes significant others conceive him, and he will tend to act in accordance with expectations he imputes to significant others concerning the way people like him should act. Secondly 'The Self' can be viewed as strictly autonomous. In this sense, the self represents all that is free and spontaneous within the individual and represents the self not moulded by the social process. Maslow (1954) claims that the real identity is only experienced in what he terms 'peak experiences' and that during peak experiences self-awareness is greatly increased.
From the above, if a person is to achieve self-fulfilment, he must realize two goals. Firstly he must find out what the autonomous 'I' enjoys doing. It has been found that this often involves physical activities of various kinds and can include individual and team sports. Secondly he must achieve recognition as an individual of worth through such activities. Thus the social self is developed through inter-action with others. This can be achieved relatively easily through physical activities, and is often very important in the development of a social identity in schools.

Most children enjoy the physical activities experienced in schools. Through performing, self-esteem can be generated and self-actualization encouraged. An individual's self-esteem is important in how a person will act in a given situation and will influence what an individual believes he can achieve in the future. Self-esteem can be defined as the extent to which a person has favourable attitudes towards himself. Over praise, however, can be detrimental rather than helpful. Second and Macken (1964) say that the external assessment of how well a person has performed must be close to that of his own assessment otherwise dissatisfaction will be experienced. In their opinion, people believe that they build up their self-perception from facts rather than from beliefs. In physical activities, participants profess to be successful based on the result that they have achieved. But success is dependent on the quality of the opposition which is often selected by the participants themselves. Most teams and individuals compete against opponents that they believe they have a chance of beating. Such a situation is a healthy one as far as self-esteem is concerned because by objective standards of performance only rarely would performers succeed against stronger and better opponents. It is the skill of the teacher of physical activities to organise participants...
so that every child achieves success at some time. Success brings a higher level of aspiration which in turn determines what the individual believes is possible in the future.

So to sum up on the subject of self-esteem, physical activities are important in any discussion of self-esteem change. This is because the culture we live in puts a high value on physical performance, and because body concept and self-perception have been found to be correlated. An individual's self-esteem is primarily a social product in that it is developed through comparison with others and via impressions and opinions of others. In these terms, individuals strive for better physical performance to raise their own self-esteem in relation to others and hence achieve social status through such activities. There is no doubt that this is a strong need in many individuals. If the activity which supplies the social status and recognition is also intrinsically satisfying, the attraction of the activity is obvious.

In contrast to self-esteem, self-actualisation is not social in nature, but is rather more an intellectual concept. It originates from the 'force for growth' theory of personality which purports to the idea that man is continually striving to exploit his talents, capacities and potentialities. Each individual's potential talents span a wide range of abilities including those of a physical nature. Everyone can achieve intrinsic satisfaction from physical activity of some kind, but the choice or choices must be made by the participant. In self-actualisation terms, it is pointless for a teacher or parent to influence a child into a certain activity if the child is not intrinsically interested or motivated towards that activity, even though he or she may be good at it. This can be found in many schools with strong sporting traditions and can be instanced by parents trying to achieve their own fulfilment through their children.
who has developed an activity because of the intrinsic joy and satisfaction it gives may find such an interest lasts a lifetime. This is why many participants, usually non-body contact activity enthusiasts, continue to perform long after they have passed their best years. It is the performance itself which is important. Physical activity can give emotional and sensory feedback to the individual which he finds satisfying. In physical activities, total involvement in an experience can lead to a 'peak experience' to which a person attaches his own meaning. Thus, according to this view, process is all important and winning only performs a secondary role.

The quest for self-actualisation leads to a third need goal, that of self-understanding. Because an individual's feelings and abilities are unique to him, it would seem that he is in a better position to determine what and how he should learn. To profitably engage in this kind of introspection requires giving attention to the question 'Who am I?' as distinct from early efforts to establish a base of self-esteem ('Am I competent?'). How in fact one answers such questions as 'Who am I?' is very difficult. However, it can be argued that the question can be partly at least answered by examining one's reactions during times of stress and of total involvement. Such occasions are found relatively frequently during certain physical activities as the opportunities to test oneself to the limit are not experienced often during everyday existence. It can be argued that such physical activities create these situations artificially and that they are not so meaningful as naturally occurring situations would be. But as peak experiences are otherwise usually met at times of great crisis, such as during wars or disasters of some sort, surely participation in demanding physical activities is a more satisfactory alternative with less severe consequences? To know oneself, one must be willing to stretch oneself to the limit. Participation in some physical activities is one of the few available outlets for such self-inquiry in our modern, industrial society.
Competitive behaviour is said to be a learnt phenomenon (Loy 1968). It develops as a child grows older through the influence of the host society. Even if no competitive activities were encouraged at school, children would develop competitive attitudes by imitation of adults in their environment assuming that they live in a competitive society. In Arnold's book (Arnold 1968) examples of less competitive societies are given together with the effects of the societal norms of playing games. The Navajo Indians playing tennis hit the ball back to their opponents without making overt attempts to defeat them. The Zuni of New Mexico did not only discourage outstanding ability but they exhibit a negative attitude towards the individual who shows superiority over others by not allowing him the following year to compete in the event he has just won. Arnold's work would suggest that if the norms of the host society encourage competition, then it would be unproductive to discourage it in the schools. Fielding (1976) in opposing competition states:

'I reject the use of competition in schools: competition as a social ideal seems to be abhorrent; competition as a procedural device is morally repugnant because whatever criteria one wishes to include or omit I would insist that part of one's characterisation contains some reference to working against others in a spirit of selfishness; for that reason I would also deplore any fostering of a competitive motive; the act of competing is thus irremediably objectionable as is the social ideal which forms a substantial part of the political backcloth against which such practices are set.'

Some children enjoy competition, and the enjoyment may include both winning and losing. Some advocates of competitive physical activities introduce the idea of competing against oneself rather than the competition against an opponent or opponents. But it can be argued that this is not truly competing but striving for self-improvement. Others argue that
competitive physical activities encourage co-operation. It is suggested that it is impossible to compete against someone unless he co-operates and agrees both to compete and to abide by the rules. But the consent of opponents to compete is essentially different from co-operative intent and co-operative activity to achieve a common goal. But co-operation in physical activities with team mates against opponents is genuine co-operation. This was part of the justification for the teaching of team games by Muscular Christians and why they thought that team games were morally superior to individual games. Unfortunately many sports organisations in schools act as eliminating systems. Children who are less successful in sport suffer the indignity of non-selection, and are continuously assessed by comparison with the more successful. Some, to maintain their sense of dignity and their self-image, try to avoid all competitive sport. One local survey in England revealed that 22 per cent of the boys and 40 per cent of the girls in the sample intended to play no game or sport on leaving school (Emmett 1971). Thus it would appear that the concentration on competitive physical activities may discourage the continued participation in such activities.

