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A Study to Examine the Attitudes and Perceptions of Saudi Women in the United States and Canada Toward Exercise and Physical Activity

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A STUDY TO EXAMINE THE ATTITUDES AND PERCEPTIONS OF SAUDI WOMEN IN THE UNITED STATES AND CANADA TOWARD EXERCISE AND PHYSICAL ACTIVITY

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ABSTRACT

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This study is an examination of the knowledge and perceptions of Saudi women in the United States and Canada in regard to exercise and physical activity. No studies on exercise, physical activity or sport for women in Saudi Arabia were found in the literature.

This study focused on ascertaining knowledge of Saudi women regarding physical and psychological benefits of exercise and physical activity. Furthermore, this study investigated the barriers that limit Saudi women from participating in exercise and physical activity. The population for this study included Saudi women who are associated with Saudi clubs and student organizations in the United States and Canada.

A survey instrument was developed and distributed by mail to the fifteen Saudi clubs listed in the address book provided by the Cultural Mission of Saudi Arabia. All Saudi women members of these clubs were asked to participate in this study.

A MANOVA was run to determine if there were significant differences among Saudi women's attitudes and perceptions toward exercise and physical activity based on various demographic variables. Analysis of barriers to participation involved tabulating and calculating frequencies.

The results of this study showed that there were no significant differences between the independent variables (i.e. age, marital status, number of children, level of education, occupation, years in the United States or Canada, and level of participation), and the dependent variables (i.e. the importance of exercise for them and their interest in participation and their knowledge about the benefits of exercise and physical activity).

Implications of the results are discussed and recommendations for future research are suggested.

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CHAPTER I

INTRODUCTION

While sports participation has increased dramatically during the past few years in Saudi Arabia, this growth in athletic opportunities has been limited to half of the population. Women in Saudi Arabia are not permitted to participate in sports. In fact, there are no physical education programs for girls in Saudi Arabia (Alsagheir, 1999), and information about exercise and physical activity for Saudi women is scant.

Due to the Islamic law in Saudi Arabia, the mixing of sexes is forbidden in most situations. For example, boys and girls cannot share the same classroom starting from the first grade, and thus attend separate schools. Women are not allowed to appear in public uncovered or unveiled; wearing a 'Hijab' is required when appearing in society. According to the holy Qur'an, Islam strongly recommends that both men and women not stare at a person in an immodest way, but rather cast down their eyes, as the look in itself can be sexually alluring.

Also, a female should cover her body in public. Decent dress is an important part of good manners for Muslims. Islam has fixed a minimum level of decency for dress, mainly at times of prayer and devotion, when a woman must cover all her body except for her face, hands and feet. For most women, veils have a moral, religious and cultural connotation. While some women argue that Islam is the reason for wearing a veil, others insist it is more a question of values and tradition (Al-Munajjed, 1997).

Although the various constraints imposed by Islamic law reveal that it is difficult for women to participate in physical activities in public, it does not mean they cannot practice in private clubs or even in their homes. Given the fact that research has found

many physical and psychological benefits associated with an active lifestyle (Astrand, 1992; Bunker, 1991; Denys, 1999; Koivula, 1999; Wells, 1999; Williams & Moussa 1996), it is important for Saudi women to understand the positive effects of exercise and try to incorporate physical activities in the boundaries of their lives in Saudi society.

PURPOSE OF THE STUDY

The purpose of this study was to explore the attitudes and perceptions of Saudi women in regard to exercise and physical activity. Specifically, this study compared the attitudes (i.e., importance and interest) and perceptions (i.e., knowledge of physical and psychological benefits of exercise and physical activity) of Saudi women based on several demographic variables such as age, marital status, number of children, level of education, occupation, years in the United States or Canada, and level of physical activity. In addition, perceived barriers to exercise and physical activity for Saudi women were examined.

SIGNIFICANCE OF THE STUDY

There is no doubt that participating in exercise and physical activity is beneficial for both men and women. Saudi women, however, have limited opportunities to take part in such activities and there is a void in the literature on studies pertaining to exercise and physical activity for women in Saudi Arabia. Thus, the findings of this exploratory study may provide a better understanding of Saudi women's attitudes and perceptions toward exercise and physical activity. The results of this study may assist administrators and sport leaders in Saudi Arabia in being more responsive to the physical fitness needs of Saudi women so that they can enjoy the benefits of a more active lifestyle.

RESEARCH QUESTIONS

This study will seek answers to the following questions:

1. What are the attitudes (i.e., interest and importance of exercise and physical activity) and perceptions (i.e., knowledge of physical and psychological benefits of exercise and physical activity) of Saudi women toward exercise and physical activity?
2. Do Saudi women's attitudes and perceptions of exercise and physical activity differ based on age?
3. Do Saudi women's attitudes and perceptions of exercise and physical activity differ based on marital status?
4. Do Saudi women's attitudes and perceptions of exercise and physical activity differ based on parenthood status?
5. Do Saudi women's attitudes and perceptions of exercise and physical activity differ based on education level?
6. Do Saudi women's attitudes and perceptions of exercise and physical activity differ based on occupations?
7. Do Saudi women's attitudes and perceptions of exercise and physical activity differ based on number of years living in the United States or Canada?
8. Do Saudi women's attitudes and perceptions of exercise and physical activity differ based on level of participation in physical activities?
9. What are the perceived barriers that prevent Saudi women from participating in exercise and physical activity?

DEPENDENT AND INDEPENDENT VARIABLES

Seven independent variables were studied in this research. The independent variables were age, marital status, children, level of education, occupation, years in the United States or Canada, and level of participation. The dependent variables consisted of attitudes (i.e., importance and interest) and perceptions (i.e., knowledge about physical and psychological benefits) toward exercise and physical activity.

DELIMITATIONS OF THE STUDY

The study was delimited to Saudi women associated with Saudi Clubs or Saudi Student Associations in the United States and Canada. This population was chosen due to its accessibility. This study focused on attitudes and perceptions of these women toward exercise and physical activity. Sport was not included since there are no organized sports for women in Saudi Arabia

LIMITATIONS OF THE STUDY

Since this study is limited to Saudi women in the United States and Canada, the findings may not be generalizable to women living in Saudi Arabia. Limitations of survey research are threefold: a) ensuring that the questions to be answered were clear and not misleading; b) encouraging respondents to answer questions thoughtfully and honestly; and c) acquiring a sufficient number of the questionnaires completed and returned so that meaningful analyses can be made (Fraenkel & Wallen, 1996).

DEFINITION OF TERMS

Cultural Mission: The Royal Embassy of Saudi Arabia, Cultural Mission to the U.S.A. was established in 1951 to meet the educational needs of Saudi students who are pursuing

their higher education in the U.S.A. Also it is function as cultural liaison office between the U.S.A. and Saudi Arabia (SACM, 2000).

Exercise and Physical Activity: Movement of the human body that results in expenditure of energy, that someone does regularly in order to stay strong and healthy as an example of, walking and jogging (Anshel, Freedson, Haywood, Horvat & Hamill, 1991).

The General Presidency of Youth Welfare GPYW: The main organization that manages and organizes sports and physical activities for youth and adults, in Saudi Arabia (General Presidency of Youth Welfare, 1993).

The General Presidency for Girls Education: Responsible for all aspects of female education from primary level through higher education.

Hijab: Muslim women observe HIJAB (covering the head and the body) because *Allah* has told them to do so. The word "hijab" comes from the Arabic word "hajaba" meaning to hide from view or conceal. In the present time, the context of hijab is the modest covering of a Muslim woman.

Holy Qur'an: The book of Allah (GOD) for Muslims. It is a record of the exact words revealed by GOD through the Angel Gabriel to the Prophet Muhammad.

Sport: Organized play that is accompanied by physical exertion, guided by a formal structure, organized within the context of formal and explicit rules of behavior and procedures, and observed by spectators (Anshel et. al, 1991).

Veil: A thin material that women wear to cover their faces whenever they venture outside their homes. Decent dress forms an important part of good manners for Muslims. While both men and women are expected to be dressed modestly, the Qur'an explicitly addresses the dress code for women (Al-Munajjed, 1997).

CHAPTER II

BACKGROUND

INTRODUCTION

The role of women is a controversial issue in Saudi Arabia. The cultural and ideological norms associated with the tribal family system, in addition to the very strict interpretation of the Islamic laws by the Islamic reform movement, have restricted and prohibited women from contact with men, therefore, excluding them from most occupational roles outside the home. The lack of women's participation in public life is a result of traditional attitudes and social values that have a negative impact on the status of women (Al-Hazzaa, 1993).

The fact that Saudi women have become one of the most rapidly changing elements of society, however, makes the issue of women in Saudi Arabia one of particular interest. It is true that traditional norms and cultural and patriarchal values have shaped the role of women in Saudi Arabia. Nevertheless, for some Saudi women, education and work outside the home have provided new horizons beyond the traditional confines of marriage and motherhood, and this has had a positive effect on their behavior, self-esteem, aspirations and relations with others (Al-Munajjed, 1997).

During the past two decades, many studies have provided evidence which suggest that sport and physical activities can be very beneficial in relation to health and psychological well being (Blair, Kohl, Gordon & Paffenbarger, 1992; Willis & Frye-Campbell, 1992); however, it does not appear that Saudi women are becoming involved in sport or exercise despite the tremendous growth of sport in Saudi Arabia in the past

few years. Meanwhile, there are no physical education programs for girls in Saudi Arabia (Alsagheir, 1999).

WOMEN'S ROLE IN ISLAM AND IN SAUDI ARABIA

> [In Saudi Arabia, Islam acts as a major force in determining the institutional norms, patterns and structures of society. This is especially so since Islam is not only a religious ideology, but also a whole comprehensive social system embracing detailed prescriptions for the entire way of life. In addition, the impact of Islam is a major factor affecting the traditional position, obligations and privileges of women in Saudi Arabia.] (p.9), Al-Munajjed, (1997) stated.

Saudi Arabia is an Islamic country that embraces the legal, economic and social precepts of Islam. Under Islamic law, men and women have basic legal rights in terms of marriage, property, divorce, inheritance, education and work. In Saudi Arabia today a woman cannot be forced to marry against her will; she has the right to choose whether or not to marry the person proposed to her. She even keeps her own last name after marriage. A Saudi woman also has rights of ownership and disposal of property and wealth before and after marriage. She has the right to an education, and the right to work in one of a number of occupations, as long as it does not negatively affect her family responsibilities (Al-Munajjed, 1997).

Alsaad, (1982) states that it is clear that the guiding principle and the organizing structure of Saudi society stem from the teachings and tenets of Islam. However, it is of utmost importance that these teachings be used in a positive way to promote what is best in humankind and for societal growth rather than to restrict and inhibit. Until the end of

the 1950s, education was denied to women in Saudi Arabia based on what many believe to be the misinterpretation of Islamic teachings.

