

**SPORTS HEALTH EDUCATION INSTRUCTIONAL FOR WOMEN AT THE
UNIVERSITY OF JEDDAH**

Submitted by

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Abstract

The promotion of sports-related health activities at educational facilities represents an area of concern for the healthcare sector as it can significantly reduce the occurrence of health complications and promote positive health and lifestyle choices among students. Because of this, I chose to focus on exploring the integration of sports health education into the curriculum of the University of Jeddah, which is among the critical institutions in Saudi Arabia that dedicates considerable time and effort to ensure that its students make healthy life choices and engage in physical activities. The purpose of the study is to explore whether the introduction of a sports health education instructional program at the University of Jeddah would have a positive impact on the prevalence of chronic and acute diseases among students. This study involves both quantitative and qualitative data using primary and secondary methods; a comparison of the results of the two approaches was conducted to determine deviations in the findings. The primary methods of qualitative data collection include questionnaires and observations, while secondary methods include the analysis of reports from the university departments as well as health care institutions. Random selection of participants yielded a sample of 113 students and four 4faculty members to acquire evidence-based findings to facilitate the understanding of how the integration of sports-related health activities can benefit the health and well-being of students at the University of Jeddah.

Keywords: Sports health, physical activities, well-being, education.

Dedication

I want to dedicate my dissertation to my family for supporting me dearly in every step. I also dedicate this dissertation to my lovely mother, Munirah. Also, I dedicate this dissertation to my beloved father, Kareem.

This dedication also goes to my family with a special feeling of gratitude to my brothers Khaled, Ahmed, Mohammed and Abdul-Aziz and my sisters Elham, Amal, Dalal, Basma, Khulud, and Haifa.

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Chapter 1: Introduction to the Study

Physical activity is widely recognized as one of the major ways of promoting good health. Active people are less likely to get ill when compared to those who are less active. Research has shown that physical inactivity is directly related to conditions such as obesity, high blood pressure, coronary diseases, among other illnesses (Reiner et al., 2013). Despite the awareness of the risks involved, many people across the world still do not engage in sufficient physical exercise. This implies that the risk of falling sick is very high among many people. It is thus important that healthcare stakeholders design interventions to address the problem and avert the inevitable illnesses related to a sedentary lifestyle. One way to encourage physical activity is incorporating sports health education into the curricula of colleges and institutions of higher learning. This is because students in colleges and institutions of higher learning are among the most inactive section of the population.

The goal of the Saudi Arabian government to improve healthcare among the population is hampered by physical inactivity (Al Hazzaa, 2004; Aljaaly, 2016). Many factors contribute to this phenomenon. The first factor is economic growth where technology and development in the economy reduce the need for human effort, making people less active. For example, many people drive, use lifts, and spend a lot of time on their phones and computers (Dima-Cozma et al., 2014). Other factors include education, where students have little time to engage in physical activity and spend most of their time studying and preparing for exams (Kohl & Cook, 2013). To realize the goal of improving healthcare and preventing diseases related to physical inactivity, it is important to introduce sports health educational programs in institutions of higher learning. This study evaluated the

appropriateness of integrating such a program at the University of Jeddah. Using a quantitative and qualitative research methods, the study examined the relations among reduced physical activity and illnesses, the preparedness of the university to manage the program, and the barriers to establishing a sports health educational program.