Some would say that one of the strongest arguments for compulsory competitive physical activities in schools is that they act as an introduction to competitive society. In today's society, defeat, failure and humiliation are to be expected as well as victory, success and self-satisfaction. In a well organised physical activities programme both kinds of experience can be had by children without irreparable psychological or physical damage being done. Others would point out that competitive activities are not only judged by the criteria of winning and losing. Performances can be judged for skill, courage, imagination, aesthetic appeal and even joy of performance. Often the losers are admired as much, and on some occasions more, than the winners. (One can remember Gerulaitis versus Borg at Wimbledon in 1977 and the
the All Blacks losing at rugby to the Barbarians in early 70's). There is also respect for the achievements of the lesser competitors, for example Malmo getting to the final of the European (Soccer) Cup in 1979. It is within the experience of many to have enjoyed a hard game which has been lost more than an easy game that has been won.

Energy, determination, skill, concentration, even the humour of surprise and mistake, may give satisfaction in games won or lost.
Violence has become a feature in some physical activities and is included in the behaviour of some supporters. Injury can be self-inflicted or inflicted by one contestant on another. In the main, injuries in schools happen in combat sports and team games which are body contact sports. Body contact sports have come under criticism for tolerating an increasing amount of violent behaviour by players contrary to the spirit and letter of the rules. An obvious example of this has been the increasing incidence of physical violence in Rugby Union Football as evidenced by the J.P.R. Williams injury against the All Blacks in 1979. Sometimes such violence occurs at the beginning of matches, long before the game itself has had a chance to generate its own hostility. It is known that hostility can be built up deliberately before a game by coaches, captains and players. Who should be held responsible for an act of violence under such circumstances, the person who encouraged the attitude or the person performing the deed? Can the player hide behind the excuse that he or she was only carrying out the orders or wishes of some other person or persons?

Violence is linked with aggression and analysis of aggression has given rise to a number of theories, three of which are outlined below.

One theory of aggression associated with Konrad Lorens (Lorens 1976) holds that aggression is an inborn instinct and that aggressive behaviour is functionally adaptive. Supporters of this theory would say that sport provides opportunities for relatively harmless and perhaps positively adaptive expressions of an inborn instinct which might otherwise find spontaneous and more harmful outlets. If the theory is correct, the elimination of aggression in sport is impossible and undesirable to achieve. But it would be possible to distinguish
aggressive behaviour which was acceptable and unacceptable. Bertrand Russell is said to have supported this view suggesting that sport might provide outlets for aggressive behaviour and that what was wrong with our civilisation was that such forms of competition formed too small a part of the lives of ordinary men and women (Russell 1949).

A second theory holds that aggression is the result of frustration and is based on the psychological theories of Freud (Dollard 1939). As it is difficult to imagine that life of any human being could be totally devoid of frustration and therefore free from aggression, the possibility of eliminating aggression would be remote. Nevertheless some forms of aggressive behaviour can be judged morally better or worse than others.

A third theory of aggression maintains that aggressive behaviour is a learned response to the environment. Schilling thought that aggression, like other patterns of behaviour, will be copied from others, and it will be reinforced by successful outcomes and weakened by failure (Dollard 1939).

These theories of aggression do not really help in producing answers to the problem of aggression and violence in physical activities. No longer is it possible to assume or argue that participation in physical activities will purge the participant of his desire for aggressive behaviour, nor will it exhaust his capacity for violence. On the contrary, it might act as a stimulant rather than a cathartic agent.

This is supported by the research by Martin (1976) into the effects of competition upon the aggressive responses of college basketball players and wrestlers.
Arnold Toynbee (Toynbee 1961) developed a theory of 'challenge and response' to account for the success or failure of entire cultures and civilizations. In summary, he proposed that a challenge may be too great (e.g. for people living beyond the Arctic Circle where all effort is expanded on mere survival), or the challenge may be too weak (as in the tropics), or at an optimum (as in the temperate zone). He propounds the general idea of an optimum challenge level producing an optimum response. It is suggested that this idea is relevant to the subject of participation in physical activities.

Delattre (1975) considers that the testing of a participant's mettle through the challenge involved in many physical activities produces a form of self-discovery and that the preparation for participation produces a form of self-creation. Physical activities are not unique in this but they do provide opportunities for self-realisation, for concentration and intensity of involvement through the challenge presented. Delattre states:

'..... it is a far greater success in competitive athletics to have played well under the pressure of a truly worthy opponent and lost than to have defeated a less worthy or unworthy one where no demands were made'.

The importance of challenge for adolescents has been expressed by Roger Bannister some years after he had broken the four minute mile barrier (Bannister 1963):

'Like life, the problem of sport and a sporting career only makes sense in retrospect. What significance does sport have for the individual? I think, adolescence can often be a time of conflict and bewilderment and these years can be weathered more successfully if a boy develops some demanding activity that tests to the limit his body as well as his mind. Each adolescent has to find this demanding activity for himself.'
It may be mountain climbing, running or sailing, or it may be something quite different. It may not even be sport at all. But by absorption in this pursuit, he forgets himself and it fills the void between the child and the man. And later, when he finds a career or some other loves, he will be surprised at the extent to which he has grown. By then, he is no longer in a position to make the sacrifices which he hardly noticed.

Challenge occurs in all physical activities to some degree. It can be met through mastering the physical skills required in the activity and also through the psychological demands of the activity. Challenge occurs not only in competitive activities but also in co-operative activities, in unstructured play and in individual practice. Children like to create their own challenges at an early age (Piaget 1962). If schools should provide physical and mental challenges, one way that this could be organised is through participation in physical activities.

Morgan (1972) undertook a critical review of the research on the socialisation effects of participation in sport. He discussed the results with reference to three types of socialisation effects: psychological effects, behavioural effects and attitudinal effects. These studies gave support to the characterisation of athletes as being more tough-minded, more dominant, more self-reliant, more extrovert, more emotionally stable, more self-confident, more self-disciplined, more aggressive, more acceptable, more conventional in response to social situations, and as having a lesser need to be nurtured than non-participants.

An overview tentatively suggests that the dimensions of dominance and aggression, urgency, self-confidence, adventurousness and temperance, as well as correspondences can be typically associated...
Participation and Personality

This subject is characterised by controversy. Yates (1975) in his paper says:

"In general terms the relationship between personality characterisations and aspects of social development would suggest that the factor of heredity and the influence of early formative years are more fundamental to the growth of "personality" and its component "traits", and that it is indeed the possession of certain traits which leads to the selection of physical activities and not the other way round".

He goes on to say:

"It is patently obvious that to single out athletic involvement as being in a direct way connected with, even responsible for, the personality profiles of participants is a totally unwarranted assumption. "Profiles" are created by the research instrument like Cattell's 16 PF which are used. They point to static traits of personality not dynamic dispositions towards action. It is a gross distortion of reality to attribute to sporting involvement aspects of 'personality' which are the outcomes of a whole range of possible determinants".

