

## CHAPTER I

### 1.0 Introduction

Physical inactivity in the adult population is a global problem. In Malaysia statistics have revealed similar trends among the adult population with almost three-quarters of them leading a relatively sedentary lifestyle minus regular health-promoting physical exertion (Chen, 1998). It is in view of this poor participation of this population of adults in particular, the Health Ministry in its long-term drive launched the 1998 Fitness Campaign to promote healthy Malaysians which was targeted at all Malaysians, both old and young.

Latest trends in Malaysia also showed that cardiovascular diseases have been the principal cause of mortality since 1972 (Khoo, Tan & Khoo, 1991). Mortality from heart diseases had shown to be taking the lead since 1980 in 18% of hospital deaths. In the 1995 Annual Report by the Department of Public Health, Ministry of Health Malaysia, statistics showed that the total number of admissions and deaths due to cardiovascular diseases in government hospitals in Malaysia had increased from the figures of 58,961 (admissions) and 6205 (deaths) in 1985 to 89,824 (admissions) and 6688 (deaths) in 1994. The base causal factors for these

diseases are the result of lack of exercise, mechanization and automation, swift communication and transport, computer usage, the lure of television, and social pressures leading to obesity, personal and emotional stress (Medical Journal Malaysia, May, 1995).

There is indication that nearly 20% of the population of Malaysia is obese (Bedos, 2000). A report on the obesity problem in the country (Health Today, Jan./Feb. 2000) showed that the prevalence of obesity in urban areas is estimated to be 5 – 8% and 6.5% in rural areas. The report also indicated that in a rural area of Malaysia, the prevalence of overweight was 24.1%. In addition to the above, the report also showed the findings of a recent compilation of Body Mass Index in adult Malaysians (2111 females) from three ethnic groups in urban areas. It revealed that in females 26% were overweight and 8% obese (Health Today, Jan./Feb. 2000). Lam (1998) cited that in a study by the Selangor State Health Department in Malaysia in 1991 it was found that 11% of primary-six students in that state were obese. Lam also quoted the President of the Nutrition Society of Malaysia as saying that over the past five years the obesity problem in Malaysia has become worse. Thomas (1999) mentioned that in a study conducted on the obese adults in the country in 1996 by the Science University of Malaysia in the state of Kelantan, one of the more rural states, 25% of its population were found to be

overweight. Results of the study mentioned revealed that this 25% were significantly younger than the lean ones (with normal weight) and suffered more from hypertension. The sedentary lifestyle has been one of the attributes of such prevalence of obesity mentioned.

Latest local health findings also showed that 70% of women especially housewives in Malaysia never exercised at all (Santos, 1998), which was commonly blamed on time constraint. Results from a Malaysian government survey of young people between the ages of 13 and 21 shocked Malaysians. The survey revealed that 71% smoked, 28% gambled, and 14% took hard drugs (Vatikiotis, 1996). An increasing number of cases of juvenile delinquency, drug abuse and moral decadence are some the apparent social ills taking place in the country as cited by the Malaysian Minister of national unity and social development (Vatikiotis, 1996). Plouffe (1999) reported that in 1998, 8% of drug abusers were adolescents in Kuala Lumpur. According to Plouffe, the Secretary General of the Association for the Prevention of Drug Abuse (PEMADAM) and the deputy chairman of PENAWAR, a support group for families of addicts in Malaysia, was quoted as saying that most of Malaysia's drug problems are found in its new satellite towns and land schemes areas (FELDA) where youngsters have plenty of time and little to do, and are bored.

On the school front, the level of physical fitness among the school-age children is not satisfactory as reported by the Sports Division, Ministry of Education during the keynote address of the Malaysian Association for Physical Education, Sport Science, and Fitness 37<sup>th</sup> Anniversary convention and Biennial General Meeting 1999 in Kuala Lumpur. It was also revealed that 10% to 25% of schoolchildren in the country are obese and this condition is attributed to the fact that these children are not actively involved in any physical activities. Most of school life tends to be sedentary in the secondary schools today with the stress placed on other exam subjects like Science, History and Languages in school. Student misbehaviour and juvenile delinquency like loafing, smoking, drug addiction, drug-dealing, theft, extortion, assault, in Malaysian schools have also reached worrying levels. Smoking among students especially girls aged 18 and below is on the rise and findings have attributed the cause to boredom (Health Today, Sept/Oct. 1999).