Research Topic

Over the years, colleges and higher education institutions have promoted sports health activities. The University of Jeddah is one of the institutions that is incorporating sports health instructional programs. Participating in sports health improves lifestyles and teamwork in colleges and institutions of higher learning (Alahmed et al., 2016). Many institutions of higher learning integrate sports health education programs in their academic curricula to improve the confidence levels and cognitive abilities of students (Casebolt et al., 2017). Students usually experience declining sports participation during college and university attendance between the age of 18 and 24 (Fahad et al., 2017). As a result, sports health education programs need to be integrated into the curricula of colleges and universities in Saudi Arabia. Approximately 58% of the students in Saudi Arabia have been shown to be physically inactive, and different barriers account for this inactivity (Alfhaid et al, 2017; Awadalla et al., 2014). Many obstacles account for the failure of students to engage in physical exercise. Students in colleges and institutions of higher learning have much classwork and many examinations. Also, the economic growth in Saudi Arabia contributes to physical inability. This declining physical activity participation comes with health challenges like the prevalence of chronic conditions. University students continue to participate at low rates in sports health activities. Male students, however, remain more active

than female students in Saudi Arabia colleges (Fagarasa et al, 2015). The lack of participation in sports health activities has raised the concern for sports health education at the University of Jeddah.

Background of the Study

The increasing number of cases associated with many diseases among the university population led to the promotion of sports health education programs in institutions of higher learning to change people's lifestyles (Almutairi et al., 2018). With the focus of Saudi Arabia's Vision 2030 on health and fitness, people's attitudes toward physical exercises are changing. The percentage of individuals participating in physical exercise and activities has increased (Eye of Riyadh, 2018). The prevalence of diseases like cancer, diabetes, chronic conditions, and obesity in Saudi Arabia has raised concern for the need to have participation programs at the university level. Failure to participate in physical activities and exercise contributes to 9% of premature deaths (Al-Hazzaa & AlMarzooqi's, 2018). Thus, the increasing number of diseases requires a thorough study of the relation between individuals' involvement in physical activities and their health status. Economic growth in Saudi Arabia is among the factors limiting physical activity. Urbanization reduces the exposure of the population to physical exercise (Al-Hazzaa & AlMarzooqi's, 2018). This study explored how culture and gender influence physical inactivity and associated outcomes (Sharara et al, 2018). These unexplored aspects and the adverse health outcomes of being physically inactive are the foundation for this study. Physical inactivity remains a big issue in the health of the Saudi Arabian population (Alahmed & Lobelo, 2019). Therefore, different entities are looking for possible ways of dealing with inactivity in sports and other health-promoting activities among the Saudi Arabian

population. This concern raised the need to offer sports health education instructional to college and university students in Saudi Arabia. The problem substantially relates to recent economic growth, education systems that do not allow students time to participate in sports, and cultural and gender barriers. The problem affects the entire population; however, the brunt of the impact is felt by the younger generation. Physical inactivity remains an active driver of premature deaths in Saudi Arabia (Al-Hazzaa & AlMarzooqi's, 2018). Many studies have examined the reasons behind the declining trends of physical activity participation. Studies in previous periods explained how physical activity promotes the health of the population (Al-Hazzaa & AlMarzooqi's, 2018). Among the contributing factors is that females remain less active than males in sports health. Physical inactivity is the fourth risk factor, and it affects 58.8% of the Saudi Arabian population Alahmed & Lobelo, 2018. Also, current investigations show that girls have the right to participate in sports health programs and form a part of their education (Human Rights Watch, 2017; McKernan, 2017). Increases in diabetes and other chronic diseases led to the analysis of the policies related to incorporating health education programs in institutions (Alharbi et al., 2016). There is a great need to understand how the introduction of sports health education will improve the health of the population and reduce spending on healthcare. Thus, it is very appealing to conduct further research to understand the relation between sports health education and the general health of the population.

Problem Statement

Over the years, the number of cases of diseases resulting from inactivity in physical exercise has increased in Saudi Arabia. Diseases like cancer, diabetes, and other chronic conditions are on the rise in Saudi Arabia (Al-Hazzaa & AlMarzooqi's, 2018). The primary cause of such conditions among the population is decreased participation in physical activities (Al-Hazzaa & AlMarzooqi's, 2018). Different factors contribute to people's failure to get involved in sports, which continuously affects the health of individuals. The primary contributors to decreased physical exercise are economic growth and the education system. Although policies in Saudi Arabia have changed in favor of sports health education in schools and institutions, physical sports inactivity still contributes to 9% of premature deaths (Al-Hazzaa & AlMarzooqi's, 2018). Therefore, more efforts to integrate sports health education in colleges and universities remain viable.