Stevenson (1975) undertook a critical review of the research on the socialisation effects of participation in sport. He discussed the results with reference to three types of socialisation effects: psychological effects, behavioural effects and attitudinal effects. These studies gave support to the characterisation of athletes as being more tough-minded, more dominant, more self-reliant, more extrovert, more emotionally stable, more self-confident, more self-disciplined, more aggressive, more sociable, more conventional in response to social situations, and as having a lesser need to be nurtured than non-participants.

Morgan (1972) in his discussion on personality and physical activity states:

"An overview tentatively suggests that the dimensions of dominance and aggression, surgency, self-confidence, adventurous temperance and extraversion can be typically associated
with games ability. The relationship of characteristics in the case of anxiety, tenseness, and neuroticism has caused some disagreement. The need for longitudinal studies is emphasised.

One example of a longitudinal study is Werner and Gottseill (1966). They undertook a four year study of cadets at West Point Military Academy. All cadets, whether previously athletes or not, were made to participate in a compulsory physical education programme. At the end of the four years of compulsory physical education, it was concluded that 'no evidence was found to support the view that college athletics significantly influenced personality structure'.

Finally we might remember the views of Tutko and Burns (1976) who are of the opinion that if sport has the ability to build character, it also has the capacity to damage it. They support their argument with evidence from Little League Baseball in the U.S.A. It has been found that continuous failure in competition produces a feeling of failure and rejection amongst the players leading to detrimental psychological effects which could influence the development of personality.
SECTION 2. PARTICIPATION IN PHYSICAL ACTIVITIES BY SECONDARY SCHOOL GIRLS

STATEMENT OF THE PROBLEM

The earlier sections have given a broad and general introduction to the participation in physical activities. The sections included material not directly related to the limited study undertaken, but now included as an introduction because I think that an overall picture should be painted concerning participation. Subjects included which are not directly related are moral implications and the effects of participation on academic achievement. Nevertheless any investigation into participation in schools should include some section of moral implications. PARTICIPATION IN PHYSICAL ACTIVITIES BY SECONDARY SCHOOL GIRLS

STATEMENT OF THE PROBLEM

The subject of participation in activities in such a broad one that it becomes obvious that to produce any meaningful study, the field would have to be restricted. Fortunately a secondary girls' boarding school in Kenya was available for the study. This school provides the following advantages:

Firstly it was possible to investigate school children. This is advantageous because it may be that habits of participation or non-participation are laid down during the school years and the attitudes of pupils towards sport at least at school often continue into adult life. Many would argue that an unsympathetic approach to physical activities at school often effectively discourages participation later and may cause present pupils to forego obtaining pleasure and satisfaction
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Firstly it was possible to investigate school children. This is advantageous because it may be that habits of participation or non-participation are laid down during the school years and the attitudes of pupils towards sport as learnt at school often continue into adult life. Many would argue that an unsympathetic approach to physical activities at school often effectively discourages participation later and may even prevent adults from obtaining pleasure and satisfaction.
Secondly it was possible to investigate girls. Presentation of physical activities to girls is a more difficult exercise than to boys. There is the cultural problem as to whether it is 'ladylike' for girls to participate in physical activities, especially the more dangerous, vigorous, violent activities. Also there is the greater stresses involved with puberty in girls than in boys. Should they be expected to take part in physical activities when they are undergoing such traumatic changes?

Thirdly it was possible to investigate secondary school girls between the ages of eleven and sixteen years old. This age range includes the 'difficult years', and is also advantageous because it is thought that the girls would be mature enough to be able to answer the questionnaires with some competence. At the school under study they were expected to take part in compulsory physical activities and had not reached an age or level when they were allowed to opt out of some activities as is often done to sixth formers in many schools. They had therefore participated in an educational system which expected full participation in physical activities over a period of years, in some cases up to ten years.

Fourthly it was possible to investigate a boarding school. Greater active participation in physical activities is often expected in boarding schools and the time available is greater than in day schools. The opportunities for alternatives to physical activities is commonly less as it is usually difficult to obtain permission to leave the school bounds. Also many boarding schools encourage 'community spirit' through house and school activities and these generally include physical activities.

Finally it was possible to investigate a school in Kenya. Kenya
has many advantages for the study of physical activities, not the least being the climate. In the highlands where the school was located (at 6,300 feet and within half a degree of the Equator), the daily temperature averaged about 17 to 18 degrees Celsius. Conditions were suited to physical activities throughout the year, although during the two rainy seasons (especially the 'Long Rains') there could be some interference with outdoor activities. But during the dry seasons, good conditions for outdoor activities could almost be guaranteed. The other advantage of Kenya was the availability at the school under study of an interesting ethnic mixture. The school was composed of pupils of varying extraction, just over a third being of European descent, and just under a third each being of African and Asian descent, with the remainder made up of a combination of Afro-Europeans and Eurasians. This made any study of more than usual interest.

Using the girls from the school under study, it was decided to investigate their attitudes towards participation in physical activities using the Likert type questionnaire devised by Gerald S. Kenyon. (For a description of this questionnaire, see Section III - Materials and Methods). This test was designed to measure attitude towards physical activities within the content of a model characterizing physical activities on six dimensions. These are specifically physical activities perceived as (1) a social experience, (2) for health and fitness, (3) the pursuit of vertigo, (4) an aesthetic experience, (5) for catharsis, and (6) as ascetic experience.

Having chosen to measure attitudes towards participation in physical activities, it was decided to relate those measures with self-image and body image. (For a description of these questionnaires, again please see Section III - Materials and Methods). Self-image and body image were selected because it was thought that both were relevant
factors regarding participation in physical activities.

It was then decided to choose the physical activities to be investigated. Two differing types of activity were chosen, one an individual activity where participation is primarily on an individual basis and the other a team activity where participation is based on teamwork and co-operation. For the individual activity, swimming was chosen. This was because it was the most popular and most important of the individual sports attempted at the school. For the team activity, hockey was chosen as it was the most popular and most important of the team sports attempted at the school. (See Section III for further details).

When suitable samples had been chosen to represent individual and team activities, a group of non-participants were chosen for comparison. These were pupils who did not choose to be active in either the individual or team activity. It was hoped that a study of the latter group's attitude towards participation in physical activities, together with their self-image and body image, would shed some light on the reasons for participation and non-participation in physical activities of eleven to sixteen year old girls in a secondary boarding girls' school in the highlands of Kenya.
SECTION III
THE INVESTIGATION MATERIALS AND METHODS

1. Definition of variables

1. Level of participation

High - participation in voluntary physical activities (hockey and/or swimming) outside the compulsory physical education activities.