The health benefits of regular physical activity especially for adults have well been documented. Studies have shown that whatever benefits contributed by physical activity to adults can also be beneficial to children and adolescents (Cooper, et. al., 1975, cited in Pollock & Blair, 1981). A review of many more studies on the benefits of physical activity concluded that exercise can play a role



in preventing obesity and preserving the physical characteristics of youth; and a high level of activity throughout the lifespan can inhibit vascular degeneration (Hein & Ryan, 1960; cited in Morris, 1991). Physical activity has always been associated with reduced risk of osteoporosis (Brewer, Keele, Upton & Hagen, 1983; cited in Corbin, 1987), ulcer disease (Kraus & Raab, 1961; cited in Corbin, 1987), diabetes (Duda, 1985; cited in Corbin, 1987), certain types of cancer (Lee, Paffenbarger & Hsieh, 1991) and mental health disorders such as depression (Monahan, 1986; cited in Corbin, 1987). Surveys have also shown that adults who exercise regularly believe that it makes them feel better in general and also helps in relieving stress and tensions (Harris, 1979; cited in Corbin, 1987). Numerous studies have concluded that sedentary individuals are twice as likely to have circulatory heart disease when compared to physically active people (Davis, 1996). A study at Cooper Institute (Cooper, 1991) demonstrated that children are equally at risk for heart or circulatory disease and for premature deaths as adults resulting from a lack of physical activity. The findings also showed that 30–35% of school-age children were at risk. Here the review of studies mentioned earlier clearly indicated that risk factors for heart disease begin early in life and for this reason the promotion for an active-healthy lifetime living should be at an early age for the individual. Thus to do that, the best way and place to start moulding a positive attitude toward physical activity would be through physical education in school.

Documented evidence has also revealed that enhanced self-esteem, learning skills, academic performance (Benett, 1986; cited in McGinnis, Kanner, DeGraw, 1991) and a sense of well-being are associated with increased physical activity. They also represents the immeasurable contributions of regular physical activity in school through physical education (Nelson, 1991). Due to these invaluable benefits to be gained from physical activity as mentioned earlier, the activity habits of the individual need to be changed and this can be done by the school through the physical education programme.

However, the discussion above of the health-fitness situation in Malaysia, suggests that the population-attributable risk from physical inactivity in the country is very high. Such prevalence of inactive lifestyle indicates that changing physical activity habits of the population rather than by changing any other major cardiovascular disease risk factors can save more lives. Physical education in schools is therefore an ideal choice of intervention because virtually all children and adolescents can participate in physical education activities. Sallis and MacKenzie (1991) also suggested that the greatest resource in promoting physical activities is physical education in schools because of its almost universal reach.

The Physical Education curriculum in Malaysia is developed based on the components of fitness, skills and sportsmanship. The physical education syllabus in secondary schools has numerous objectives other than just the development of the physical. These objectives include the cognitive, psychomotor and affective development of the student. The development of an active interest in physical fitness, satisfying social characteristics, emotional adjustments, skills, as well as the physical, are part and parcel of learning physical activities in schools. In other words, the moulding of healthy wholesome attitudes, active-healthful living habits and interest in physical fitness/activity of the students is acquired through physical education in schools. As Herophilus (Krishnamurthy & Ram, 1990) puts it: health does not always come about by chance; the individual needs attitudes, knowledge and skills to make thoughtful decisions that translate into well-being.

Thus, an effective and meaningful physical education programme which would motivate and provide opportunities for pleasant, joyful and satisfying learning experiences that have pronounced affective component is needed to ensure that the students develop a positive favourable attitude toward physical activity and continuous participation in physical activity. Since attitudes are a learned response, they can be taught. According to Hull's Reinforcement Learning Theory, learning does not take place with a single trial; it is stamped in through a

process of repeated need or drive stimulus reduction. As such in physical education, to ensure repeated participation in physical activity of the learner, physical educators should therefore always offer activities that will afford satisfaction to the learner. Learning as such produces changes in the individual. Moreover attitudes have three inter-related components, namely, the cognitive, affective and behavioral (Triandis, 1971) and as such modifying the affective component will help to modify the attitude of the learner. In other words, the purpose of physical education in secondary schools is to assist the student to acquire knowledges, skills and positive attitudes that would lead the individual to practice a healthy and active lifestyle for now and the future through physical activity.