Many Saudi women want to make use of their university degrees. Thus, the number of workingwomen is increasing rapidly. In the public sector there are female university professors, mathematicians, scientists, teachers, administrators, nurses, doctors, media personnel and social workers (The Growing Role, 2000). In the private sector, women work in agriculture, banking, trade, real estate, interior design, pharmacology, biology and biochemistry. They own and manage boutiques, restaurants, beauty salons, tailoring establishments and even construction companies and manufacturing plants. When it comes to business activity, there is no distinction between the two sexes. Areas of business operations are open to both, and both enjoy the same facilities and services provided by the Saudi Council of Chambers of Commerce and Industry (The Growing role, 2000). However, tradition still plays a major role in restricting and protecting women in the light of public interest. For example, tradition discourages women from working as waitresses, plumbers, bus drivers, gas station attendants, janitorial workers, and similar jobs (Dahlan, 1990).

While great strides have occurred for Saudi women in regard to their careers, it appears that little progress has been made relative to their participation in exercise and physical activity. To better comprehend Saudi women's views and behaviors related to exercise and physical activity, it is important to understand education and sport in Saudi Arabia.

EDUCATION IN SAUDI ARABIA

Girls' education in Saudi Arabia officially began in 1959. That was because the Saudi society had previously had many objections to educating women. The government began paving the way towards this education through debates and dialogues in the society and the newspapers. They aimed at convincing people of the benefits of women's education. They also strove to demolish fears that this type of education might lead to disorder, mingling with men, or teaching what differs from Islamic injunctions (General Presidency for Girls' Education, 1977).

Attitudes toward the education of girls in a traditional society like that of Saudi Arabia may be seen in the types of roles assigned to women, such as being good housewives and mothers. Alsaad (1982) indicated that the historical development of prejudice against female education in Saudi Arabia, or elsewhere in the Arab world, owes its genesis to cultural attitudes and cannot be attributed to Islam. Now, however, males encourage their daughters and wives to finish their education to be good housewives and mothers. Many Saudis realize that society needs educated women, as it needs educated men (Al-Hazzaa, 1993). The need for having educated mothers and housewives is to help in building and strengthening the structure of an Islamic family. The firm structure of Islamic family life rests on four pillars: 1) Family life as a cradle of human society providing a secure, healthy and encouraging home for parents and the growing children. 2) Family life as guardian of the natural erotic desires of men and women, leading this powerful urge into wholesome channels. 3) Family life as the very breeding-place for human virtues like love, kindness, and mercy. 4) Family life as the most secure refuge against inward and outward troubles (The Secretary General, n.d.).

Girls' education began with the opening of fifteen elementary schools in some major cities along with a single class in the Elementary Institute of Teacher Preparation. Year after year, the numbers of schools began to increase and the numbers of female students doubled many times over until it superceded all plans and expectations. People were drawn toward women's education to the point that the number of educational establishments in 2000 became 13,893 schools, institutes, and colleges, which included 2,210,856 female students and 217,227 teachers and administrators (General Presidency for Girls' Education, 2000).

Despite the rapidly expanding plans for involving women in higher education, some traditional and social roles still influence both the philosophy of educational planning and the school curriculum. Many subjects reflecting the wife-mother role are taught. At the same time, development has opened up new opportunities for women to work, and the actual number of working women continues to rise.

PHYSICAL EDUCATION

Physical education in Saudi Arabia is one of the subjects that are taught in public schools for boys only. There are no physical education programs for girls in Saudi Arabia (Alsagheir, 1999). Alsagheir also states that the term physical education covers a wide range of activities that help people to be physically fit, emotionally stable, intellectually competent, and skillful. While these attributes are gender neutral, girls do not have the same opportunity to learn physical and psychological skills associated with exercise since physical education is not part of their school curriculum.

Societies and individuals have long recognized the importance of physical education and it has been part of many cultures. For primitive people, physical education was a vehicle of survival. Van Dalen and Bermeit (1971) noted, "To a large extent, general

education was physical education, in early societies for the environment made great demands on the physical condition of man" (p. 4). In order to obtain daily requirements, such as food and shelter, a person had to be physically fit; otherwise he could not survive.

Jewett, Bain, and Ennis (1995), and Pangrazi (1998) indicated that physical education can promote optimal growth and development. This growth includes the development of muscular strength, flexibility, endurance, and increased bone density. It can also help regulate weight control and improve body composition. Moreover, Henderson (1998) states, "All females, just like all males, should have the right to physical education. Education systems can provide opportunities for individuals to learn lifetime physical activity skills and to preview practices that constrain their lives" (p.17).

THE DEVELOPMENT OF SPORT IN SAUDI ARABIA

The introduction of a national education system in the 1950s was the first step in the development of modern sports in Saudi Arabia. As an integral part of the education system, sports spread throughout the country as new schools were built in large cities and small towns. In the late 1960s, a decision was made to establish a nationwide network of sports facilities that could be enjoyed and used by all. A further step in encouraging public participation in sporting activities was taken in 1974 with the establishment of the General Presidency of Youth Welfare (GPYW). That was a mandate to make sporting, recreational and cultural facilities and events accessible to young Saudis throughout the country and to get as many people interested and involved in these activities as possible (General Presidency for Youth Welfare, 1993). Since participation by women in public is very restricted, it appears that those sport facilities were built to be used by males only.

Rosandich (1991) stated that organized sport first appeared in coastal regions of Dhahran, Saudi Arabia (largely because of foreign presence brought by the oil companies), and Jeddah (because it was the largest port on the peninsula and gateway to the Holy cities of Makkah and Medina). Soccer was the first sport introduced in these locations in the mid-1940s, and slowly spread inland. Soccer was, and continues to be, the most important and popular game in Saudi Arabia although most participants are foreigners such as Sudanese and Indonesians. Gradually, additional sports such as basketball, volleyball, and track and field were added, but then, as now, these play a relatively minor role in the overall sport scene in Saudi Arabia.

Perhaps the single most important event that has impacted the development of sport in Saudi Arabia was the 1973 oil embargo, and a subsequent quadrupling of oil prices. One result of this action was that sport became a matter of first concern. A massive infusion of cash generated by high priced oil allowed the country to build sport facilities and start programs on a scale unparalleled in history. The second factor, which was far subtler, yet far reaching, was the drive for urbanization and industrialization. Throughout the country, cities expanded at phenomenal rates with accompanying shifts in population from countryside to these now expanded metropolitan centers. Without a doubt, as cities in Saudi Arabia grew, so did sports participation and spectatorship for men (Rosandich, 1991).

Saudi Arabia has been marked by dramatic changes over the course of the past decade. From a situation where this country had no sport tradition whatsoever, sport now plays a significant role in society. Saudi Arabia has made remarkable progress in the area of sport in the past few years. Sports participation and sport spectatorship have grown

substantially, and by all appearances shall continue to do so for the foreseeable future. Nevertheless, women's sport does not exist due to the unique setting and the role of women in Saudi Arabia with regard to the tradition and Islamic laws.

WOMEN'S SPORTS IN SAUDI ARABIA

In some Muslim countries, women's participation historically is limited because women are not permitted to expose any part of their body in public (Chappell, 1999). In most Islamic countries where sports are accessible to Muslim females, participation may only occur in single-sex schools; in many other schools there are no opportunities in which to participate (Chappell, 1999).

While the first public schools for women in Saudi Arabia opened in 1960 and the first female university graduates emerged in 1973 (Shaheen, 1989), physical education was not and is still not part of the curriculum. Additionally, opportunities for women to participate in sport and recreational activities in private club settings are limited not only because of the scarcity of facilities available for such purposes, but for a variety of other reasons as well. Some women fail to participate in physical activities because of reasons that relate to personal, social, and organizational constraints (Henderson, 1998).

This is not to say that sport opportunities are totally precluded for Saudi women. Women are beginning to realize benefits of exercise and recreational activity through the media, so interest in participation is slowly building. As Chappell (1999) stated, in Bahrain (a country close to Saudi Arabia) there has been a planned drive to develop women's sports. According to Hijris (1993) the number of sports centers opened for the exclusive use of women increased after a head of women's sport was appointed. However, if participation is to increase, the number of facilities available to women must

increase substantially. According to Henderson, Bialeschki, Shaw, and Freysinger (1996), as women receive more status in society, they should have more opportunities for physical activity. For the foreseeable future, however, it is unlikely that women's sport will ever be developed in Saudi Arabia to the point where there is organized competition on the international level (Rosandich, 1991).

BENEFITS OF EXERCISE FOR WOMEN

Among several definitions, Anshel, et al. (1991) defines physical activity as "the movement of the human body that results in the expenditure of energy at a level above the resting metabolic rate" (p. 64). The benefits derived from sport cannot be denied. Not only do they have physical and social benefits, but also essential psychological consequences. Wells (1999) states that the evidence now suggests there are many health benefits for females who become regularly involved in physical activity. Research (Koivula, 1999) has found that regular participation in physical activity contributes to physical and psychological well-being.

Research has revealed a positive relationship between exercise and psychological well-being. These positive effects have been explained by both psychological (e.g., feelings of competency and a sense of control) and physiological (e.g., reduction in muscle tension, increase in cerebral blood flow) mechanisms (Weinberg & Gould, 1999). Franks (1999) stated that the findings of recent scientific research were an explosion that has provided the basis for many reports that document the health benefits of regular physical activity. Many studies show that physical activity improves health, fitness, endurance, muscle strength, and cardiovascular health (Calmbach, Dahanda, Espino, Hazuda & Mouton, 2000). Exercise plays a role in prevention of heart disease as well as

other serious health problems (Dowling, 1996). In addition to the cardiovascular benefits, regular physical activity alleviates depression, reduces stress, reduces the number of fall-related injuries, and decreases the risk of hip fracture (Calmbach et al, 2000). Furthermore, Nicholas, Pearce, Pentony and Pilz (2001) reported that participating in sport and physical activity promotes a physically active lifestyle. Katonah and Flaxman (2001) found that there is a significant improvement in body attitudes and a significant decrease in depression from participating in physical activities.

Physical Benefits

Researchers have determined that exercise and physical activity is physiologically beneficial for human beings. Albanes, Blair, and Taylor (1989) found that physical activity involvement decreases the risk of colon cancer in men and breast and reproductive cancer in women. Also, Astrand (1992) indicated that participation in physical activity decreases the risk of cardiovascular disease especially Coronary Heart Disease (CHD). Wall and Murray (1989) explained that participation "in at least twenty minutes of activity three times or four times a week increases individual physical fitness, which is a combination of cardiovascular endurance, muscular endurance, muscular strength, and flexibility" (p.16). Improved health is one of the most important benefits of physical activity. For example, exercise can decrease the likelihood of developing diseases such as cardiovascular disease and adult-onset diabetes (Fontane, 1996). University of Washington researchers found that walking 30 to 45 minutes three days a week was enough to lower the risk of heart disease by 50 percent among older women, compared to their sedentary counterparts. Reduction in heart disease is not the only health benefit women enjoy from exercise. The 10-year-long Harvard study confirmed that

regular physical activity also helps women control high blood pressure, obesity, diabetes and stress (Denys, 1999).