Low - participation in compulsory physical activities only and with a low level of activity.

2. Level of participation

Individual - a pupil with a high level of participation who took part in an individual physical activity (swimming) where participation is essentially individual rather than co-operative.

Team - a pupil with a high level of participation who took part in a team physical activity (hockey) where participation is essentially that of groups of individuals.

THE INVESTIGATION + MATERIALS AND METHODS

"The emotions contain of the personal unconscious and conscious" (Jung).

"The way emotions were themselves. Conscious perception of self structuring and organizing self".

"An individual has the capacity to reorganize his field of perception including the way he perceives himself, and that a conscious or a resultant of this personal reorganization is the appropriate alteration in behavior".

The above quotations are from Rogers (1976). In the investigation under study it is presumed that, as changes occur in perception of self, changes occur in behaviors. From this it is thought that participation in physical activities and the attitudes towards physical activities may be influenced by the individual's self-image.
SECTION III  THE INVESTIGATION MATERIALS AND METHODS

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Team - pupils with a high level of participation who took part in a team physical activity (hockey) where participation is essentially that of group cooperation rather than being essentially individual.

3. Self-image

"Expresses contents of the personal unconscious and conscious" (Jung).

"The way someone sees themself. Conscious perception of self structuring and organising self".

"An individual has the capacity to reorganise his field of perception including the way he perceives himself, and that a concomitant or a resultant of this perceptual reorganisation is the appropriate alteration in behaviour".

The above quotations are from Rogers (1976). In the investigation under study it is presumed that, as changes occur in perception of self, changes occur in behaviour. From this it is thought that participation in physical activities and the attitudes towards physical activities may be influenced by the individual's self-image.
4. Body Image

"Includes perceptions, thoughts and feelings which the ego has in reference to viewing its own body". (Kolb)

"Concept which each person has of his own body as an object in space".

"Conceptualisation of the body's structure and function that grows out of the awareness of the self and one's body in intended action".

The above quotations are from Hinsle and Campbell (1970). In this investigation it is presumed that participation in physical activities produces experiences which are influenced through the awareness by the individual of her body image. The body image of the individual therefore may be of importance in the choice and degree of participation in physical activities as well as effecting her attitudes towards physical activities.

5. Attitudes towards Physical Activities

It is thought by Kenyon (Kenyon 1968) that individuals may perceive physical activities as:

(a) A social experience.
(b) For health and fitness.
(c) For pursuit of thrills and excitement.
(d) For aesthetic experience.
(e) For catharsis.
(f) For aesthetic experience.

The above are the six attitudes towards physical activities.
All hypotheses are presented as null hypotheses and the data obtained will be used to see whether these hypotheses are supported or not by the evidence obtained from this study.

**Hypothesis 1.** There is no significant relationship between self-image and level of participation or type of participation.

**Hypothesis 2.** There is no significant relationship between body image and either level of participation or type of participation.

**Hypothesis 3.** There is no significant relationship between the six measures of attitude towards physical activities and either level of participation or type of participation.

**Hypothesis 4.** There is no significant relationship between the measures of self-image and any of the six measures of attitude towards physical activities.

**Hypothesis 5.** There is no significant relationship between measures of body image and any of the six measures of attitude towards physical activities.
In order to test the hypotheses given above, four groups were required from within the sample:

Group 1. Participants in team sports

Team sports were chosen to represent co-operative physical activities where co-operation and team work are required in order to function effectively within the competitive framework. This group comprised 15 members of the various school hockey teams who were required to train for approximately two hours a week outside normal time-tabled school time, to play in usually one or possibly two matches per week against outside opposition, and also to take part in compulsory school physical activities (two hours per week) which included forms of dancing as well as sport. The hockey season lasted for two terms (Michaelmas and Hilary). Hockey was chosen rather than other team sports as it was the most important of the team sports with the longest season and the largest number of fixtures.

Group 2. Participants in individual sports

Individual sports were chosen to represent individual physical activities where participation is essentially individual rather than co-operative. This group comprised of 13 members of the various age groups of the school swimming team. They were required to train for about four hours a week outside normal time-tabled school time, take part in inter-school galas and Amateur Swimming Association of Kenya galas (approximately one gala a week), and also take part in compulsory school physical activities (two hours a week) which included forms of dancing as well as sport. The swimming season lasted for two terms (Michaelmas and Hilary). Swimming was chosen rather than other individual sports as it was the most important of the individual sports with the longest season and the largest number of fixtures.
Group 3. Participants in both team sports and individual sports

There were a small number (six) who were members of both the hockey teams and swimming teams and who managed to take part in the various activities given above. This was not always achieved without friction as the demands of the two activities were comprehensive. The group, although of great interest, was too small for separate analysis and therefore was added to the participant group (hockey players plus swimmers) when the participant group was being compared with the non-participant group.

Group 4. Non-participants.

The non-participant group were:

(a) Not members of any school team at any physical activity.

(b) Showed low levels of activity during participation in compulsory school physical activities.

This group comprised twenty-six pupils.
D. QUESTIONNAIRES

For the investigation, a test was required which would produce information regarding attitudes towards physical activities. From this information it was hoped to infer reasons for participation and non-participation in physical activities by the girls in the study. Kenyon's 'Attitude Toward Physical Activity' test (Kenyon 1968) was chosen. This test can be administered either through the use of Likert-type Scales or through the use of Semantic Differential Scales.

It was decided that the Likert-type Scales would be used as it was thought that these would be more suitable for the sample under study. The terminology and language of the questionnaire, although not simple, was found to be appropriate for use with eleven to sixteen year old girls. Kenyon himself claimed that the test was suited to adolescents as well as adults.

The Likert-type Scales used attitude statements representative of each of the six dimensions based on the 'perceived instrumentality' of each dimension. These dimensions were physical activity perceived as (1) a social experience, (2) for health and fitness, (3) the pursuit of thrills and excitement, (4) an aesthetic experience, (5) catharsis, and (6) an aesthetic experience. The six dimensions were developed for two separate but similar inventories, one for males (Form DM: 59 items) and one for females (DF: 54 items). Items are weighed in accordance with discrimination of each of seven response categories: very strongly agree, strongly agree, agree, undecided, disagree, strongly disagree, very strongly disagree. Examples of items for each variable are as follows:

Social experience: I enjoy sports mostly because they give me a chance to meet new people.
Health and fitness: Of all physical activities, my first choice would be those whose purpose is primarily to develop and maintain physical fitness.

Pursuit of Vertigo: Physical activities having a strong element of daring or requiring one to take chances are highly desirable.

Aesthetic Experience: Among the best forms of physical activity are those which use the body as an instrument of expression.

Catharsis: Watching athletes becoming completely absorbed in their sport nearly always provides me with a welcome escape from the many demands of present day life.