Theoretical Framework

Different theories found in the related literature are used to explain the relevancy and the relation between sports health education and students' health. One of these approaches is the cognitive learning theory, which explains student learning by internal forces. Therefore, introducing sports health education into the curriculum allows students to learn it quickly and ably. Also, the cognitive development theory aids in understanding the topic. According to this approach, children's cognition develops through interaction with others (Wellsby & Pexman, 2014). Therefore, the concept needs to be integrated into Saudi Arabian schools and institutions to improve students' cognitive development capacity (Anastasia, 2018). Other theories, like behaviorism theory, also explain the topic. This

approach emphasizes that a student learns in response to the surrounding environment (Zhou & Brown, 2017). Therefore, if sports health education becomes part of the curriculum, students may change their behaviors by responding to their environments. Finally, the social cognitive learning theory is also crucial in explaining the introduction of sports health education instructional programs at the University of Jeddah. This approach emphasizes learning through social interaction. Also, it explores self-monitoring, self-regulation, and self-judgment that allows students to make decisions (Tougas et al., 2015). These educational learning theories explain the theoretical framework of the study. They make the topic understandable and unfold why researching this problem is essential.

Purpose of the Study

The purpose of this study was to explore the feasibility of the introduction of a sports health education instructional program at the University of Jeddah. It further examined the willingness of lecturers to include sports health education in the curriculum of the University of Jeddah. This study also explored the possibility of the successful implementation of sports health education instructional programs.

Research Questions

The main research question addressed by this study was “What are the thoughts and experiences of students and faculty members participating in the integration of the sports health education instructional program into the curriculum for female students at the University of Jeddah in Saudi Arabia? The supporting sub-questions were:

R₁ Are the faculty members well equipped to provide sufficient health education to female student at the University of Jeddah?

R₂ Does the University of Jeddah provide sufficient resources to facilitate the integration of the sports health education program into the curriculum for female students?

R₃ What barriers may prevent the implementation of the sports health education instructional program as a compulsory discipline for female students?

R₄ What are the benefits of the implementation of the sports education health instructional program as a compulsory discipline for female students?

Study Methodology

The instruments used in this study allowed for the collection of two types of data, qualitative and quantitative, through the survey's open-ended and closed-ended questions in four sections. Closed-ended questions, while open-ended questions provided more insight into the issue and application of the program for female students (Adams-Budde et al., 2014). Validity was checked using Cronbach's Alpha for the closed-ended questions (Briggs et al., 2008).

Rationale for the Methodology

The research methodology considered useful in collecting relevant data for the study was a mixed methodology. This involved the use of both the primary data collected and analyzed through qualitative data modeling and the secondary data that were informative in addressing the research questions in the quantitative research-modeling framework. A triangulation method was used so that different perspectives could explain the outcomes of the study from a dynamic perspective concept and compare those with the control (Flick, 2018). The Sports Health

Instruction program may have different impacts on people; hence they needed to have a personal contribution to the research outcome through a questionnaire. A comparison of the two outcomes helped in drawing accurate conclusions and providing recommendations. The exploratory study model was useful in unearthing any perception elements that could not be captured through a literature review on existing studies Creswell & Zhang (2009).

The chosen methodology for this research was a triangular mixed method that involved surveys with open-ended and closed-ended questions. The concurrent triangulation method was selected because it aligns qualitative and quantitative analysis, which correlated with the exploratory design of this research. This study focused on a population of young people studying at the University of Jeddah, as well as the capabilities and willingness of staff members to incorporate this program into the curriculum. Therefore, the population included 113 female students and four faculty members at the University of Jeddah. The institution's personnel were recruited to participate and provide insight into how a health education program focused on physical activity could be incorporated in the curriculum.