Researchers at the University of Maryland have compared groups of women who have lost weight through caloric restriction alone to those who have done so with caloric restriction plus endurance exercise. They found that exercise counteracted the slowing of fat oxidation seen with caloric restriction alone. The same researchers found that some bone density is lost by women during weight loss, but those who lost weight with diet alone suffered more localized bone loss (in vulnerable parts of the hip) than did those women who lost weight with diet and exercise combined. Losing weight with diet and exercise combined might provide some protection against fracture risk (Exercise and weight loss, n.d.). Also, Williams and Moussa (1996) found that the more miles a woman runs, the greater the health benefits, including a more heart-healthy cholesterol profile, significant weight reduction, particularly around the waist and hips, and modest improvements in blood pressure.

Duncan, Gordon, and Scott (1991) conducted a study on 59 women to examine whether the quantity and quality of walking necessary to decrease the risk of cardiovascular disease among women differed substantially from that required to improve cardiorespiratory fitness. They found that walking at intensities that do not have a major impact on cardiorespiratory fitness might nonetheless produce equally favorable changes in the cardiovascular risk profile.

Psychological Benefits

Accumulating evidence suggests that exercise participation reduces tension and anxiety, elevates mood, improves one's coping ability, increases self-worth, and

promotes feelings of happiness (Willis & Frye-Campbell, 1992). Involvement in physical activity also plays a role in the development and building of children's self-confidence and self-esteem (Bunker, 1991). Also, a meta-analysis by McCullagh, North, and Mood (1988) found that participation in physical activity and sport significantly reduced depression.

Sport and exercise is one of the more heavily contested terrains today in the struggle by women for self-determination. Martin and Miller (1999) reported that workout routines, fitness clubs, and a new generation of exercise styles, many of them intended for women, have evolved in the second half of the twentieth century, particularly among the more privileged in affluent urban and suburban areas. Yet, many women feel stressed, tired, and dissatisfied with their lives. As Hochschild and Machung (1989) pointed out, leisure and physical activity is frequently the first thing to go when a woman feels stressed and tired.

Recent research has found that significant health benefits can be achieved by performing physical activities that are moderate in intensity and sporadic in duration (DHHS, 1996). Another recommendation provided by the American College of Sport Medicine (ACSM), Centers for Disease Control (CDC) and the Surgeon General states that adults should accumulate at least 30 minutes of moderate physical activity on most, if not all, days of the week (DHHS, 1996; Pate, Pratt, Blair, Haskill, Macera, & Bouchard, 1995). The new guidelines state that health benefits can be achieved by performing moderate-intensity leisure time activities such as jogging, bicycling, or swimming and/or physical activities of daily living such as house and yard work, as well as occupational related physical activities (Scharff, Homan, Kreuter, & Brennan, 1999).

According to Aragon (n.d.) who stresses that even if an individual has ten minutes, his or her energy level can be increased and stress minimized by exercising at home. Therefore, even if Saudi women do not have access to private fitness clubs, they can still obtain some health benefits by exercising at home.

In his study, Branch (1998), examined the effects of short-term and long-term exercise on self-esteem and stated that exercise not only improves health and promotes good health maintenance, but may also increase emotional stability and self-esteem. Psychological functions of the body may be further improved by exercise and exercise psychologists have studied the relation of anxiety and performance for decades. They have not reached definitive conclusions, but they have illuminated aspects of the process that have several implications for helping people mentally prepare and perform better. Exercise intensity appears to be important in determining how well exercise reduces state anxiety (Weinberg & Gould, 1999). Results of several research studies have found that exercise appears most helpful in relieving depression for subjects who are clinically depressed. Beyond anxiety and depression, other findings have emerged from research about the relation between various forms of exercise and changes on mood states, such as decreases in fatigue and anger, as well as increases in vigor, clear thinking, energy, alertness, and an increased sense of well-being (Weinberg & Gould, 1999).

BARRIERS TO PARTICIPATION

To understand lack of participation in exercise and physical activity, it is necessary to determine the barriers that limit the number of participants. Although there is a wealth of data describing determinants of physical activity, women have seldom been the focus of these studies (Sallis, Hovell, & Hofstetter, 1992). In the few studies focusing

on women, lack of time (Johnson, Corrigan, Dubbert, & Gramling, 1990), lack of support (Johnson et al., 1990), children (Verhoef & Love, 1994), family obligations (Verhoef & Love, 1994), and being older (Ebrahim & Rowland, 1999) have been found to be negatively associated with participation in physical activity.

In their study, Johnson et al. (1990) reported that the lack of time due to family, work, and social obligations was the most significant factor limiting women from exercise. Other barriers included low personal motivation, limited spouse and family support, and inconvenient exercise facilities, and high intensity exercise. In another study, Verhoef, Edgar, and Rose (1992) indicated that parenthood and marital status were significantly related to women's exercise and participation.

SUMMARY

Saudi Arabia is an Islamic country that embraces the legal, economic and social precepts of Islam. Under Islamic law, men and women have basic legal rights in terms of marriage, property, divorce, inheritance, education and work. The fact that Saudi women have become one of the most rapidly changing elements of society, however, makes the issue of women in Saudi Arabia one of particular interest. It is true that traditional norms and cultural and patriarchal values have shaped the role of women in Saudi Arabia. Nevertheless, for some Saudi women, education and work outside the home have provided new horizons beyond the traditional confines of marriage and motherhood, and this has had a positive effect on their life.

Despite the rapidly expanding plans for involving women in higher education, some traditional and social roles still influence both the philosophy of educational planning and the school curriculum. Physical education is one of the subjects that is

taught in public schools for boys only. Therefore, girls in Saudi Arabia do not have the same opportunity to learn physical and psychological skills associated with exercise since physical education is not part of their curriculum.

With the fact that sport now plays a significant role in society, Saudi Arabia has made remarkable progress in the area of sport in the past few years, however, opportunities for women to participate in sport and recreational activities in private club settings are limited not only because of the scarcity of facilities available for such purposes, but for a variety of other reasons as well.

Many studies have determined that exercise and physical activity are physically and psychologically beneficial for human beings. Saudi Arabia has made tremendous progress in terms of sports development over the course of the past few years; however, it appears that this development has benefited only half of the population. Saudi women fail to participate in physical activities because of reasons that relate to personal, social, and organizational constraints.

While many of the factors identified by Johnson et al. (1990) that limit women's participation in exercise may also apply to Saudi women, due to their unique culture and society, Saudi women may be affected by additional constraints. No studies were found on Saudi women's participation in exercise and physical activity. Thus, this study, which is exploratory in nature, will examine Saudi women's attitudes and perceptions toward exercise and physical activity in general. Also, it will investigate what Saudi women perceive to be the barriers preventing participation in such activities.

CHAPTER III

METHODOLOGY

The purpose of this chapter is to describe the methodological procedures for the investigation and answering of the research questions found in Chapter I. The methodology is described in relation to the following aspects of the study: a) research design, b) selection of the sample, c) instrumentation, d) translation of questionnaire, e) scale development, e) data collection procedures, f) operational definitions, and g) data analysis procedures.

RESEARCH DESIGN

The objective of this study is to investigate the attitudes and perceptions of Saudi women who are currently living in the United States or Canada toward exercise and physical activity. This was a descriptive study utilizing survey research. Survey research was used to assess interest in exercise and physical activity and importance placed on such activities, knowledge of physical and psychological benefits of exercise, and perceptions of barriers that Saudi women face relative to participation in physical activities. Comparisons among respondents were made based on varies demographic variables.

SELECTION OF SAMPLE

Population

Information about the population of this study was obtained from the Cultural Mission of Saudi Arabia. The Department of the Saudi Clubs and School Centers at the Cultural Mission provided the researcher with the addresses of Saudi clubs and student associations in the United States and Canada.

As the time of this study, there were fifteen Saudi clubs in different parts of the United States and Canada. Eleven clubs are located in different States of the United States with a total of 174 Saudi women, and four clubs in Canada with a total of 31 Saudi women. Most of Saudi women associated with these organizations are joining their spouses who are post-graduate students. Some of the Saudi women, however, are in North America for other purposes such as business or their own education.

Sample

Since there were fifteen Saudi clubs distributed throughout the United States and Canada, the entire population was used as the sample. All Saudi women members of those clubs were asked to participate in this study. Due to the purpose of this study and knowledge of the population, purposive sampling was used.

INSTRUMENT DEVELOPMENT

A questionnaire derived from literature regarding knowledge about exercise and physical activity was designed by the researcher to provide information about Saudi women's perceptions toward physiological and psychological benefits of exercise and physical activity.

The questionnaire was composed of four sections. Section One was designed to collect demographic information including age, marital status, number of children, level of education, occupation, and years in the United States and/or Canada. An indication of the level of participation in exercise and physical activity and the type of activity that one practices was identified in Section Two. The items in Section Three were designed to examine the knowledge of Saudi women about the physiological and psychological benefits of exercise and physical activity, as well as their interest in exercise and physical

activity and the importance it plays in their lives. The questions in Section Four explored some of the barriers that limit Saudi women from participation.

TRANSLATION OF QUESTIONNAIRE

To collect the data and examine the variables of this study, the questionnaire was first constructed in English. Since the native language of the respondents is Arabic, the questionnaire was then translated into Arabic. The researcher did the initial translation. The questionnaire was then reviewed by two Arab graduate students who study in the Department of Linguistics in the College of Education at Old Dominion University, an Arabian faculty member who teaches Arabic in the College of Education at ODU, and a Saudi business woman who has been working in the United States for over ten years.

SCALE DEVELOPMENT

Panel of Experts

The first version of the instrument was presented to a panel of experts in order to determine the face validity and content validity of the Attitudes and Perceptions of Saudi Women Toward Exercise and Physical Activity Questionnaire. These experts include the members of this thesis committee from Old Dominion University and two professors familiar with survey research, instrumentation and exercise behavior at The Ohio State University. These individuals were furnished with detailed information regarding the purpose of the study and specific directions to assist them in making judgments. They were asked to rate each item on the instrument as well as the instrument as a whole. They were also asked to categorize items under the four subcategories comprising the dependent variable (i.e., interest, importance, knowledge of physical benefits, and

knowledge of psychological benefits). The feedback from the panel of experts led to the elimination of two items and minor changes to the appearance of the instrument.

Pilot Test

The revised instrument was administered as a pilot test to a representative sample of the target population. The pilot test was sent to a convenience sample of all Saudi women who are members of Saudi Club of Norfolk, Virginia with a total of 26 participants. The Saudi women in the pilot test each received a packet containing a cover letter, the questionnaire, and a pencil. The cover letter contained information regarding: a) the person conducting the study and the affiliated university, b) the purpose of the study, c) the value of the study, d) assurance of anonymity, e) directions on returning the questionnaire, f) contact information, and g) grateful appreciation for the respondent's time and efforts.