Ascetic experience: I would get by far the most satisfaction from games requiring long and careful preparation and involving stiff competition against a strong opposition.

In the handbook 'Tests and Measurements in Child Development' published by Jossey-Bass Inc., the following is included under 'Reliability and Validity' of the Kenyon tests:

Likert-type Scales: The validity of each scale is inferred by using preferred type of activity -- through direct or vicarious participation -- as a criterion. It was found that scale scores differentiated between strong and weak preference groups in the predicted direction for all scales except "catharsis". Hoyt reliabilities for each of the six factors following an incomplete image analysis yielded clusters of items clearly corresponding to each of the six postulated subdomains. No two factors shared more than 32 per cent of the variance -- usually much less.

The two questionnaires on Self-Image were taken from the Open University Educational Studies Course on Personality and Learning (Open University (1972)). As these questionnaires were being recommended for research in schools, it was presumed that both would give valuable information regarding self-image and would be appropriate for the sample under study.

The Body Image questionnaire was adapted from Snyder and Kivlin (1974) and Read (1969). Although the questionnaire was very basic, it
was expected that it would provide sufficient information regarding
the girls' satisfaction or dissatisfaction with their own body image.

Examples of the questionnaires are included in the Appendix.

Self-image questionnaire C

Each of the 15 questions was marked out of 4 with negative questions
having the marking reversed. It was found that to divide the sample
into groups of approximately equal size, a score of 47 was selected to
divide high scores from low scores.

Self-image questionnaire D

Each of the 34 questions was marked out of 4 with negative questions
having the marking reversed. It was found that to divide the sample
into groups of approximately equal size, the score of 52 was selected to
divide high scores from low scores.

Body Image questionnaire

There were 21 questions. Pupils indicating satisfaction for each
feature scored 2, dissatisfaction scored 0, with 1 being scored for an
undecided vote. It was found that to divide the sample into groups of
approximately equal size, the score of 95 was selected to divide high
scores from low scores.
E. SCORING

Attitude towards physical activities test

There were 54 items each marked from one to seven with 4 (undecided) as a median score. The median score times the number of items in each of the six dimensions was taken as the dividing line between high and low scorers. Thus 32 was taken as the dividing line for social experience, 44 for health and fitness, 36 for pursuit of thrills and excitement, 36 for aesthetic experience, 36 for catharsis, and 32 for ascetic experience.

Self-image questionnaire C

Each of the 15 questions was marked out of 4 with negative questions having the marking reversed. It was found that to divide the sample into groups of approximately equal size, a score of 40 was selected to divide high scorers from low scorers.

Self-image questionnaire D

Each of the 34 questions was marked out of 4 with negative questions having the marking reversed. It was found that to divide the sample into groups of approximately equal size, the score of 90 was selected to divide high scorers from low scorers.

Body Image questionnaire

There were 21 questions. Pupils indicating satisfaction for each feature scored 2, dissatisfaction scored 0, with 1 being scored for an undecided vote. It was found that to divide the sample into groups of approximately equal size, the score of 30 was selected to divide high scorers from low scorers.
Investigation into self-image and attitude towards physical activity

For self-image, high scorers had to be high scorers in both questionnaires C and D, and low scorers had also to be low scorers in both questionnaires.

The remainder were recorded as medium scores.
### Table 1: Chi-Square Test of Independence

<table>
<thead>
<tr>
<th></th>
<th>Group A</th>
<th>Group B</th>
<th>Group C</th>
<th>Total</th>
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<tbody>
<tr>
<td>High</td>
<td>22</td>
<td>9</td>
<td>26</td>
<td>57</td>
</tr>
<tr>
<td>Low</td>
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<tr>
<td>Total</td>
<td>33</td>
<td>26</td>
<td>50</td>
<td>109</td>
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</table>

**Chi-Square (x^2) = 9.45**

**P < .01**
The 'Chi Square' technique of analysis was used to investigate the data. The results of this analysis is given beside each table.

### Table 1: Self-Image (questionnaire C) and Level of Participation

<table>
<thead>
<tr>
<th></th>
<th>P</th>
<th>NP</th>
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<td>H</td>
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</tr>
<tr>
<td>L</td>
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<td>17</td>
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<tr>
<td>Total</td>
<td>31</td>
<td>24</td>
<td>55</td>
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</tbody>
</table>

\[ x^2 = 9.45 \]

\[ P < .01 \]

Not significant
### Table 2: Self-Image (Questionnaire C) and Level of Participation

<table>
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<td>L</td>
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<tr>
<td>Total</td>
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<td>57</td>
</tr>
</tbody>
</table>

\[ X^2 = 6.21 \]

\[ P \leq .05 \]

### Table 1: Self-Image (Questionnaire C) and Type of Participation

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<tr>
<td>Total</td>
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### TABLE 4
**SELF-IMAGE (questionnaire D) and LEVEL OF PARTICIPATION**

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<tr>
<td>L</td>
<td>5</td>
<td>4</td>
<td>9</td>
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</table>

Total: 27

$x^2 = 4.2$

Not Significant

### TABLE 7
**PARTICIPATION FOR SOCIAL EXPERIENCE AND LEVEL OF PARTICIPATION**

### TABLE 5
**BODY IMAGE AND LEVEL OF PARTICIPATION**

<table>
<thead>
<tr>
<th></th>
<th>P</th>
<th>NP</th>
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<tbody>
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</tr>
<tr>
<td>L</td>
<td>16</td>
<td>7</td>
<td>23</td>
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</table>

Total: 33

Not Significant

The table shows the distribution of responses for each category, with significance levels indicated for each comparison.
### TABLE 6

<table>
<thead>
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<th></th>
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</tr>
<tr>
<td>L</td>
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<td>7</td>
</tr>
<tr>
<td>Total</td>
<td>12</td>
<td>9</td>
<td>21</td>
</tr>
</tbody>
</table>

\[ \chi^2 = 4.2 \]

\[
P < .05
\]

### TABLE 7

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<th></th>
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*Not significant*
### Table 8 Participation for Social Experience and Type of Participation

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### Table 9 Participation for Health and Fitness and Level of Participation

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$X^2 = 4.46$  
Not significant.
TABLE 10  PARTICIPATION FOR HEALTH AND PHYSIQUE AND TYPE OF PARTICIPATION

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</table>

Not significant

TABLE 11  PARTICIPATION FOR THRILLS AND EXCITEMENT AND LEVEL OF PARTICIPATION

<table>
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\[ \chi^2 = 4.46 \]

p < .05
TABLE 12  PARTICIPATION FOR THRILLS AND EXCITEMENT

AND TYPE OF PARTICIPATION

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<tr>
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\[ \chi^2 = 1.57 \]
Not significant
\[ p < .05 \]

TABLE 13  PARTICIPATION FOR AESTHETIC EXPERIENCE

AND LEVEL OF PARTICIPATION

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\[ \chi^2 = 3.65 \]
Not significant
### TABLE 14  PARTICIPATION FOR AESTHETIC EXPERIENCE

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<th>L</th>
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<td>Sw</td>
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\[ x^2 = 3.87 \]

\[ P < .05 \]

### TABLE 15  PARTICIPATION FOR RECREATION AND RELAXATION AND LEVEL OF PARTICIPATION

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<tr>
<td></td>
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<td>55</td>
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</tbody>
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Not significant
## Table 18: Participation to Meet a Physical Challenge and Type of Participation

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All not significant.