Research has shown that the stronger the students' positive attitudes toward physical activity are, the greater their involvement in physical activity (Deeter, 1988). Studies by Ferguson, Yesalis, Pomrehn & Kirkpatrick (1989) revealed that students who perceived exercise as beneficial, who exhibited positive attitudes about physical education, who had good self-esteem and who perceived themselves as able to maintain commitments, were more likely to intend to exercise in the future than those who did not exhibit such attitudes. Since behavior relates significantly to attitude, changing the attitudes will change the habits (Terry,

Erickson & Johnson, 1977). Review of studies on attitudes toward physical activity in school children has also shown that consistent and continuous pleasant, satisfying and meaningful learning experiences acquired by students during their physical classes definitely provide opportunities for the student to develop a positive attitude toward physical activities through physical education (Rice, 1988; Kenyon, 1968b). One's attitude about an activity will influence future participation in the activity (Miller, 1994). Godin (1987; cited in Dishman, 1994) reported that the affective dimension of attitude is an important factor that is associated with intentions. As suggested by Godin, it is therefore important to ensure that physical activity programmes for children offer positive learning experiences whose outcomes result somewhat automatically from an enjoyable experience associated with exercise, and that participants' enjoyment should be given top priority which will ensure that the individual leaves school with carry-over values or he or she can be expected to continue to participate in physical activities only if he or she is motivated to do so. The student, who has learned to like physical activities and physical education, and who has acquired interests and skills, which make participation fun, will undoubtedly find ways to continue. Enjoyment of any form of physical activity including sports in which an individual participates serves multiple purposes such as, a form of recreation, for fitness and health, a social experience, a pursuit of vertigo, or as catharsis, for the student. The students'

attitudes are so important later in life and therefore should be looked into at an early age. With that, schools and those who teach physical education should aim to help the students to develop their interests and find joy in play and most of all their attitude towards physical activity through physical education in school, outside of school and beyond the school environment.

The discussion above suggests that school physical education programmes can foster a positive attitude toward an active lifestyle in the students. To achieve it, concerted efforts from the curriculum division and schools have to operate in tandem. Schools will have to assure of providing meaningful programmes that provide opportunities for students to learn to be active in the present, to understand the role of physical activity/exercise in lifelong health and to learn how to maintain that active lifestyle. To do that physical educators therefore must be knowledgeable in the subject and well versed in their teaching methods that will help the students to make physical activity a part and parcel of their living lifestyle for now and the future.

The future of the nation depends on the health of the people. Therefore, for the nation to achieve a society that is active, healthy, productive and peaceful, concerted efforts will have to come from the schools administrators, physical

educators and curriculum planners to ensure that physical education has no more important responsibility than that of helping young people to develop their capacities, broaden their interests, and find joy in play through physical activity for a lifetime. Most people like to repeat doing those things that satisfy their needs and desires and where there is fun and enjoyment in doing them. Therefore, the child, adolescent, man or woman who has learned to like physical activity and has the interests and skills that make participation fun will undoubtedly find ways to continue their involvement in physical activity. It is therefore important that the student should have a positive attitude toward physical activity before he or she leaves school because it is only in schools that the individual is able to learn and practice the health-related fitness activities through physical education. Moreover physical education is the only subject in school that aims at helping the student to carry over the long-term health-related fitness learning experiences into life's future. As such physical educators in schools should therefore plan systematic and functional learning experiences for the students to ensure that positive attitudes toward physical activity are developed in them because such attitudes can significantly affect the intent exercise behaviour and enhance future participation in physical activity of the individual. According to Scott (1960; cited in Krishnamurthy & Ram, 1990), physical activity can affect the behavior of an individual in several psychological ways. Among the behavioral outcomes which

contributes to psychological development are; attitudes are changed; improved sense of well being exists; social efficiency is improved; and skills are acquired. According to Jackson (1992), there is an emphasized need to examine students' attitude because a better understanding of students' attitudes and beliefs about physical education can greatly influence teacher effectiveness and the design of programmes to address the needs of children.