The process used to select and collect data on the sample for this research included distributing the survey to 113 female participants and four faculty members, analyzing data using SPSS software, examining the qualitative data, and aligning the two perspectives to answer the study questions. Hence, the research approach to this study of the health education program is explanatory, and to answer the research questions, open-ended and closed-ended survey questions were used.

Definitions of Terms

Health: Health refers to a state where a person is physically and mentally well (Svalastog et al, 2017). It is not simply the absence of disease. Physical well-being is when the body of a person is free from injury or disease, and the person is in good health condition. Mental well-being is when the brain is stable and functioning properly with a manageable level of stress. A person can be free from disease but still be unhealthy due to the state of the body. For example, if a person has too much body fat, the person is deemed unhealthy. This is because body fat is a potential catalyst for disease (Müller & Geisler, 2017). Similarly, people who cannot complete tasks quickly due to running out of breath are unhealthy despite not having a diagnosis of any disease. A healthy person should function normally and enjoy a fulfilling life.

Disease: A disease is a disorder in the structural makeup of a person and affects the normal functions of the body. Diseases are specific in their causative agents and the symptoms associated with them. Agents such as bacteria, viruses, physical injury, and other factors cause diseases. A sick person does not function normally and experiences discomfort and pain. In the contemporary world, there is an increase in the number of people experiencing lifestyle diseases. These are diseases that arise from the routine lifestyle of a person. For example, lack of physical exercise and eating too much junk food results in obesity, which is a lifestyle disease (Müller & Geisler, 2017). Diseases are treated with medication, therapy, or surgery. Prevention, however, is the best way to avoid diseases. Being physically active can prevent lifestyle diseases, taking healthy foods, and avoiding behavior such as smoking and excessive consumption of alcohol (Elwood et al., 2013; Mosconi et al., 2018).

Physical activity: This is body movement that requires the use of energy. Physical activity is beneficial to the body as it strengthens the muscles and joints (McGuire & Beerman, 2016). It also ensures that a person maintains good body weight. Aerobic activity is beneficial to the lungs, the heart, and many other muscles because it builds the capacity to pump blood appropriately and utilize oxygen in metabolism (Patel et al., 2017). People are encouraged to get physically active. It does not necessarily mean going to the gym every day or joining a sports club. Simple activities such as walking and taking the stairs constitute physical activity.

Health promotion: It is the act of ensuring that there are good health practices within a set area. For example, key stakeholders work hand in hand with educators to ensure that they lead a healthy life. It involves varied campaigns that help improve the way people live every day in society (Sparks, 2013). The idea is to help educate people on the need to lead a healthy living standard in every step of life. It involves giving directions and approvals on the correct way to handle health-related dilemmas. The contributions of health promotion make it possible to analyse the necessary aspects of life in society.

Summary and Organization of the Remainder of the Study

Physical activity is critical in maintaining good health. It helps prevent lifestyle diseases and enables a person to enjoy the fullness and well-being of a healthy life. However, it is difficult for students pursuing higher education to get physically active due to the demands of their education. It is, therefore, important to introduce sports health education instructional programs to promote physical activity (Çiçek, 2018; Quennerstedt, 2019). This study established the viability of implementing such a program by using the case of the University of Jeddah. The

next chapters include a review of the literature regarding physical activity and health in relation to students pursuing higher education. Possible barriers, such as lack of time, culture, gender, and economic status are discussed. Quantitative and qualitative data were collected and analyzed. Conclusions were drawn from the data analyzed and recommendations are made.