## Tables 19 and 20

<table>
<thead>
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<td>Thrills and Excitement</td>
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<td>Recreation and Relaxation</td>
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<td>To Meet a Physical Challenge</td>
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*Only V Significant, \( \chi^2 = 6.39, \ p < .05 \)*
### TABLE 19  SELF-IMAGE AND THE SIX ATTITUDES TOWARDS PARTICIPATION

<table>
<thead>
<tr>
<th>SI</th>
<th>S</th>
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<th>V</th>
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<td>6</td>
<td>6</td>
<td>8</td>
<td>Low</td>
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</table>

All not significant.

### TABLE 20  BODY IMAGE AND THE SIX ATTITUDES TOWARDS PARTICIPATION

<table>
<thead>
<tr>
<th>BI</th>
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<th>H</th>
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</table>

Only V Significant  \( \chi^2 = 6.56 \)  \( P < .05 \)

Remainder not significant.
SECTION VII. CONCLUSIONS

14. SELF-IMAGE AND LEVEL OF PARTICIPATION

It was found that with both measures of self-image that participants had a significantly higher self-image than non-participants \( P < .01 \) and \( P < .05 \). A suggested explanation of these results is given below.

In many schools, extra-curricular activities including sport are popular, and successful participants are looked upon favourably by both peer groups and staff, and this can lead to the development of a positive self-image. At the school under study, sport was a popular activity, and at the time of the study, both the hockey players and the swimmers were coming to the end of a successful season. Examples of this success were that the school's formerly hockey team had won the Kenya Women's Hockey Association Schools' Festival open to all schools in Kenya, and the under 14 years old swimmers had been awarded the cup for the outstanding girls' school in one of the Amateur Swimming Association of Kenya galas also open to all schools in Kenya. It would be interesting to repeat the survey after a less successful season to see whether less significant results would be achieved as suggested by Tzoko and Barnes (1976).

The overall conclusion to these results is that either participation leads to a higher self-image or that a higher self-image stimulates a pupil into participation.

15. SELF-IMAGE AND TYPE OF PARTICIPATION

The various factors which influence self-image have been outlined in the introductory chapter. No significant difference between the self-images of the hockey players and the swimmers was found. Interestingly enough the hockey players had a higher self-image than the swimmers
SECTION VI. CONCLUSIONS

1A. SELF-IMAGE AND LEVEL OF PARTICIPATION

It was found that with both measures of self-image that participants had a significantly higher self-image than non-participants ($P < .01$ and $P < .05$). A suggested explanation of these results is given below.

In many schools, extra-curricula activities including sport are popular, and successful participants are looked upon favourably by both peer groups and staff, and this can lead to the development of a positive self-image. At the school under study, sport was a popular activity, and at the time of the study, both the hockey players and the swimmers were coming to the end of a successful season. Examples of this success were that the under 15 years old hockey team had won the Kenya Women's Hockey Association Schools' Festival open to all schools in Kenya, and the under 14 years old swimmers had been awarded the cup for the outstanding girls' school in one of the Amateur Swimming Association of Kenya's galas also open to all schools in Kenya. It would be interesting to repeat the survey after a less successful season to see whether less significant results would be achieved as suggested by Tutko and Burns (1976).

The overall conclusion to these results is that either participation leads to a higher self-image or that a higher self-image stimulates a pupil into participation.

1B. SELF-IMAGE AND TYPE OF PARTICIPATION

The various factors which influence self-image have been outlined in the introductory chapter. No significant difference between the self-images of the hockey players and the swimmers was found. Interestingly enough the hockey players had a higher self-image than the swimmers.
in Questionnaire C but parity was achieved in Questionnaire D.

The conclusion from the above is that whilst high-self-image is a necessary condition or function of participation, it does not determine the kind of physical activity.

2. BODY IMAGE AND LEVEL OF PARTICIPATION AND TYPE OF PARTICIPATION

No significant differences were found although the statistics showed that participants had a higher body image than non-participants and that hockey players had a higher body image than swimmers.

The higher body image of hockey players in comparison with swimmers could be the result of the generalised body type favoured by each activity. In hockey, there is some advantage in being an ectomorphic mesomorph to give speed and agility, and in swimming to being an endomorphic mesomorph for buoyancy and endurance. The present desire for slimness might explain the tendency of hockey players to be more satisfied with their body image than swimmers.

The overall lack of significance between body image and both level and type of participation might be explained by a combination of differing opinions on body image with age, the additional complexities produced during puberty, and the influence of the media, especially magazines, on attitudes towards a desirable body image. What can be concluded is that body image is not an important variable when examining the level of participation.

ATTITUDES TOWARDS PHYSICAL ACTIVITIES RELATED TO LEVEL OF PARTICIPATION AND TYPE OF PARTICIPATION

3. FOR SOCIAL EXPERIENCE AND LEVEL OF PARTICIPATION AND TYPE OF PARTICIPATION

No significant difference was found between the participation in physical activities for social experience and level or type of partici-
The similarity of the data on both counts might be considered a surprise as participants might be expected to be more extrovert and gregarious than non-participants, and team games might be expected to attract 'social types' more than an individual sport. But the compulsory games activities at the school were organised on a 'fun for all' basis and were designed to be a pleasant break from the previous nine periods spent in classrooms or laboratories. All taking part were expected to try their best, the less talented being encouraged and the more talented being discouraged from participating in a way which might spoil the activity for the majority.

In the sample it was found that most girls saw physical activities as being a positive social experience.

4. FOR HEALTH AND FITNESS AND LEVEL OF PARTICIPATION AND TYPE OF PARTICIPATION

Again the results were not significant but the tendencies shown were rather surprising. It might be expected that participants would be more inclined to take part in physical activities for health and fitness than non-participants. But the results showed that non-participants were more interested in physical activities for health and fitness than participants, swimmers more than hockey players, with hockey players showing least interest of all groups. The low scoring of the hockey players might be explained by the concentration during training on technical skills - fitness was required but skill was valued more highly. The activity for the hockey players was therefore not essentially to encourage health and fitness, whereas the less active non-participants and the active swimmers could appreciate the value of the of the activity in promoting health and fitness.