Till today although a few local studies have been done on the college students and teacher-trainees, no local research that has been done on secondary school students' attitude towards physical activity and as such findings gathered would help in giving some direction as to how the students perceived physical activity. It is therefore the intention of this study to determine the direction of the attitudes of the Malaysian secondary school female students toward physical activity through physical education that is presently being taught in schools. Apart from this further investigation was carried out to determine the attitudinal status of the Science major students who are more academically inclined and abiding in comparison to that of the students who are in the Arts field of study. In addition to that a comparison of attitudes between the non-athletes and athletes was also to be carried out to determine the attitudinal status of the former who show a lack of interest in sports and physical activities in this study.



### 1.1 Significance of the Study

The aim of this study is to determine the attitudes of the secondary school female students who are average age 16 years; towards physical activity. It seeks to establish whether the following variables such as academic majors and athletic experiences of the students contribute to the attitudinal extent of the students toward physical activity with regard to the six sub-domains of physical activity in physical education.

One of the ultimate goals of the physical education programme in secondary schools in the Malaysian context is the development of the child as a unity of body, mind and spirit. To ensure that the learning process of the cognitive, psychomotor and affective domains takes place within the individual, teachers should organize learning experiences and opportunities for physical, social, emotional, intellectual and other beneficial responses through which the student may become educated or changed in desirable behavioral ways in a physical education lesson. It is therefore the intention of this study to offer physical educators a better understanding of the attitudes and beliefs of the students toward physical activities that are undertaken in physical education which in turn might

greatly influence teacher- effectiveness and design of physical education programmes to address the students concerns, needs and interests.

The findings of the study will reflect the present extent of the Form Four secondary school female students' attitudes toward physical education, a compulsory subject that is taught in schools. Such information can provide baseline data that will help the designers of Form Four Physical Education curriculum to select appropriate content and activities that will meet the needs, interests and desires of the students.

This study will also provide evidence as to whether academic background (Science and Arts Majors) is a vital factor in affecting the attitudes of the students of the same age group. If so, then curriculum planners need to do a further study of the factors that could have been the contributors to such a difference between the attitudes shown by the students. An investigation into the curriculum content for the different majors and the teaching approaches would be appropriate in offering physical educators and all the more the students themselves, a better understanding of the attitudes of the students toward physical education.

The result of this study will also provide evidence as to whether athletic status contributes to the attitudinal state of the female students' towards physical activity. If the factor (athletic status) is found to be so, then different sets of desirable steps and strategies must be taken and applied by the physical educators on the non-athletic students and athletic students respectively in the teaching of physical education to ensure maximum involvement and participation of the students in activities that lead to positive learning experiences.

The findings of the present study would also be helpful to the teacher education planning and training divisions in readdressing the professional preparation of future physical educators who plan lessons which have the satisfaction and personal enjoyment elements, which in other words cater for the needs, interests and desires of the students. As such, immediate and appropriate corrective measures can be taken in preparing future physical education teachers who are proficient at encouraging and reinforcing student participation and involvement in the physical activities in physical education with the effective and creative use of the environment.

Findings of this study would also give an insight into the physical education programme available. The administrators concerned therefore, would be able to

make further desirable evaluation of the programme and offer an explanation if their programme is favourable or unfavourable with the students. Moreover, the study would be helpful as a guide to the policy makers, curriculum planners and educators in the country in future planning of the physical education syllabus, curriculum content evaluation and innovations when the need arises with regard to the importance of the subject.

It is also hoped that the empirical data collected in this study would be of use for future research in this area of study because it can serve as an avenue for understanding the attitudes of students toward physical education and to further investigate the relationship between attitudes and other factors. According to Crow and Crow (1948), attitudes are important motivator of behavior in an individual.

## **1.2 Statement of the Problem**

Teachers play an important role in the learning process of students in schools. They have a profound impact upon a student's attitude toward the subjects being taught by the teachers concerned (Fowler, 1974; cited in Aicinena, 1991). In most Malaysian schools, physical education is taught by teachers who

are not trained or have very little training to teach the subject (Rashid, 1994, cited in Hardman, 1995; Sheikh, 1990; Singh, 1997; Zainun, 1998). With the incorporation of Health Education into Physical Education in 1989, the new subject demands that the teaching of physical fitness be integrated into the teaching of games skills during a physical education class. As such, teachers find insufficient time to teach the physical aspects at the same time because the physical education curriculum demands some classroom-based teaching lessons to teach Health Education.