Chapter 2: Literature Review

Introduction to the Chapter and Background to the Problem

Exploring the way in which higher education institutions have promoted activities related to sports health was the key objective of this study. The rising number of cases associated with disease among the student population requires such institutions to facilitate the improvement of health and fitness. As mentioned by Al-Hazzaa and AlMarzooqi (2018), the prevalence of such chronic conditions as diabetes, cancer, and obesity increases the concern for the health of the population and contributes to the decrease in quality of life as well as premature deaths. Thus, the current study focused on raising the question about the importance of health education as well as how colleges in Saudi Arabia can improve the health of their students and encourage them to engage in health-promoting activities.

This chapter pertaining to the literature review is targeted at exploring the range of research associated with the importance of promoting active lifestyles among students. In the Saudi Arabian context, the problem is essential to consider despite the fact that the government has changed policies to allow sports education in schools and other educational institutions. This author expected to find a defined need in the literature to integrate sports education into the everyday learning of students as well as the work of teachers.

Theoretical Foundation

The cognitive learning theory represents the critical theoretical foundation for the current study. It provides an explanation for various mental processes and how they are influenced by multiple external and internal processes that facilitate by the learning of individuals influenced them. Since physical education pedagogy

has predominantly been seen as drill-style teaching, limited attention has been given to the integration of theoretical educational models that support practical, pedagogical approaches (Usher et al., 2015). More cognitive involvement of students in physical education and sports is needed to strengthen the capabilities of pedagogical approaches and ensure effective critical and creative thinking among students. The cognitive learning theory was thus applied to the current study because it also considers the social aspect of learning and the fact that in the educational context, the social interactions between students in sports can alter the behaviors of learners as a result of exposure to new experiences. Therefore, the social component of learning represents the critical basis for exploring the integration of sports health education in the context of the University of Jeddah.

Review of Literature

This section is dedicated to the exploration of research conducted on the subject of integrating sports education into the curriculum of institutions of higher learning. It is essential to understand the Saudi Arabian context of this study to evaluate the efforts of the government targeted at improving sports education at schools and universities. Sports education as a curriculum approach was studied from the perspective of research conducted in different educational contexts.

The Saudi Arabian Context

In place of confining health education processes to method to prevent premature deaths and diseases among the population, the concept of health education should be explored. Understanding the context within which this study was conducted is important because it offers a perspective as to the existing issues as well as methods intended for their elimination. The health resources that facilitate a good quality of life can manifest themselves in different ways, which is

why researchers have dedicated their studies to exploring the integration of health education into the curriculum (Quennerstedt, 2019). In the context of Saudi Arabia, health education has gained tremendous attention from researchers due to the declining health of the young population. As mentioned by Al-Hashem (2016), health education has been gaining importance in the country since the late 1900s as a response to the rising health concerns of the population, including young people. The 1980s were particularly successful for the healthcare sector of the country due to the boost in the construction of hospitals and primary health care centre.

Activities in health education have steadily increased between 1985 and the late 1990s (Al-Hashem, 2016). In 1997 health education was seen in a much more positive light by both public and professionals, with the media coverage dedicating more time to the issue. In terms of the relatively modern developments, initiatives targeted at promoting more exceptional educational skills were introduced from 2007 onwards, with the Ministry of Health facilitating the prevention of chronic conditions through education. In 2013, the National Committee on Health Education was founded alongside the Charitable Society for Health Communication to oversee the countrywide educational strategies targeted at health promotion and disease prevention (Al-Hashem, 2016). At this time, health educators in the country can work with the Ministry of Health and the private, public, and academic sectors to facilitate the development of health associations. Overall, Saudi Arabia is expending considerable effort on the integration of sports education into the curriculum as well as promoting overall healthy behaviors among the population. In Saudi Arabia, health education has

transformed into a profession that requires continuous training and development to address the future challenges of the health care sphere.