In conclusion, outside the hockey group who had been under special training criteria, most girls showed a positive attitude towards
participation in physical activities for health and fitness.

5. FOR THRILLS AND EXCITEMENT AND LEVEL OF PARTICIPATION AND TYPE OF PARTICIPATION

There was found to be a significant difference \( (P < .05) \) between participants and non-participants. This is as might be expected as participants tended to be more active in their involvement and were required to take part in competitive events with opponents from outside the school environment. It was noted that non-participants did not rate participation for thrills and excitement highly at all.

It was found that swimmers rated participation for thrills and excitement positively whereas the hockey players rated it negatively, although between the two there was no significant difference. It was expected that the swimmers might find competition 'exciting'. The negative attitude of the hockey players might be a result of their method of play. They were expected to play to a set pattern as laid down by the coach, and during the matches they were expected to concentrate on their positional play. Such regimentation might result in pleasure from playing well or winning but would restrict the opportunities for thrills and excitement.

6. FOR AESTHETIC EXPERIENCE AND LEVEL OF PARTICIPATION AND TYPE OF PARTICIPATION.

Although the result of this investigation in regard to level of participation was not significant, it was very close to being so. Surprisingly enough, the non-participants rated the aesthetic experience higher than the participants, but this was mainly the result of the negative attitude of the swimmers. It is suggested that the introduction
of synchronised swimming or some other similar activity, rather than
the concentration on distance training, might have produced a more
positive response. This negative attitude from the swimmers helped to
produce a significant difference between the attitudes of the hockey
players and the swimmers ($P < .05$).

7. FOR RECREATION AND RELAXATION AND LEVEL OF PARTICIPATION AND TYPE
OF PARTICIPATION

The result of the inquiry into level of participation was not
significant although participants indicated a slightly more positive
attitude than did non-participants. It might be said that it was
surprising that the difference was not more distinct because for some
girls participation in physical activities must be rather degrading
if not embarrassing. The ethos of the school where fun for all was
stressed and those with unsuitable physiques were not forced to be
unnecessarily active might partially explain the result.

Interestingly enough swimmers rated participation for recreation
and relaxation more highly than did hockey players although this
result also was not significant. It is suggested that this might be
partially caused by the training strategies and schedules adopted.
The swimmers usually had time for a sun bathe and a chat after train-
and there was also free time between races during competitions. On the
other hand the hockey players were expected to be active until the
limit of their time during training and practice games.

6. TO MEET A PHYSICAL CHALLENGE AND LEVEL OF PARTICIPATION AND
TYPE OF PARTICIPATION.

There was no significant difference between the attitude of partic-
pants and non-participants. In fact there was an over all low negative
response. This suggests that girls within the eleven to sixteen years old age group in Kenya are still not allowed opportunities available to their elders and their male counterparts to test themselves through such activities as mountain climbing and the more dangerous body contact sports.

Hockey players showed a low positive attitude towards participation to meet a physical challenge whereas the swimmers produced a negative attitude. This negative attitude was not expected because, over long distances and especially when using the more tiring strokes (e.g. butterfly), competitive swimming does present a physical challenge. But the young swimmers in the investigation were mainly required to swim over 50 metres only, and the older swimmers over 100 metres only. It is suggested that these distances were not too distressing.

9. **SELF-IMAGE AND ATTITUDES TOWARDS PHYSICAL ACTIVITIES.**

As can be seen from the table Number 19, those with a high self-image and those with a low self-image have very similar attitudes towards physical activities. This suggests that self-image does not influence the attitudes measured and thus attitudes and participation in physical activities are not a function of self-image and vice-versa and must be a function of other variables.

10. **BODY IMAGE AND ATTITUDES TOWARDS PHYSICAL ACTIVITIES.**

The table Number 20 indicates that those with a high body image and those with a low body image have very similar attitudes towards physical activities with the notable exception of physical activities for thrills and excitement. In that interesting exception, it was found that those with a low body image had a significantly more positive attitude towards physical activities for thrills and excitement than did those
with a high body image \( (r < .05) \). The author can put forward no satisfactory explanation for this surprise result although it could be suggested that those with a low body image might be willing to put their body at risk rather more than those with a high body image in the quest for thrills and excitement.

Over all it can be said that attitudes towards physical activities and participation in physical activities are generally not a function of body image and vice versa, and must therefore be a function of other variables.

**DISCUSSION**

It was found that the Null Hypotheses were upheld in most cases, the only significant positive relationships being:

1. Between self-image and level of participation.
2. Between participation in physical activities for thrill and excitement and level of participation.
3. Between participation in physical activities for aesthetic experience and type of participation.
4. Between participation in physical activities for thrills and excitement and body image.

Apart from the above, it can therefore be concluded that, in this investigation, there would appear to be a low relationship between self-image, body image and attitudes towards physical activities amongst eleven to sixteen year old girls.

If the reasons for the greater participation by some members of the school community cannot be isolated, the effect of greater participation has been shown in this study to be real and beneficial as far as self-image is concerned. The problem that this result poses is whether the higher participation leads to the higher self-image, or whether the
higher self-image stimulates a pupil into greater participation, or whether it could be the success of the participation which created the higher self-image rather than the actual participation. If greater participation does lead to an increase in self-image, this would justify some of the claims of physical educationalists for including physical activities in the curriculum of secondary girls' schools. If higher self-image leads to greater participation, appropriate selection for physical activities for girls could be achieved through an investigation into self-image. But the overall conclusion must be that it is difficult to explain participation in physical activities through the media of self-image, body image or attitudes towards participation.

The preceding section has presented many possible reasons as to why school children participate in physical activities. The study examines why girls attending a secondary school might participate voluntarily in certain physical activities.

**SUMMARY**

In this study, an investigation was made into the attitudes towards participation in physical activities related to self-image, body image, level of participation and type of participation. The investigation was conducted using sixty school girls from a multi-racial secondary boarding girls' school in Kenya, the girls being between eleven and sixteen years of age. The study required the completion of four separate questionnaires. Data analysis showed some significant differences between groups regarding self-image and level of participation, and their attitudes towards participation. Otherwise most girls demonstrated no difference in their body or self-image nor in their attitudes towards participation in physical activities regardless of whether they were participating actively in individual and team activities or not.
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(1975)
NAME OF PUPIL

QUESTIONNAIRE C

Please put a circle round the number that applies to you.