A lack of facilities and playing fields found in most urban school (Singh, 1997) have created more problems to the teaching-learning process. The non-trained teachers designated to teach physical education are also not sure of what to teach, for how long, at what level and how to teach the subject using effective instructional methodologies in attaining the goals of physical education. Teachers cancel the physical education class on the slightest excuse (Vasudevan, 1988) or because of its non-examination status. Most of the physical education classes have large class sizes and the crowded condition may not permit the teacher to have quality personal interactions with the students. The problems of inadequate instructional time, insufficient space, facilities and equipment and oversized classes, regardless of the extent of these problems, make the quality of instructions difficult

even for the best of teachers. The teaching of physical education in schools is getting from bad to worse as teachers and students are losing interest in the subject (Sunday Star, February 8, 1998). Education Minister Datuk Seri Najib Tun Razak, also expressed concern over the lax attitude among students about their physical conditions (Sunday Star, February 8, 1998).

The fitness level of females in the secondary and primary schools is extremely poor and the attitudes of Malaysian children towards fitness and an active lifestyle is very poor as indicated in the 1983 Physical Education Convention Recommendations. The lack of proper changing place, facilities, skills, and the indifferent attitude of teachers, have resulted in girls who do not want to play and sweat which eventually causes them to have an unfavourable attitude towards physical activities. As such, the females seek other ways to spend their leisure hours on activities like loafing, getting indulge with drugs and alcohol.

The behavioral pattern by the physical education teachers could have indirectly affected the attitudes of the school going students who are at the period of adolescents life where key behaviors begins and decisions are made which will have a profound lifelong impact (Gibson, 1996). Participation in a physical education class taught by an uninterested teacher who later rolls out a ball for

students to play with if they want to is hardly viewed as an educational or enjoyable experience by students. Instead, teachers need to offer classes that motivate students to become active, fit and to build a favourable attitude towards physical education. Teachers are to provide and promote opportunities that will help the students to gain the many benefits of physical education classes through the physical means that will go a long way.

Attitudes are learned (Doob, 1947; cited in Fishbein, 1967) and the teacher is always a part of the pupil's outside world (Steinhaus, 1963) and as such it would be wise to be cognizant of the factors which affect negatively the students' attitudes toward physical education. It is therefore the intention of this study to determine the attitudes of secondary school female students, of average age 16 years, toward physical activity undertaken during physical education classes.

### **1.3 Limitations of the Study**

The study is confined to the students of Senior Methodist Girls' School, who are all females average age 16 years old. As such the results may not be applicable to all the secondary schools in the country with respect to its gender. A

population of 212 respondents was selected for this study due to its availability of the students particularly the Science students in the school mentioned. Nevertheless, the research findings from this study may serve as guidelines towards the planning and implementation of an effective physical education programme at the secondary school level.

#### 1.4 Research Questions

In this study data would be collected to answer the following research questions:

1. What are the students' attitudes toward physical activity in the following six perceived sub-domains?
  - i) physical activity as an aesthetic experience;
  - ii) physical activity as catharsis;
  - iii) physical activity as the pursuit of vertigo;
  - iv) physical activity for health and fitness;
  - v) physical activity as a social experience; and
  - vi) physical activity as an ascetic experience.



2. Do students in different academic fields of study differ significantly in their attitudes toward physical activity with regard to the following six perceived sub-domains?

- i) physical activity as an aesthetic experience;
- ii) physical activity as catharsis;
- iii) physical activity as the pursuit of vertigo;
- iv) physical activity for health and fitness;
- v) physical activity as a social experience; and
- vi) physical activity as an ascetic experience.

3. Do athletic students (who have participated in interschool and intramural sports activities) differ significantly in their attitudes toward physical activity from non-athletic students in terms of the six sub-domains listed below?

- i) physical activity as an aesthetic experience;
- ii) physical activity as catharsis;
- iii) physical activity as the pursuit of vertigo;
- iv) physical activity for health and fitness;
- v) physical activity as a social experience; and
- vi) physical activity as an ascetic experience.

## 1.5 Hypotheses

The following hypotheses are posed in the null form.