The pilot test was limited to this area for several reasons: a) expense and time, b) ease of access and contact, and c) the typical setting of Saudi women in the United States and Canada, which makes the results of the pilot study applicable to women to other regions in the United States or Canada. Using the Arabic version allowed the researcher to check the weaknesses and strengths of the questionnaire in order to avoid the former and support the latter. The pilot study survey was distributed to all Saudi women members of the Saudi Club of Norfolk, Virginia (n=26). The 26 Saudi women responded to the questionnaire for a 100% overall return rate. Data collected from the pilot test were used to check the reliability of the questionnaire. The reliability method used for this study was Cronbach's alpha. Cronbach's alpha is used when items are summated to represent one variable such as with Likert-type scale. Reliability coefficients should be at least .7 and preferably higher (Nunnally, 1978).

The original version of the questionnaire comprised four subscales: 1) interest in exercise and physical activity, 2) importance of exercise and physical activity, 3) knowledge of the physical benefits of exercise and physical activity, and 4) knowledge of the psychological benefits of exercise and physical activity. Upon analysis of the pilot data, it was decided to collapse the four subscales into two. The first subscale measured interest and importance of exercise for Saudi women, and the second subscale assessed knowledge of physical and psychological benefits of exercise and physical activity. The reason for combining the interest scale and the importance scale into one subscale was that in the Arabic language, the phrases interest and importance have very similar meanings. In addition, reliability was improved by collapsing the four subscales into two.

The reliability coefficients of the four original subscales were calculated and are as follows: .83 for the interest scale; .61 for the importance scale; .53 for the knowledge of physical benefits scale; and .77 for the knowledge of psychological benefits scale. After the four subscales were combined into two subscales, the Cronbach's alpha were .84 for the first scale (interest and importance) and .76 for the second scale (physical and psychological benefits scale), both above the .70 benchmark (Nunnally, 1978) (Table 1).

Table 1. Reliability Measure from the Pilot Test (n=26)

No.	Subscale	Chronbach's Alpha
1	Interest	.83
2	Importance	.61
3	Physical benefits knowledge	.53
4	Psychological benefits knowledge	.77
5	Interest & importance	.84
6	Physical & psychological benefits knowledge	.76

In addition to testing the internal consistency of each subscale, item-total correlations were derived. In item-to-total correlations, each item was correlated with the total of the other items in its own subscale and with totals of other subscales. Items should correlate higher with their own scale than with others, and each item should correlate at least .25 with total score of its own scale. Based on the results of the item-to-total correlations, two items were eliminated.

DATA COLLECTION PROCEDURES

The data collection for the target population of this study followed Dillman's (1978) Total Design Method. Prior to the collection of data, approval was obtained from the Old Dominion University College of Education Human Subjects Review Committee and the Saudi Arabia Cultural Mission in the United States. A list of Saudi Club addresses in the United States and Canada was obtained from the Cultural Mission. The researcher first contacted a representative from each of the fifteen clubs by phone and e-mail to explain the purpose of the study and request assistance with the distribution and the collection of the surveys. The researcher then sent a packet of surveys to the contact person at each club.

The initial mailing of questionnaires was accompanied by a cover letter explaining the same information that was pointed out in the cover letter of the pilot study, and a self-addressed mail return envelope. The contact person handed out the surveys and the cover letter to all Saudi women among the community. He then collected them upon completion and mailed all back to the researcher. After seven days, follow-up letters were sent that served as a thank you to those who had already responded and a reminder for those who had not. Two weeks after the initial mailing, a letter, replacement

questionnaires, and another return envelop were sent to those clubs who had not responded.

OPERATIONAL DEFINITIONS

Operational definitions define terms by stating the actions, processes, or operations used to measure or identify examples of the term (Fraenkel & Wallen, 1996). This section includes the operational definitions for the attitudes and perceptions of Saudi women toward exercise and physical activity that were measured by the questionnaire that had been developed.

Independent variables included: age, marital status, number of children, level of education, occupation, and years living in the United States or Canada. The dependent variables included the attitudes (interest and importance of exercise and physical activity) and perceptions (knowledge of physical and psychological benefits of participating in exercise and physical activity).

Interest and importance were operationally defined as the mean score for items 1, 3, 4, 9, 11, 13, and 15 on the questionnaire. Knowledge of the physical and psychological benefits of exercise and physical activity was operationally defined as the mean score for items 2, 5, 6, 7, 8, 10, 12, 14, and 16.

DATA ANALYSIS

Data was coded for computer handling, and was analyzed using the program Statistical Package for Social Sciences (SPSS). Frequencies, means, and standard deviations were calculated. Reliability coefficients (Cronbach's alpha) were calculated for the two factors used to assess attitudes and perceptions toward exercise and physical activity. These factors included: 1) interest and importance, 2) knowledge of the physical

and psychological benefits of exercise and physical activity. Item-to-total correlations were checked for the two factors. A multivariate analysis of variance (MANOVA) was conducted to determine differences in attitudes and perceptions based on various demographic variables. Frequencies were calculated to assess the responses pertaining to barriers to participation in exercise and physical activity.

CHAPTER IV

RESULTS AND DISCUSSION

DEMOGRAPHIC INFORMATION

The data were obtained from the Saudi clubs or organizations in the United States and Canada. The survey was distributed to 205 Saudi women. The overall rate of response was 45% (N=93). The demographic characteristics considered in this study were analyzed using a sample frequency table (see Table 2).

The participants ranged from 18 to 50 years of age. For statistical reasons, the value of the age variable was divided into two groups. The first age group comprised women 27 years of age or younger (52%) and the second age group consisted of women 28 years of age or older (48%) (see Table 2). For the marital status, 84% were married and 16% (15) were unmarried. In regard to the highest level of education, 44% reported high school, 48% indicated college, and only 8% reported graduate level. The responses for the number of children each woman were divided into three categories. The first category included women who do not have any children (30%). The second category comprised women who had one or two children (30%). The third category consisted of women who had three children or more (40%). For the occupational variable, 37% of the women were students, while 55% were housewives, and only 9% had other occupations.

In terms of number of years lived in the United States and Canada, 40% reported that they have been in the U.S or Canada for less than two years, while 27% stated that they have lived in the U.S or Canada for two to four years, and 33% had been in the U.S or Canada for more than four years. As for the level of participation in physical activity, 12% of the respondents indicated that they do not participate in any physical activities,

while 81% reported that they exercise sometimes or occasionally, and only 8% stated that they usually or regularly participate in exercise or physical activities.

Table 2. Frequency and Percentage of the Demographic Variables

No.	Variable		Frequency	Valid percentage
1	Age	27 years and younger	48	51.6
		28 years and older	45	48.4
2	Marital status	Married	78	83.9
		Not married	15	16.1
3	Level of education	High school	41	44.1
		College	45	48.4
		Graduate	7	7.5
4	Number of children	No children	28	30.1
		One or two children	28	30.1
		Three children or more	37	39.8
5	Occupation	Student	34	36.6
		Housewife	51	54.8
		Other	8	8.6
6	Number of years in the U.S or Canada	Less than 2 years	37	39.8
		2 – 4 years	25	26.9
		More than 4 years	31	33.3
7	Level of participation	Never	11	11.8
		Sometimes or occasionally	75	80.6
		Usually or regularly	6	7.5

As for the level of participation in section two, the original version of the questionnaire comprised five levels of participation that ranged from never to regularly; however, due to conceptual and statistical reasons, it was decided that for this study, the five levels would be collapsed into three levels. The first level included "never exercise", the second level included "sometimes and occasionally", and the third level included "usually and regularly", (See Table 3).

Table 4. Descriptive Statistics for the Interest / Importance Scale and Knowledge Scale as Perceived by All Participants

	N	Range	Min.	Max.	Mean		Std. Deviation	Variance
					Statistic	Std. Error		
INT/IMPSCALE	93	3.14	1.86	5.00	4.0799	6.815E-02	.6572	.432
KNWSCALE	93	2.67	2.33	5.00	4.1816	5.710E-02	.5507	.303
Sum					4.12		.60	

Descriptive statistics generated from the Interest / Importance Scale and Knowledge Scale indicated that the general mean of Saudi women' responses was (M= 4.12). As can be seen in figure 1, the majority of Saudi women have positive attitudes (M = 4.07) and positive perceptions (M=4.18) toward exercise and physical activity.

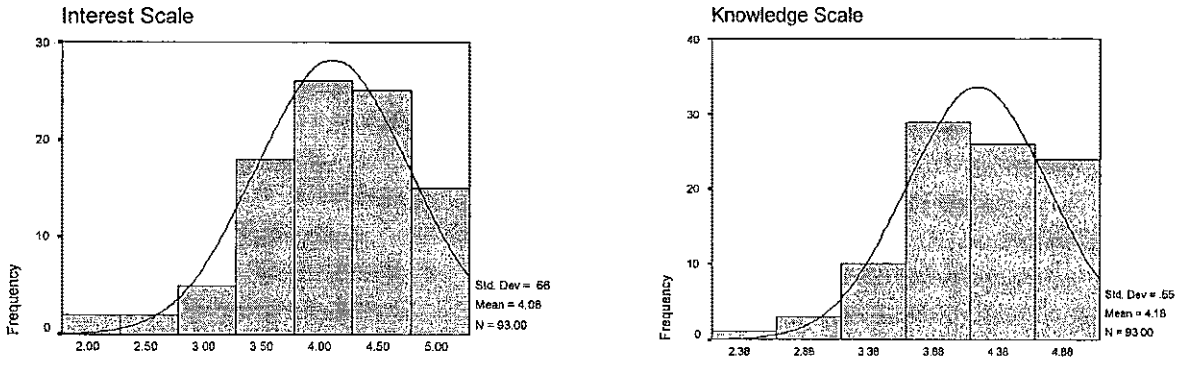

Figure 1. Histogram of Interest / Importance Scale and Knowledge Scale

The Cronbach's alpha reliability coefficient for the Interest / Importance Scale was .80, while the reliability for the Knowledge Scale was .83, and both were above the .70 benchmark (Nunnally, 1978) (see Table 5).

As for the type of activity, the results indicated that walking was the activity that most Saudi women used for exercise.

Table 3. Frequency and Percentage of the Level of Participation

Variable		Frequency	Valid percentage
Level of participation (N=93)	Never	11	11.8
	Sometimes	44	47.3
	Occasionally	31	33.3
	Usually	5	5.4
	Regularly	2	2.2

DESCRIPTIVE STATISTICS

Research question #1 was stated as follows: What are the attitudes (i.e., interest and importance) and perceptions (i.e., knowledge of physical and psychological benefits) of Saudi women toward exercise and physical activity? In order to provide details about this question, it is essential to indicate some descriptive statistics. Table 4 illustrates the mean and the standard deviation of Saudi women's responses with regard to their attitudes and perceptions toward exercise and physical activity. The Interest / Importance Scale and Knowledge Scale were utilized as the dependent variables.