1 means all the time
2 means most of the time (more than 50%)
3 means some of the time (less than 50%)
4 means none of the time

1) I am entirely self-confident. 1 2 3 4
2) I expect to succeed in things I do. 1 2 3 4
3) Life is a strain for me. 1 2 3 4
4) I think very little of my abilities. 1 2 3 4
5) I am satisfied with the way I am. 1 2 3 4
6) I am a good mixer. 1 2 3 4
7) I am certainly lacking in self-confidence. 1 2 3 4
8) I usually feel that life is worth while. 1 2 3 4
9) I have never felt better in my life than I do now. 1 2 3 4
10) I certainly feel useless. 1 2 3 4
11) I feel adequate enough to meet almost any kind of situation. 1 2 3 4
12) I am not a dependable person. 1 2 3 4
13) I don’t consider myself a very mature person. 1 2 3 4
14) The things I do aren’t very useful. 1 2 3 4
15) I feel that I am a very stable person. 1 2 3 4
NAME OF PUPIL ........................................

QUESTIONNAIRE D

Please put a circle round the number which applies to you.
1 means a very good description (exactly like me)
2 means a quite good description (much of the time like me)
3 means not a good description (not usually like me)
4 means exactly unlike me

able to get along with everybody 1 2 3 4
adaptable 1 2 3 4
a good leader of others 1 2 3 4
aggressive 1 2 3 4
ambitious 1 2 3 4
athletic 1 2 3 4
calm 1 2 3 4
competitive 1 2 3 4
considerate 1 2 3 4
capable 1 2 3 4
bossy 1 2 3 4
friendly 1 2 3 4
intellectual 1 2 3 4
irresponsible 1 2 3 4
kind 1 2 3 4
successful 1 2 3 4
useful 1 2 3 4

logical 1 2 3 4
mature 1 2 3 4
moody 1 2 3 4
fearful 1 2 3 4
normal 1 2 3 4
protective 1 2 3 4
purposeful 1 2 3 4
sarcastic 1 2 3 4
self-conscious 1 2 3 4
self-centred 1 2 3 4
sensitive 1 2 3 4
shy 1 2 3 4
sociable 1 2 3 4
stable 1 2 3 4
stubborn 1 2 3 4
tolerant 1 2 3 4
well-adjusted 1 2 3 4

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NAME OF PUPIL

QUESTIONNAIRE E

Please put a tick under the chosen column to indicate your satisfaction/dissatisfaction with the following:

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<th>Happy</th>
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<td>Feet</td>
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Please write at the end of each statement a number between 1 and 7 indicating your opinion where:

7 - very strongly agree; 6 - strongly agree; 5 - agree;
4 - undecided; 3 - disagree; 2 - strongly disagree;
1 - very strongly disagree.

1) I would prefer quiet activities like swimming or golf, rather than such activities as water skiing or hang gliding.

2) I would gladly put up with the necessary hard training for the chance to try for an Olympic team.

3) The most important value of physical activity is the beauty found in skilled movement.

4) Physical education programmes should stress vigorous exercise since it contributes most to physical fitness.

5) The years of strenuous daily training necessary to prepare for today's international competition is asking a lot of today's young women.

6) The need for much higher levels of physical fitness has been established beyond doubt.

7) Among the best physical activities are those which represent a personal challenge, such as skiing, mountain climbing, or heavy weather sailing.

8) Among the most desirable forms of physical activity are those which present the beauty of human movement such as modern dance and water ballet.

9) I would get by far the most satisfaction from games requiring long and careful preparation and involving stiff competition against a strong opposition.

10) Of all physical activities, those whose purpose is primarily to develop physical fitness, would not be my first choice.

11) The best way to become more socially desirable is to participate in group physical activities.

12) Almost the only satisfactory way to relieve severe emotional strain is through some form of physical activity.

13) Frequent participation in dangerous sports and physical activities are alright for other people but ordinarily they are not for me.
14) Physical education programmes should place much more emphasis upon the beauty found in human motion.

15) If given a choice, I sometimes would choose strenuous rather than light physical activity.

16) There are better ways of relieving the pressures of today's living than having to engage in or watch physical activity.

17) I like to engage in socially oriented physical activities.

18) A part of our daily lives must be committed to vigorous exercises.

19) I am not particularly interested in those physical activities whose sole purpose is to depict human motion as something beautiful.

20) Colleges should sponsor many more physical activities of a social nature.

21) For a healthy mind in a healthy body the only place to begin is through participation in sports and physical activities every day.

22) The least desirable physical activities are those providing a sense of danger and risk of injury such as skiing on steep slopes, mountain climbing, or parachute jumping.

23) Being physically fit is not the most important goal in my life.

24) I enjoy sports mostly because they give me a chance to meet new people.

25) Practically the only way to relieve frustrations and pent-up emotions is through some form of physical activity.

26) The time spent doing daily calisthenics could probably be used more profitably in other ways.

27) Given a choice, I would prefer motor boat racing or running rapids in a canoe rather than one of the quieter forms of boating.

28) Of all the kinds of physical activities, I don't particularly care for those requiring a lot of socializing.

29) One of the things I like most in sports is the great variety of ways human movement can be shown in the beautiful.

30) Most intellectual activities are often just as refreshing as physical activities.

31) Strength and physical stamina are the most important pre-requisites to a full life.

32) Physical activities that are purely for social purposes, like college dances, are sometimes a waste of time.
33) The self-denial and sacrifice needed for success in today's international competition may soon become too much to ask of a thirteen or fourteen year old girl.

34) I am given unlimited pleasure when I see the form and beauty of human motion.

35) I believe calisthenics are among the less desirable forms of physical activity.

36) Watching athletes becoming completely absorbed in their sport nearly always provides me with a welcome escape from the many demands of present-day life.

37) If I had to choose between "still-water" canoeing and "rapids" canoeing, "still-water" canoeing would usually be my choice.

38) There are better ways of getting to know people than through games and sports.

39) People should spend twenty to thirty minutes a day doing vigorous calisthenics.

40) There is sometimes an over-emphasis upon those physical activities that attempt to portray human movement as an art form.

41) Physical activities having an element of daring or requiring one to take chances are desirable.

42) Since competition is a fundamental characteristic of our society, highly competitive athletics and games should be encouraged for all.

43) The best form of physical activity is when the body is used as an instrument of expression.

44) Sports are fun to watch and to engage in, only if they are not taken too seriously, nor demand too much time and energy.

45) Calisthenics taken regularly are among the best forms of exercise.

46) I could spend many hours watching the graceful and well-coordinated movements of the figure skater of modern dancer.

47) The best thing about games and sports is that they give people more confidence in social situations.

48) Among the best forms of physical activity are those providing thrills such as sailing in heavy weather or canoeing on river rapids.

49) Regular physical activity is the major pre-requisite to a satisfying life.

50) In this world there is sometimes too much emphasis on striving to be successful in sports.

51) I would enjoy engaging in those games and sports that require a defiance of danger.
52) Most people could live happy lives without depending upon frequent watching or participating in physical games and exercise.

53) A sport is sometimes spoiled if allowed to become too highly organised and keenly competitive.

54) A happy life does not require regular participation in physical activity.