1. There will be no significant differences in the mean scores of each sub-domain of attitude towards physical activity between the Arts and Science Major students
2. There will be no significant differences in the mean scores of each sub-domain of attitude towards physical activity between the athletic and the non-athletic students.

## 1.6 Definition of Terms

**Attitude:** Allport (1935, cited in Halloran, 1967) defined an attitude as ‘A mental and neural state of readiness, organised through experience, exerting a directive or dynamic influence upon the individual’s response to all objects and situations with which it is related’.

**Physical activity** : “Denotes organized (structured) , non-utilitarian (in an occupational and maintenance sense) gross human movements, usually manifested in active games, sports, calisthenics or dance” (Kenyon, 1968a; cited in Bu-Salih,1984).

**Attitude Toward Physical Activity Inventory**: An inventory designed by Kenyon 1968b) to measure the six sub-domains of physical activity in terms of the perceived meaning of physical activity:

1. Physical activity as a social experience
2. Physical activity as health and fitness
3. Physical activity as an aesthetic experience
4. Physical activity as the pursuit of vertigo
5. Physical activity as catharsis
6. Physical activity as an ascetic experience.

**Academic majors** : The Science and Arts Programmes studied in secondary schools in Malaysia.

**Athletic Involvement** : The level of participation of the student at school level, zone or district level, state level in any of the following games such as badminton, tennis, ping- pong, volleyball, netball, hockey, handball, softball, swimming, taekwan-do, chess, athletics, gymnastics.

**Non-Athletes:** Students who do not participate or get involve in any of the interschool games or intramural sports activities at school, zone, district or state level.

### **The Attitude Dimensions of Physical Activity:**

A conceptual model characterizing physical activity as a set of all physical activities that can be reduced to logical subsets, and that a meaningful basis for doing so was the "perceived instrumentality" of each class of physical activities. Each subset, or "sub-domain" provided a "psychological object" toward which one may be favourably or unfavourably disposed. As such, one's attitude was not directed to a sport per se; or toward some traditional class of sports, such as team sports or individual sports. Rather, a particular sport may serve different people in different ways. The six sub-domains of the model were as follows: physical activity perceived as (1) an aesthetic experience, (2) catharsis, (3) the pursuit of vertigo, (4) health and fitness, (5) a social experience, (6) an ascetic experience (Kenyon, 1968b).

- (1) **Physical activity as an aesthetic experience:** Some forms of physical activity are generally pleasing to the eye, and have a capacity for satisfying aesthetic tastes. There are individuals who may consider skilled movement

as beauty such as in ballet and gymnastics but there are others who may consider such movement as creative and expressive movements such as in the dance. The important point is that physical activity is often perceived as having aesthetic value by the individual from the activities which are conceived of as possessing beauty or certain artistic qualities.

- (2) **Physical activity as catharsis** : Physical activity which is perceived as providing a release of frustration-precipitating tension through some vicarious means, is considered to be cathartic. It is believed that physical activity can provide a release from frustration and so-called pent-up emotions created by pressures of modern living.
- (3) **Physical activity as the pursuit of vertigo** : Here it is suggested that certain physical experiences can provide some risk or challenges; elements of thrill and excitement through the medium of speed, acceleration, sudden change of direction or exposure to dangerous situations, to the participant with the participant usually remaining in control.
- (4) **Physical activity for health and fitness**: Health through physical activities is both possible and desirable. Thus, it was posited that some physical

activities could be characterized primarily by its contribution to the improvement of one's health and fitness. It is obvious that such physical activities like jogging and conditioning exercises are for such a purpose but conceivably, many activities could be similarly oriented.

- (5) **Physical activity as a social experience** : The claim that participation in physical activities can meet certain social needs of individuals and activities engaged in by groups of two or more is perceived by many as having some social value. Here, physical activity as a social experience was characterized by those physical activities whose primary purpose is to provide medium for social interaction.
  
- (6) **Physical activity as an ascetic experience**: In this case, physical activity is perceived to provide a medium for the expression of superiority. Those who aspire to high levels of achievement, regardless of the sport, recognize the need to delay gratification and to be able to endure long strenuous periods of training. Thus the ascetic experience perceived physical activity as long, strenuous painful training and stiff competition demanding a deferment of gratifications.