Table 5. Reliability Measure of the Main Questionnaire (n=93)

No.	Subscale	Chronbach's Alpha
1	Interest / Importance	.80
2	Knowledge	.83

Table 6 indicates the mean scores and standard deviations of the Interest / Importance Scale regarding age group, marital status, level of education, number of children, occupation, years in the U.S. or Canada, and level of participation.

Table 6. The Means and Standard Deviations of the Interest / Importance Scale by Demographic Variables

No.	Variable		M	SD
1	Age	27 years and younger	4.09	.63
		28 years and older	4.06	.68
2	Marital status	Married	4.05	.68
		Not married	4.19	.47
3	Level of education	High school	4.12	.67
		College	3.99	.66
		Graduate	4.36	.45
4	Number of children	No children	4.12	.57
		One or two children	3.88	.72
		Three children or more	4.19	.64
5	Occupation	Student	4.18	.53
		Housewife	3.98	.72
		Other	4.25	.66
6	Number of years in the U.S or Canada	Less than 2 years	3.98	.70
		2 – 4 years	3.83	.68
		More than 4 years	4.39	.42
7	Level of participation	Never	3.71	.68
		Sometimes or occasionally	4.07	.64
		Usually or regularly	4.67	.34

Mean scores and standard deviations for these same variables in relation with the Knowledge Scale are shown in Table 7.

Table 7. The Means and Standard Deviations of the Knowledge Scale by Demographic Variables

No.	Variable		M	SD
1	Age	27 years and younger	4.14	.54
		28 years and older	4.22	.56
2	Marital status	Married	4.14	.57
		Not married	4.38	.37
3	Level of education	High school	4.17	.54
		College	4.17	.54
		Graduate	4.26	.71
4	Number of children	No children	4.17	.44
		One or two children	3.96	.65
		Three children or more	4.35	.48
5	Occupation	Student	4.21	.47
		Housewife	4.09	.59
		Other	4.59	.43
6	Number of years in the U.S or Canada	Less than 2 years	4.11	.57
		2 – 4 years	4.02	.52
		More than 4 years	4.38	.50
7	Level of participation	Never	3.96	.56
		Sometimes or occasionally	4.18	.52
		Usually or regularly	4.52	.66

Research questions #2 – #8 pertained to Saudi women's attitudes and perceptions of exercise and physical activity according to their age group, marital status, level of education, number of children, occupation, years living in the United States or Canada, and level of participation. A MANOVA was performed to answer these research questions. The aforementioned demographic variables were the independent variables

while the Interest / Importance Scale and the Knowledge Scale were the dependent variables. Results of the MANOVAs can be seen in Table 8.

Table 8. Summary of Multivariate and Univariate Statistical Test

No.	Independent Variable		MANOVA	Univariate	
				INT-Scale	KNO-Scale
1	Age group	27 and younger 28 and older	.513	.783	.494
2	Marital status	Married Not married	.277	.480	.118
3	Level of education	High school College Graduate	.551	.332	.908
4	Children	No children 1 or 2 children 3 or more child	.073	.152	.016
5	Occupation	Student Housewife Other	.099	.269	.051
6	Years in the U.S. or Canada	Less than 2 years 2 to 4 years More than 4 years	.065	.003	.034
7	Level of participation	Never S/times/Occasionally Usually/Regularly	.052	.009	.114

Using Wilk's Lambda for the multivariate test, there were no significant differences for any of the independent variables at the .05 alpha level. Univariate analysis, however, revealed a significant difference ($\alpha = .016$) on the Knowledge Scale based on number of children (see Figure 2).

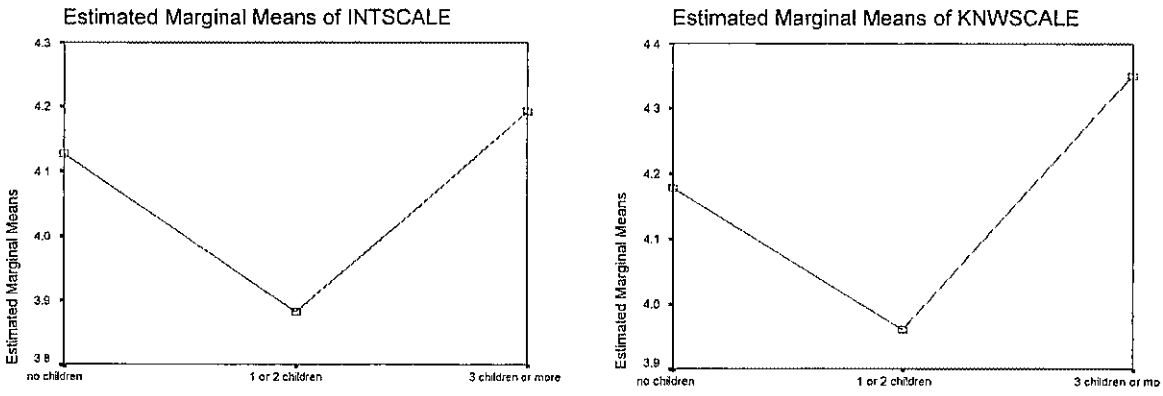

Figure 2. Estimated marginal means of Interest / Importance Scale and Knowledge Scale

The Univariate analysis of number of years in the United States or Canada shown in Figure 3 revealed a significant difference on both the Interest / Importance Scale (α = .003) and the Knowledge Scale (α = .034).

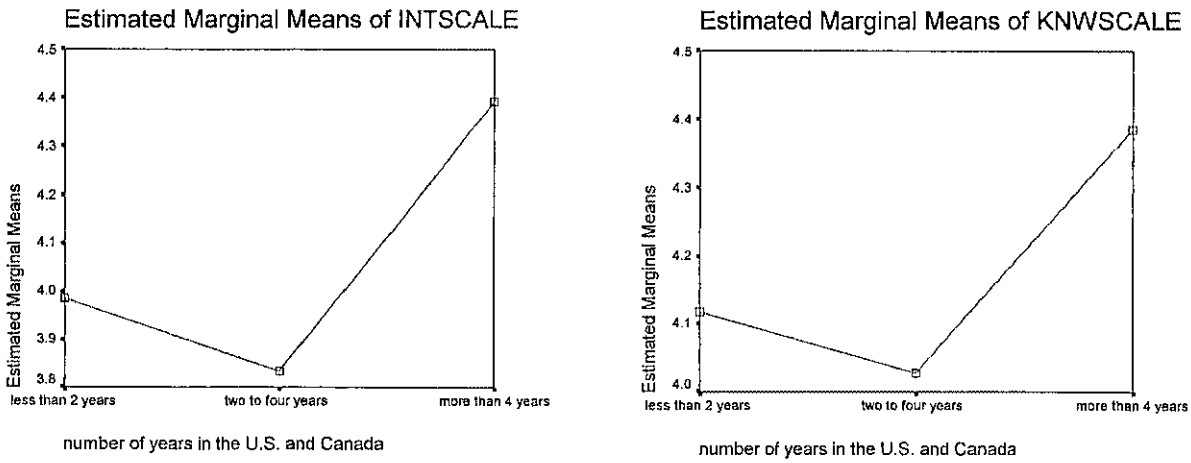

Figure 3. Estimated marginal means of Interest / Importance Scale and Knowledge Scale for years in the U.S. and Canada

The figures above show that women who had been in the U.S or Canada for two to four years had the lowest mean scores on both the Interest / Importance Scale (M=3.83) and Knowledge Scale (M=4.02). Mean scores were highest for the Interest / Importance Scale (M=4.39) and for the Knowledge Scale (M=4.38), for women who had been in the U.S or Canada for more than 4 years.

The final Univariate analysis that indicated a significant difference (see Figure 4) was level of participation on the interest scale ($\alpha = .009$). There was a positive linear relationship between level of participation and the mean scores for both the Interest / Importance Scale and the Knowledge Scale. That is, as the level of participation increased, the attitudes toward exercise and physical activity became more favorable and perceptions pertaining to knowledge of physical and psychological benefits increased.

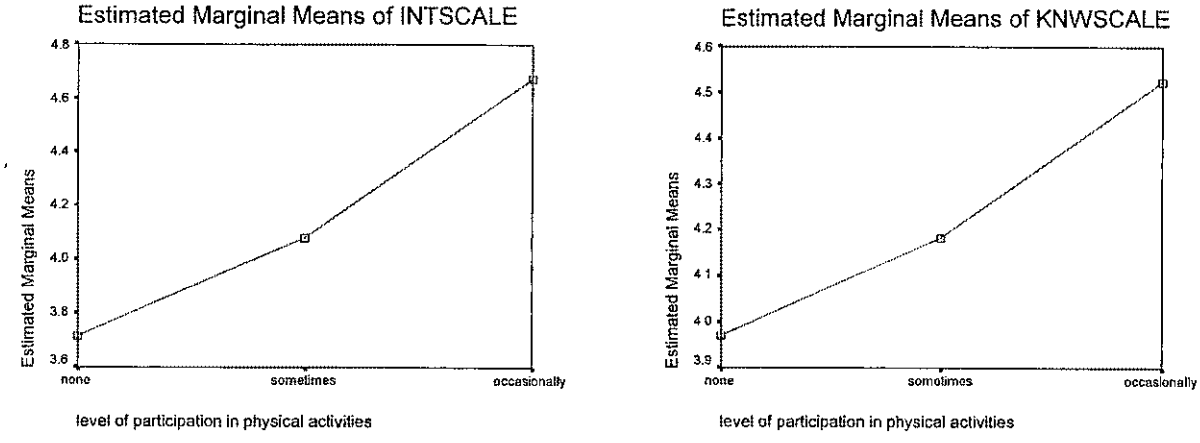

Figure 4. Estimated marginal means of Interest / Importance Scale and Knowledge Scale for level of participation

For the final research question, the perceived barriers that prevent Saudi women from participating in exercise and physical activity, frequencies were calculated and are shown in Table 8. By analyzing the frequencies of all barriers, the highest percentages of the most important barrier that the participants perceived were identified. The five most important barriers were found and ranked as follows: Lack of time was perceived as the most important barrier (31%) followed by the lack of appropriate place to exercise (28%), lack of interest in participating in exercise and physical activity (15%), tradition and social customs (12%), and lack of family support (7%). These were deemed to be the factors that most limited participation of Saudi women in exercise and physical activity (see Table 9 and Figure 5).

Table 9. Frequency and Percentage of the Most Important Barriers

No.	Barrier	Frequency	Percent
1	Lack of time	29	31.2%
2	Lack of appropriate places	26	28.0%
3	Lack of interest in exercise and physical activity	14	15.1%
4	Traditions and social customs	11	11.8%
5	Lack of family support	6	6.5%
6	Lack of energy	4	4.3%
7	Fear of femininity risk	4	4.3%
8	Lack of knowledge about benefits	3	3.2%
9	Fear of getting injured	1	1.1
10	Other	-	-

The barriers that were perceived as the least important for Saudi women were as follows: lack of energy (4%), fear of femininity risk (4%), lack of knowledge about physical and psychological benefits (3%), and fear of getting injured (1%).