Female Jeddah Students and the Sports Education System

In the middle of 2019, female Jeddah students were allowed to study in the field of sports education. This was a significant social step forward for both females and the University of Jeddah. This momentous event is of great interest not only to sports professionals but also to sociologists and cultural experts. The decision that women may obtain a degree in sports education was not spontaneous but represents one of the points of the state program for improving the Saudi population. The current Sports Health Instructional Program at the University of Jeddah includes aspects such as sports science, management, and fitness. The structural component of the discipline fully provides the achievement of degrees at different levels, ranging from a bachelor's degree to a Ph.D. Development and widening of the sports sector of the labor market for all groups of the Saudi society serves as the fundamental goal of these innovative measures. The significant number of enrolled students speaks to the general interest of the female portion of the population in matters of health and physical activity.

Female Attitude to Sports and Sports Education

Over the past decade, women have actively contributed to and taken part in the development and promotion of sports activities and a healthy lifestyle. Also, in 2017, a Saudi princess was appointed to several major leadership positions responsible for the sports issue. All of this speaks to the upcoming significant social and cultural shift in the Saudi society. It is useful to conduct surveys and polls to understand the future mood of the female public about sports in general and sports education methods in particular at the University of Jeddah. The most

effective survey technique is separate polls among students and personnel in different specialties. This fully takes into account the opinion and mood of each student about the progress and quality of the educational process. However, at first glance, through the prism of recent events, a positive response from female students about past integration can be predicted. It is also essential to recognize and take into account the opinions and attitudes of the new student community in the sports education structure. Social surveys and polls help to improve modern and tested principles and techniques at the University of Jeddah to expand the impact of women in the athletics area.

Healthy Physical Education

Reiner et al., (2013) systematic review of 15 longitudinal studies aimed at establishing the long-term benefits of physical activities. Specifically, the report argues that physical activity reduces the risks of diseases like Type 2 diabetes mellitus and coronary heart disease that raise the costs for health systems. Therefore, this review summarizes existing evidence on the relation between health issues like obesity, Type 2 diabetes mellitus, and dementia and physical activity in the long term (Reiner et al., 2013). Reiner and colleagues reviewed 15 longitudinal studies that had at least a 5-year follow-up period. There were more than 500 participants in each of the longitudinal studies and 288,724 participants in total. The subjects between the ages of 18 and 85 years were identified through digital databases.

Reiner et al., (2013) studied four publications with 17,329 individuals that evaluated the effect of physical activity on obesity and weight gain. Additionally, the authors evaluated five publications with 84,647 subjects to study the effect of physical activities on Type 2 diabetes mellitus. Moreover, the study involved the

analysis of six reports involving 15,006 individuals to assess the impact of physical activity on dementia and Alzheimer's disease and six publications with 134,188 subjects investigating the effect of physical activity on coronary heart diseases. The maximum follow-up period on the subjects was between 6 and 60 years.

The Reiner et al., (2013) study established the following results. The overall studies indicated a negative correlation between obesity or weight gain and physical activity. Precisely, the subjects who reduced their daily physical activity levels gained some weight while those who increased their physical activity lost weight. Those who maintained the same level of activity kept their weight constant (Reiner et al., 2013). Generally, most studies indicated a negative correlation between the occurrence of coronary heart diseases and physical activity. Reiner et al., demonstrated this negative relation by showing the link between weight gain and associated heart diseases. An increase in the level of physical activity attributed to the reduction of coronary heart disease risks.

Furthermore, Reiner et al., (2013) reported negative relations between physical activity and the risks of Type 2 diabetes mellitus, dementia, and Alzheimer's disease and physical activity. Physically active people are at lower risk of developing Type 2 diabetes mellitus and cognitive impairment (Reiner et al., 2013). Conclusively, the results from the reviewed studies support my research because they provide an overall view of the relation between physical activity and incidences of health issues. The Reiner et al. studies indicate that physical activity is an essential factor that prevents the occurrence of health risk factors.