Under the category of "Other," a number of responses were written in. The responses were written as general statements. The most common response (n=6) related to religious obligations, such as praying (praying in Islamic religion is performed with fixed movements, which include bowing, prostration, and some other movement with a fixed procedure). Also, four of the responses indicated that not having a physical education program for girls in Saudi Arabia contributed to lack of information about exercise and physical activity benefits.

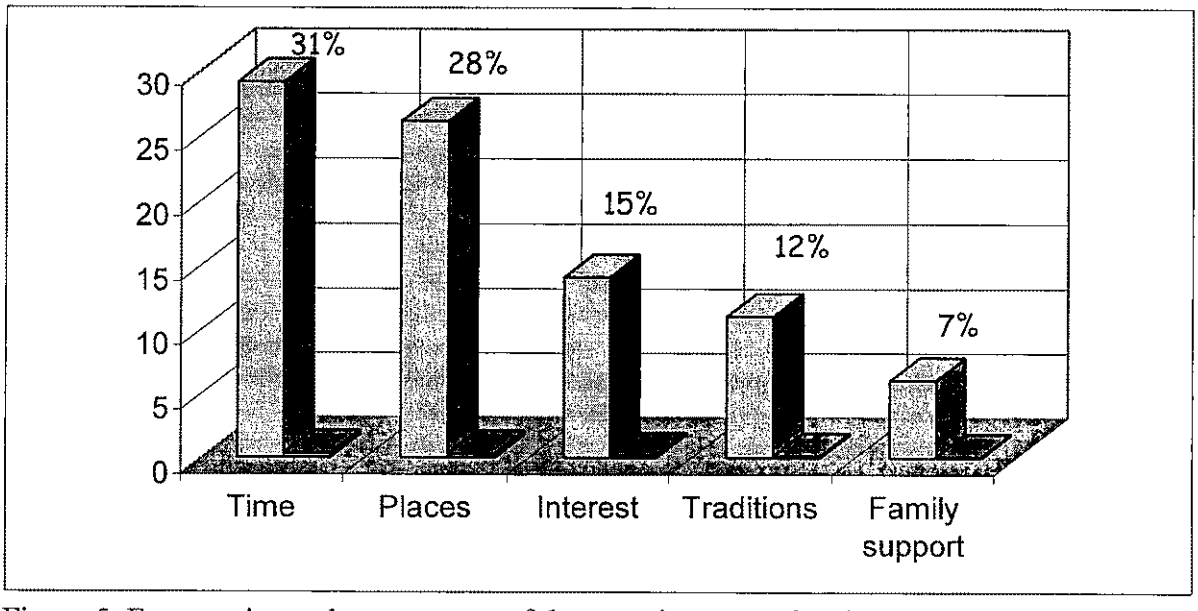

Figure 5. Frequencies and percentages of the most important barriers

SUMMARY OF RESULTS

The main objective of this study was to examine the attitudes and perceptions of Saudi women in the United States or Canada toward exercise and physical activity, and to investigate whether there were differences in Saudi women' attitudes (i.e. interest and

importance) and perceptions (i.e. knowledge of physical and psychological benefits) based on demographic characteristics (age group, marital status, number of children, level of education, occupation, years in the United States or Canada, and level of participation). Moreover, this study aimed to explore barriers that limit Saudi women from participating in exercise and physical activity.

The data of this study were collected from Saudi women who were living in the United States or Canada. All Saudi women associated with the fifteen Saudi clubs or Saudi organizations were selected to participate in this study. Of 205 questionnaires distributed to Saudi women, 93 questionnaires were sent back to the researcher by the cut-off date for a return rate of 47%. Although the return rate seemed to be acceptable for such a study, it should be noted that many Saudi families have left the United States after the attack of September 11th, 2001 because of the unsecured situations and critical circumstances.

A questionnaire developed by the researcher was used as the instrument of this study. A 16-item questionnaire derived from the literature regarding interest in participation and knowledge of physical and psychological benefits of exercise and physical activity was designed to provide information about Saudi women's attitudes and perceptions. The questionnaire was composed of four sections. Section One requested some demographic information including age, marital status, level of education, occupation, parenthood, and years in the United States or Canada. Section Two asked for the level of participation and the type of exercise. The 16 items in Section Three were designed to measure the attitudes and perceptions in regard to exercise and physical activity. These items covered the two factors; Interest / Importance Scale (items 1, 3, 4, 9,

11, 13, and 15), and Knowledge Scale (items 2, 5, 6, 7, 8, 10, 12, 14, and 16). Finally, Section Four was created to investigate barriers that prevent Saudi women from participating in exercise and physical activity.

DISCUSSION

There are several points found in this study that deserve attention. First, the results indicated that Saudi women in the United States and Canada have positive attitudes (interest in participating in exercise and physical activity) (M= 4.07), and perceptions (knowledge of the physical and psychological benefits) (M= 4.18) toward exercise and physical activity. With regard to the fact that these women did not receive any physical education as girls, the results were a little higher than expected. Perhaps these high score could be attributed to the fact that these women had spent time in the United States or Canada and subsequently had the opportunities to gain more knowledge regarding the benefits of exercise and physical activity. Nevertheless, further research is needed to determine if, in fact, this assumption is true.

Second, although multivariate analyses revealed no significant differences, univariate analyses showed a few significant differences in Saudi women' attitudes and perceptions toward exercise and physical activity. These findings along with non-significant results will be discussed next. There was no significant difference between the two age categories and the women' attitudes and perceptions. This indicates that Saudi women of different ages have positive perceptions and are interested in participating in exercise and physical activity.

Marital status had no effect on the women' attitudes and perceptions. As was stated in Chapter III, most of the women were joining their spouses, therefore the

majority of the participants were married (84%). This created two distinctly different cell sizes, which may have affected the analysis. A larger sample size in future studies may help in providing more insight on the effects of marital status.

There were no differences between the level of education and the women's attitudes and perceptions. This finding showed that women with various levels of education had a positive attitude and perception toward exercise and physical activity. More highly educated women had slightly higher mean scores in their attitudes and perceptions in comparison to those with lesser education. Future studies should continue to examine this factor.

The difference between the number of children a woman had and the Knowledge Scale was significant. The result showed that women who had 3 children or more had a higher mean score in terms of perceptions than those who had 1 or 2 children. The reason for this difference could be because women with 1 or 2 children may be busy taking care of their young children, while women who had 3 children or more have the experience to manage their lives and may be more capable to look for their health care. Age of the children, which was not included on the questionnaire, would help in interpreting this result.

There were no significant differences in attitudes and perceptions based on occupations. The number of respondents indicating an occupation other than student or housewife was small ($n = 8$). A larger sample that includes women working outside the home is needed in order to draw any conclusions regarding the attitudes and perceptions of professional women.

The years in the United States or Canada had a significant univariate effect on attitudes and perceptions. The results showed that the longer Saudi women lived in the United States or Canada, the higher their mean scores in terms of attitudes and perceptions toward exercise and physical activity. This finding was expected with regard to the fact that living is societies that are more developed in terms of exercise and physical activities, such as American and Canadian societies could have a great impact on perceiving the importance of participating and the need for being more educated about the physical and psychological benefits of exercise.

With respect to the level of participation and the women' attitudes and perceptions toward exercise and physical activity, there was a significant difference. The results showed that women with higher mean scores in their attitudes and perceptions are engaging in exercises and physical activities more than the women with lower mean scores in terms of attitudes and perceptions. A possible reason for women with lower mean scores not participating in exercise and physical activity as much as those with higher mean scores may be due to lack of knowledge and interest, but there might be some other important reasons that prevent them from participating. In fact, the last section of the questionnaire was intended to examine barriers that limit Saudi women from participation. Therefore, although they may have interest in participation and knowledge about exercise and physical activity, they might have some barriers that limit their participation.

PERCEIVED BARRIERS

The final section of this research examined that the barriers that were perceived as impeding participation in exercise and physical activity. The results indicated that time

was the most important barrier that prevented Saudi women from participation. This result is consistent with the findings reported by Johnson, et al., (1990), who concluded that time was one of the most important barriers that prevented women from participating in physical activities.

The second most important barrier was the lack of appropriate places for women to exercise. Due to the fact that mixing of sexes is forbidden in most situations because of the Islamic law, and because women should not share with men or participate in public uncovered or unveiled, finding an appropriate place to exercise is problematic even for Saudi women in the United States or Canada. This result was consistent with Johanson, et al. (1990) who reported that inconvenient exercise facilities played a role in limiting women from exercise. Therefore, establishing appropriate places for women to exercise would probably increase their interest in participation.

This study found that lack of interest is another barrier that limited Saudi women from exercising. This finding is in the line with Johanson, et al. (1990) who stated that low personal motivation was one of the most significant factors that limited women from exercise. If physical education was provided for girls and women in Saudi Arabia, perhaps their interest would increase.

Social customs and traditions were also perceived as important barriers to participation. This result was not surprising. Al-Hazzaa (1993) stated that the lack of women's participation in public life is a result of traditional attitudes and social values that have a negative impact on the status of women. Women should not break the Islamic law by participating in public uncovered; however, they still can gain benefits by exercising at home. As stressed by Aragon (n.d.), an individual's energy level can be

increased and stress minimized by exercising for as little as ten minutes at home. Also, if fitness centers for women only existed in Saudi Arabia, this would be another way for Saudi women to enjoy the benefits of exercise without compromising social customs or traditions.

Finally, yet to a lesser extent, lack of family support was perceived as a barrier to exercise and this finding is supported in the literature. Verhoef and Love (1994) found that family obligations were significant barriers that limited women from participating in exercise. Also, Johanson, et al. (1990) reported in their study that lack of support was one of the major barriers preventing women from exercising.

CHAPTER V

SUMMARY AND CONCLUSIONS

This research was conducted to examine the attitudes and perceptions of Saudi women toward exercise and physical activity. This research was exploratory in nature. No previous studies on this population in regard to exercise and physical activity were found; therefore, it is highly recommended to extend the investigation regarding Saudi women's participation in exercise and physical activity.

Although there were significant differences found in the univariate analysis for number of children, years in the United States or Canada, and for level of participation, no significant differences were found in the multivariate analysis and thus these results must be interpreted with caution. Replicating this study with a larger sample will provide more data from which to examine the variables of interest.

It should be noted that the mean score for the Interest / Importance Scale and the Knowledge Scale were relatively high indicating favorable attitudes and perceptions toward exercise and physical activities. Thus, most Saudi women in this study, young and old, married or unmarried, with children or without, with different levels of education, and who lived in the United States or Canada for less than two years or more than four years, seemed to be interested in exercise and physical activity and have knowledge of benefits of participation.

While the indicators for interest and knowledge regarding exercise and physical activity were fairly high, regular participation in fitness activities was low. Only 8% of the respondents reported that they exercised usually or often. More research is needed to examine the relationship between interest, knowledge, and actual participation for this

population. It is recommended that qualitative measures such as in-depth interviews and focus groups be employed to glean a better understanding of how Saudi women feel about exercise and the barriers that prevent their participation.

Although the sample used in this study consisted of Saudi women temporarily living in the United States or Canada, the population of prime interest to the researcher is Saudi women living in Saudi Arabia. Therefore, future studies should use random samples of women currently living in Saudi Arabia.

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APPENDIX A

COVER LETTER, CATEGORIZATION FORM, AND COMMENT FORM PROVIDED TO THE PANEL OF EXPERTS

September 5, 2001

Dear

I am conducting a study to examine the knowledge and perception of Saudi women in the United States and Canada in regard to exercise and physical activity. A questionnaire been developed to perceive their perceptions toward exercise and physical activity. Their attitudes and perceptions may be of interest to sport leaders in Saudi Arabia in order to provide and establish a better service to increase the development of sport society in Saudi Arabia.

The purpose of this study is to explore the attitudes and perceptions of Saudi women in regard to exercise and physical activity. Specifically, this study will compare the attitudes (i.e., importance and interest) and perceptions (i.e., knowledge of physical and psychological benefits of exercise and physical activity of Saudi women) based on several demographic variables such as age, marital status, children, level of education, occupation, years in the United States or Canada, and level of physical activity. In addition, perceived barriers to exercise and physical activity for Saudi women will be examined

Your expertise is requested in helping to establish face validity of Saudi women' attitudes and perceptions toward exercise and physical activity survey which is the instrument that will used to measure the attitudes and perceptions of Saudi women. Enclosed you will find a draft of the survey, a questionnaire, and a categorization and comment form. It would be greatly appreciated if they could be returned by September 13, 2001.

Thank you for your assistance.

Sincerely,

Survey to Examine Saudi Women's Attitudes and Perceptions Toward Exercise and Physical Activities

II- Please categorize each item by marking √ under the appropriate category

No.	Statement	Interest	Importance	Physical benefits	Psychological benefits
1	Exercise and physical activities are not very interesting to me.				
2	I am not familiar with the physical benefits associated with participation in exercise or physical activities.				
3	To me, exercise or participation in a physical activity is an interesting pastime				
4	Exercise and physical activity will keep my health in good condition.				
5	I think it is important for women to include exercise or physical activity in their daily life.				
6	Participation in physical activity and exercise can reduce depression.				
7	I think it is important to encourage girls to participate in exercise and physical activities				
8	Exercise and physical activity done on a regular basis, help women achieve and maintain physical fitness.				
9	Exercise and physical activity can improve a women's level of confidence.				
10	Exercise and physical activities will allow me to control my weight.				
11	I think it is important for women to exercise and participate in some physical activities				
12	Exercise and physical activity will help in the development of intellectual and mental conditions.				
13	Participation in exercise and physical activity decreases the risk of heart disease.				
14	Exercise and physical activity will help to release tension and frustration.				
15	Exercise and physical activity are very exiting to me.				
16	I am not familiar with the psychological benefits associated with participation in exercise or physical activities.				
17	I have no interest in exercise or physical activity.				
18	I don't think it is important for women to exercise and participate in physical activity				

Attitudes and Perceptions of Saudi Women in the US and Canada Toward Exercise and Physical Activity

Please read the enclosed questionnaire and respond to the following statements in the space provided. Feel free to write directly on the instrument. Any suggestions for improvement will be appreciated.

The purpose of this study is to measure the attitudes:

a) Importance of exercise and physical activity.
b) Interest in exercise and physical activity.

And perceptions:

c) Knowledge of physical benefits of exercise and physical activity.
d) Knowledge of psychological benefits of exercise and physical activity.

1- Given the purposes of this survey, do you think the questions on the survey collect the information needed? Why or why not?

2- Is the phrasing and terminology clear and easy to understand?

3- Are the directions easy to follow?

4- Is the survey attractive and neat?

5- a) Is the survey long to be comfortably completed in one sitting?
b) Approximately how long would it take you to complete?

6- Is there any important information that may be missing?

7- Are there any statements or categories that should be added or deleted? If so, please, explain.

8- Please include any other comments relevant to the improvement of this survey.

Thank you very much for your time and assistance.

Tawfeeq Al-Bakry

APPENDIX B

COVER LETTER AND COMMENT FORM FOR PILOT STUDY

Old Dominion University
Department of Exercise Science, Physical Education, and Recreation
Norfolk, Virginia 23529

September 2001

Dear Ms.,

I am conducting this survey, the purpose of which is to determine the perceptions of Saudi women residing in the United States or Canada toward exercise and physical activity with regard to: 1) interest, 2) importance, 2) physical benefits, and 3) psychological benefits of participation in exercise and physical activity. Also, the survey will determine barriers that limit their participations.

Your assistance is requested in helping to establish reliability for this study by simply completing the enclosed questionnaire. For statistical reasons, each participant will be asked to complete the survey twice. In one week after you complete this survey you will be asked again to answer the same survey.

Your participation is entirely voluntary. You may refuse to answer any questions and may withdraw from completing the questionnaire at any time. You may be assured of complete confidentiality. The questionnaires will NOT be made available to anyone other than the researcher. Do NOT include your name or identification number on either survey instrument. Individual responses will not be identified or reported. Any discussion of results will be based on group data. It is estimated that each questionnaire will take approximately 10 minutes to complete. Upon completion, return both of the questionnaires to the person who asked you to fill then out

Your participation in this pilot test and re-test is highly appreciated. Feel free to contact me if you have any questions for concerns. Thank you.

Sincerely,

Tawfeeq Al-Bakry

Attitudes and Perceptions of Saudi Women in the U.S. and Canada Toward Exercise and Physical Activity

Please read the enclosed questionnaire and respond to the following statements in the space provided. Feel free to write directly on the instrument. Any suggestions for improvement will be appreciated.

i.Is the phrasing and terminology clear and easy to understand?

ii.Are the directions easy to follow?

iii. a) Is the survey long to be comfortably completed in one sitting?

b) Approximately how long would it take you to complete?

iv. Are there any statements or categories that should be added or deleted? If so, please, explain

v. Please include any other comments relevant to the improvement of this survey

Thank you very much for your participation.

APPENDIX C

COVER LETTER FOR MAIN STUDY AND THE SURVEY IN ENGLISH

Old Dominion University
Department of Exercise Science, Physical Education, and Recreation
Norfolk, Virginia 23529

September 2001

Dear Ms.,

I am conducting this survey, the purpose of which is to determine the perceptions of Saudi women residing in the United States or Canada toward exercise and physical activity with regard to: 1) interest and importance, 2) physical and psychological benefits of participation in exercise and physical activity. Also, the survey will determine barriers that limit their participations.

Your assistance is requested in helping to assess your perceptions and attitudes toward exercise and physical activity by simply completing the enclosed questionnaire.

Your participation is entirely voluntary. You may refuse to answer any questions and may withdraw from completing the questionnaire at any time. You may be assured of complete anonymity. The questionnaires will NOT be made available to anyone other than the researcher. Do NOT include your name or identification number on either survey instrument. Individual responses will not be identified or reported. Any discussion of results will be based on group data. It is estimated that each questionnaire will take approximately 10 minutes to complete. Upon completion, return the questionnaires to the person who asked you to fill them out.

Your participation is highly appreciated. Feel free to contact me if you have any questions for concerns. Thank you.

Sincerely,

Tawfeeq Al-Bakry

Survey to Examine Saudi Women's Attitudes and Perceptions Toward Exercise and Physical Activity

Please refer to the following definition when completing this questionnaire:

Exercise and physical activity: *movement of the human body that results in the expenditure of energy to stay strong and healthy, such as walking, jogging, swimming, aerobics, cycling, etc.*

I. Please Circle the letter that indicates your answer or ***fill in*** the blank space provided:

1. Your age: (_____)

2. Marital Status:
   a) Married
   b) Single
   c) Other: _____

3. Level of Education:
   a) High School
   b) College
   c) Other: _____

4. How many children do you have? (_____)

5. Occupation:
   a) Student
   b) Housewife
   c) Other: _____

6. Years in the US and/or Canada:
   a) Less than 2 years
   b) 2 –4 years
   c) More than 4 years

II. **a)** Please Circle the appropriate number that reflects your answer:

	Never	Sometimes	Occasionally	Usually	Often
How often do you exercise?	1	2	3	4	5

b) What type/s of activities do you participate in?
You can ***circle*** more than one choice and/or ***fill*** in the blank:

1. None 2. Walking 3. Jogging 4. Swimming

5. Other/s: _____

III. Please Circle the number that indicates your answer using the following scale:

(1) Strongly **Dis**agree (2) **Dis**agree (3) Neutral (4) Agree (5) Strongly Agree

1.	Exercise and physical activities are very interesting to me	1	2	3	4	5
2.	I am familiar with the physical benefits associated with participation in exercise or physical activities.	1	2	3	4	5
3.	To me, exercise or participation in a physical activity is an interesting pastime.	1	2	3	4	5
4.	I think it is important for women to include exercise or physical activity in their daily life.	1	2	3	4	5
5.	Participation in physical activity and exercise can reduce depression.	1	2	3	4	5
6.	Exercise and physical activity done on a regular basis, help women achieve and maintain physical fitness.	1	2	3	4	5
7.	Exercise and physical activity can improve a women's level of confidence.	1	2	3	4	5
8.	Exercise and physical activities will allow me to control my weight.	1	2	3	4	5
9.	I think it is important for women to exercise and participate in some physical activities.	1	2	3	4	5
10.	Exercise and physical activity will help in the development of intellectual and mental conditions.	1	2	3	4	5
11.	Participation in exercise and physical activity decreases the risk of heart disease.	1	2	3	4	5
12.	Exercise and physical activity will help to release tension and frustration	1	2	3	4	5
13.	Exercise and physical activity are very exiting to me.	1	2	3	4	5
14.	I am familiar with the psychological benefits associated with participation in exercise or physical activities.	1	2	3	4	5
15.	I have interest in exercise or physical activity.	1	2	3	4	5
16.	I think it is important for women to exercise and participate in physical activity in regular bases	1	2	3	4	5

IV. Please answer the following question:

What do you perceive as the main barriers preventing Saudi women from exercising and participating in physical activity on a regular basis?

Please rank your **top five choices** by writing the appropriate order in the column to the right: (1 = most influential barrier; 2 = second most influential barrier; 3 = third most influential barrier; 4 = fourth most influential barrier; 5 = fifth most influential barrier).

If there are factors not included on this list, please write them in the space provided below. Also, feel free to share any additional comments and/or concerns related to Saudi women's attitudes and perceptions toward exercise and physical activity. You may use the back of this page if more space is needed.

Rank	**Order**
Lack of knowledge about benefits associated with participation . .	(____)
Lack of time	(____)
Lack of interest.	(____)
Lack of support by family.	(____)
Lack of facilities / places to exercise	(____)
Lack of energy	(____)
Risk to femininity	(____)
Fear of injury	(____)
Social tradition discourages participation	(____)
Other/s: (please, write in the space provided below)	(____)

Your participation is highly appreciated.
When you have completed this survey, please place in the envelope provided and return it no later than **10. 10. 2001**. Thank you.