Dima-Cozma and colleagues (2014) took medical, social, and spiritual perspectives to show the importance of a healthy lifestyle in modern society. The authors began by defining the term lifestyle and the relevance of the concept of contemporary society. Dima-Cozma et al. argued that lifestyle is an indicator of one's quality of life, social integration, and levels of satisfaction in consumer needs or social status. Additionally, the authors stated that lifestyle medicine offers vital information regarding physical activity, stress control, nutrition, and social support systems (Dima-Cozma et al., 2014). They referred to physical activity as both aerobic and anaerobic training at a mild and vigorous intensity. Therefore, the authors stated that in a modern society riddled with lifestyle diseases, people must make efforts to understand physical activity as an aspect of both well-being and health building.

Dima-Cozma et al., (2014) further defined a healthy lifestyle using a spiritual and social anthropological approach. Specifically, the authors argued that from the past centuries, humans have been concerned about the origin of lifestyle because the notion is present in legends and stories. A healthy diet, exercise, movement rest, sleep, and stress management are some of the physical activities that have been present over time and illustrate the human way to unite with natural rhythms as was the case for aboriginal tribes (Dima-Cozma et al., 2014). According to Dima-Cozma et al., the current view of a healthy lifestyle now falls within the definition and current practice due to the accessibility of many social groups and excessive advocacy on the same issues. Furthermore, the authors defined lifestyle from a medical perspective, discussed the importance of curative and preventive medicine, and discussed the current guidelines for the prevention of cardio-metabolic diseases.

In supporting their study, Dima-Cozma et al., (2014) cited the European Directives on Cardiovascular Disease Prevention in Clinical Practice. The guidelines provide various recommendations for individuals in different risk categories and different age groups, mainly focusing on people with metabolic syndrome. In conclusion, the article is essential to this author's research because it provides specific recommendations regarding the levels of physical activity that physicians should encourage among their patients. Additionally, Dima-Cozma et al. argued that in healthy individuals, cardio-vascular fitness and physical activity significantly reduce the risk of heart disease.

Aljaaly (2016) measured physical activity among young girls in Jeddah in Saudi Arabia. The author stated that physical activities did not exist in Saudi girls' curriculum and that physical activity in public schools was prohibited. The author cited previous research to support his claims and the importance of meeting physical activity guidelines for children between 5 and 17 years of age. Many of the studies that back Aljaaly's research have shown the advantages of regular physical activity to behavioral and health outcomes for adolescents (Aljaaly, 2016). Additionally, risk factors increasing blood lipids cholesterol, hypertension, and overweight status are associated with physical inactivity. Unfortunately, about 71% of children and adolescents in Saudi Arabia failed to meet the recommended minimal weekly medium to vigorous physical activity required for the effective functioning of the cardiovascular system.

Aljaaly's (2016) pointed out that physical activities were prohibited in school, and that physical education sessions for girls were not permitted because they were contrary to social and cultural norms. Furthermore, inactivity is also a result of factors like television viewing as well as computer and TV games.

Lastly, Aljaaly attributed physical inactivity to the Abaya, the female dress code for Saudi girls as it limits available options and outdoor activities. Aljaaly's research survey included 1519 subjects between 13 and 18 years of age. The study also included 18 schools to assess the physical activities for girls at the intermediate and high school levels. The study relied on the World Health Organization (WHO) 1995 stipulations for the classification of BMI body mass index by gender and age, which is also stratified into BMI categories as overweight and underweight.

Aljaaly's (2016) survey questions addressed the participants' views and performance of physical activity where measures were derived from self-completed forms. Results showed that most of the girls used cars as their primary transportation method; school physical activities mostly involved walking during break times. These results, therefore, show that most children and adolescents, particularly girls, did not engage in enough physical activities to keep them healthy (Aljaaly, 2016). The results emphasize that there is a need for decision-makers to protect young girls by providing an environment that will improve girls' functioning at school. The study is vital for my research because it reinforces the notion that educational classes, including physical education, should be incorporated in school programs to enhance the knowledge and perception of the importance of physical activities.