APPENDIX D

COVER LETTER AND QUESTIONNAIRE IN ARABIC

Old Dominion University
Dept. of Exercise Science, Physical Education, and Recreation
Norfolk, Virginia

بســم الله الرحمن الرحيــم

أختي الكريمة
حفظك الله

السلام عليكم ورحمة الله وبركاته, وبعـــــد

يهــدف هذا البحث إلى التعــرف على نظــرة المرأة السعوديــة في الولايات المتحدة الأمريكية وكنــدا إلى التمرينات الرياضيــة والأنشطة البدنيــة, وهــذا البحث استكمال لمتطلبات درجــة الماجستير في التربيــة البدنيــــة.

ويتطلب هذا إجراء استبانــة تجيب عليها المرأة السعوديــة والمتواجدة حاليا في الولايات المتحدة الأمريكية أو كنــدا بالنظر إلى: 1) الرغبــة, 2) الأهميــة, 3) الفوائد البدنيــة, و4) الفوائد السيكولوجية من خلال ممارسة التمرينات الرياضية والأنشطة البدنية. أيضا, من خلال الاستبانة, سوف يتم تحديد بعض الصعوبات التي تحــد من مشاركة المرأة السعودية عن الإستفادة من خلال ممارسة التمرينات والأنشطة البدنية.

فطلبي و رجائي أختي الكريمــة أن تعطيني دقائق من وقتك لتجيبي على هذه الإستبانــة.

بالطبع لك كامل الحرية في إختيار عدم المشاركة, ولكن في حال المشاركة فيجب ملاحظة أن جميع البيانات الواردة في هذه الإستبانة ستعامل بسرية تامة ولن تستخدم إلا لأغراض البحث.

في حال وجود أي استفسار, أرجو عدم التردد في الإتصال بالباحث.

شاكرا ومقدرا تعــاونك وجهــودك الطيبــة لإنجاز هذا البحث.

والله يحفظنــا وإيـــاكــم.

الباحث/ توفيــق إدريس البكــري
6105 Hampton blvd
Norfolk, VA 23508
(757) 489-7666
e-mail: teffa7@hotmail.com

نظرة المرأة السعوديـّة في الولايات المتحـدة الأمريكيـة وكنـدا
إلى التمرينـات الرياضيـّة و الأنشطة البدنيـة

الرجاء العودة إلى التعريف التالي خلال إكمال إجابة الاستبيان:
التمرينات الرياضية والأنشطة البدنية: هي حركة جسم الإنسان والناتجة من خلال الطاقة المبذولة و ذلك لاكتساب القوة البدنية والمحافظة على صحة الجسم. مثال ذلك, المشي, الجري الخفيف, السباحة, وركوب الدراجات.

---

1. الرجاء وضع دائرة حول الرقم الذي يناسب إجابتك, أو إكمال الفراغ في المكان المحدد:

أ. العمـر (_____)

ب. الحالة الاجتماعية:
1. متزوجة
2. غير متزوجة
3. غير ذلك (الرجاء التحديد) _____

ج. المستوى التعليمي:
1. ثانوية عامة
2. بكالوريوس
3. دراسات عليا

د. عدد الأطفال (_____)

هـ. الحالة المهنية:
1. طالبة
2. ربة منزل
3. غير ذلك (الرجاء التحديد)

_____

و. عدد السنوات في الولايات المتحدة أو كندا
1. أقل من سنتين
2. سنتان إلى أربع سنوات
3. أكثر من أربع سنوات

2. أ) الرجاء وضع دائرة حول الرقم الذي يناسب إجابتك للسؤال التالي:
ما مدى ممارستك للتمرينات و الأنشطة البدنية؟
1. لا أمارس إطلاقا
2. أمارس من حين لآخر
3. أمارس بشكل غير منتظم
4. أمارس بشكل دائم
5. أمارس بشكل منتظم

ب) ما هي الأنشطة التي تمارسينها؟ بالإمكان وضع دائرة حول أكثر من خيار, أو الكتابة في الفراغ:
1. لا أمارس أي نشاط 2. المشي 3. الركض الخفيف 4. السباحة
5. غير ذلك (أرجو التحديد) _____

3. الرجاء وضع دائرة حول الرقم الذي يناسب إجابتك وذلك بحسب المعيار التالي:

(1) لا أوافق أبـدا	(2) لا أوافـق	(3) لا أعـلم	(4) أوافـق	(5) أوافـق بشـدة

1. التمرينات والأنشطة البدنيـة تثير اهتمامي دائمـا	1	2	3	4	5
2. لدي معرفـة وأدراك بالفوائـد البدنيـة المصاحبة لممارسة التمرينات والأنشطة البدنيـة	1	2	3	4	5
3. في اعتقادي أن ممارسة التمرينات و الأنشطة البدنية مثيرة للاهتمام	1	2	3	4	5
4. اعتقد أنه من المهم للمرأة أن تضيف بعضا من التمرينات والأنشطة البدنية ضمن أنشطـة حياتهـا اليوميـة	1	2	3	4	5
5. المشاركة في الأنشطة البدنيـة تخفف من الضغط العصبي	1	2	3	4	5
6. ممارسة التمرينات والأنشطة البدنية بشكل منتظم, تساعـد المرأة على الوصول إلى مستوى اللياقـة المطلوب	1	2	3	4	5
7. ممارسة التمرينات والأنشطة البدنية يمكن أن تؤدي إلى زيادة الثقـة بالنفـس.	1	2	3	4	5
8. ممارسة التمرينات والأنشطة البدنية سوف تساعدني على التحكم على وزني. .	1	2	3	4	5
9. أعتقد أنه من المهم للمرأة أن تمارس و تشارك في بعض الأنشطة البدنية . . .	1	2	3	4	5
10. ممارسة التمرينات والأنشطة البدنية تساعد على تطوير الحالة الذهنية و العقليـة	1	2	3	4	5
11. المشاركة في ممارسة الأنشطة البدنية تقلل من احتمال الإصابة بأمراض القلب	1	2	3	4	5
12. ممارسة التمرينات والأنشطة البدنية يساعد على التخلص من التوتر و الإحبـاط	1	2	3	4	5
13. التمرينات و الأنشطة البدنية ممتعة جـدا بالنسبة لي	1	2	3	4	5
14. لدي معرفة و إدراك بالفوائد النفسيـة المصاحبة لممارسة التمرينات و الأنشطة البدنية	1	2	3	4	5
15. لدي أي اهتمام جيـد بالتمرينات و الأنشطـة البدنيـة	1	2	3	4	5
16. أعتقـد أنه من المهم للمرأة أن تمارس وتشارك في التمرينات والأنشطة البدنية بشكـل منتظـم	1	2	3	4	5

4. أرجو الإجابة على السـؤال التالي:

في اعتقادك, ما هي أهـم الأسبـاب التي تعيـق المـرأة السعوديـة عن ممارسـة التمرينات والأنشطـة البدنيـة بشكـل منتظـم؟

الرجاء الاختيـار من القائمـة الآتيـة **أهـم خمسـة** أسبـاب بالنظـر إلى ترتيبهـا كالتالي:
(1= أهـم عائـق، 2= ثـاني أهـم عائق, 3= ثالث أهم عائق, 4= رابع أهم عائق, 5= خامس أهم عائق). في حال إذا ما كانت هناك عوائـق أخرى لم تذكـر, أرجو كتابتهـا في الفراغ اسفل الصفحـة. أيضا, لك الحريـة في إضافة أي تعليـق أو تنويـه يتعلق بنظـرة المرأة السعودية تجـاه التمرينات الرياضية والأنشطة البدنية. بإمكانك الكتابة على ظهـر الورقـة إذا لم تكف المساحـة أسفل الصفحـة.

ترتيب الأهمية

( ) عدم توفـر الوقت
( ) عدم وجـود الرغبـة في الممارسـة
( ) عدم الإدراك بالفوائـد المصاحبة من جراء المشاركة في التمرينات والأنشطة البدنية
( ) عدم وجود الدعم والتشجيع العائلي للممارسـة
( ) عدم توفـر أماكن مناسبـة ومهيأة للمرأة لممارسة الأنشطة البدنية
( ) الإجهاد وعدم توفر الطاقة اللازمة لبذلها في ممارسة الأنشطة البدنية
( ) خطورة ممارسة التمرينات والأنشطة البدنية من ناحية التأثير السلبي على أنوثـة المرأة
( ) الخوف من الإصـابة
( ) عـادات و تقاليـد المجتمع لا تشجع المرأة على المشاركة والممارسة
( ) أسبـاب أخـرى (الرجاء, الكتابة في المساحة أسفل الصفحة)

لك مني جزيل الشكـر والتقدير على مشاركتك في هذه الإستبانـة
فضـلا, عند الانتهاء من إجابة الأسئلة, أرجو إعادتها إلى الباحث قبل 2001/18/10.
شكـرا جـزيلا. ( )

VITA

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EDUCATION:

B.S. Umm Al-Qura University, Makkah, Saudi Arabia 1991
Physical Education
M.S. Old Dominion University, Norfolk, VA
Physical Education
(Sports Management emphasis), expected degree date May 2002

WORK EXPERIENCE:

Physical Education Teacher, Besha, Saudi Arabia
Besha, Saudi Arabia August 1991– August 1992
Physical education teacher at an elementary and intermediate school.
Physical Education Teacher, Jeddah, Saudi Arabia
Jeddah, Saudi Arabia September 1992–February 1996
Physical education teacher at an elementary school to teach basic skills of individual and team sports for kids from 6 to 12 years old. Participated in region school tournaments as will as championships.
Teacher Assistant, Department of Physical Education, Umm Al-Qura University, Makkah
Makkah, Saudi Arabia March 1996- October1998
Taught basketball, Badminton, and Volleyball for freshmen students.
Basketball Assistant coach, Makkah, Saudi Arabia
Makkah, Saudi Arabia May 1997- September 1998
Basketball assistant coach for Al-Wehda Club. (Youth division)
Research Assistant, Center for Global Business and Executive Education Norfolk, VA
Old Dominion University, Norfolk, VA September 2001- March 2002
Primary responsibility was to act as liaison providing administrative and logistical support for a group of the Center's clients.
President of Saudi Club, Norfolk, VA
Norfolk, VA August 1999- November 2001
To help in organizing and providing a social and cultural environment for Saudi Students, as well as being a connection source between the Saudi students of Norfolk area and the Cultural Mission at the Saudi Embassy.
Vice President of Muslim student Association (MSA), Old Dominion University, Norfolk, VA
Old Dominion University, Norfolk, VA November 2000- March 2002
To help in creating an environment where Muslim students can practice the obligatory tents of Islam

PROFESSIONAL ORGANIZATIONS, PUBLICATIONS, AND AWARDS
North American Society of Sport Management (NASSM)
Idealist Student Award, Umm Al-Qura University, Makkah, Saudi Arabia May 1991