Preserving Health Through Physical Education

There is a tendency toward a decrease in physical activity that leads to deterioration in the physical condition of students in Saudi Arabia. The level of physical performance is an important quantitative criterion for human health,

allowing for judgment about one's adaptive capabilities and the results of preparation for labor and sports. Although the main causes of deteriorating physical condition can be traced to religious doctrines, experts claim that the local culture and traditions are primary reasons for the given discrimination (Choi, 2011). In addition, the cultural basis of a community plays a major role in determining the implementation practices of sports classes in Saudi Arabia (Wang & Ha, 2008). Thus, both culture and tradition are critical influencing factors that prevent accessible sports classes for girls.

Furthermore, gender differences among boys and girls can be vital in determining overall attitudes toward physical education. It is important to note the fact that girls tend to be more sensitive to the aims of physical education, whereas boys are inclined to be more aggressive and competitive (Tannehill & Zakrajsek, 1993). There are also significant differences in general preference among boys and girls. Zhang & Rice (1988) 78% of males prefer team-based sports rather than individual or solo sports. Therefore, gender variations must be considered in order to construct effective sports classes.

Lastly, it is crucial to allocate the correct amount of time and to prioritize physical education classes. The largest portion of the time given for physical education classes is not spent on actual implication and practice of skills. Morcom and Fletcher (2007) showed that inefficient time usage during sports classes could be one of the primary reasons for the lack of appeal of physical education. In addition, there is an issue of prioritizing sports classes, because several schools might regard physical education as unimportant. This can lead to physical education becoming a highly dispensable class, which can be easily replaced by more "important" classes, such as math and science (Meqdad, 2009). The given

prioritization problem can lead to discouragement among physical education teachers, which will further facilitate the perception of physical education as being less relevant.

A range of issues like preserving the health of the nation, health saving, and healthy lifestyle are discussed and excite the society, especially in modern times. The state of ecology and constant stress caused by transformations in all sectors of the economy constitute a whole complex of causes that harm the health of every person and a nation as a whole. Concern over the health status of the population in Saudi Arabia, especially of students, is one of the issues discussed at various levels of the government, departments, and ministries responsible for social and medical services for citizens.

Sports Education as a Curriculum Approach

Sports education as a curriculum approach has been a priority for different educational institutions. As mentioned by Farias et al., (2018), the teaching and learning of games and activities based on sports have represented an important form of health education curricula. There is substantial evidence suggesting that the model supporting engagement in sports can benefit the emergence of positive social goals as well as healthy sports behaviors. There is no “one size fits all” approach to implementing physical education sports techniques (Kirk, 2013). Consequently, physical education programs should consider the various abilities of students to execute their motor skills according to circumstances and various situations regarding game and sports-related activities. Therefore, most studies on encouraging sports education have focused on the competency and participation of students and their involvement with sports (Araújo et al., 2016).

However, Farias et al. (2016) pointed out that despite the positive results of integrating sports education into the curriculum, the prolonged proposal for embedding this aspect of education has not yet been unequivocally established. The reasons for this gap in integration are varied; for example, studies have found a lack of student improvement when games and exercises are implemented (Mahedero et al., 2015). Another reason for the ineffective integration of physical activities into the educational curriculum is the lack of validated conceptual frameworks to facilitate game-based pedagogies. Namely, the potential for transferring sports education across the curriculum relies on the level of preparedness of educational facilities to address the needs of their students regarding sports training (Farias et al., 2018).

The aspect of participation plays an integral role in the integration of sports education into the curriculum. As mentioned by Farias et al. (2018), the participation of learners in consecutive seasons of sports of the same type and that require similar skills can enable the transfer of long-term performance and strengthen students' capabilities in sustaining healthy behaviors through playing games. However, when developing programs that aim to positively influence students' fitness, special considerations should be given to the design of the tasks (Haible et al., 2019). Instructors play important roles in this area because they can conduct regular assessments of their students' progress and work on developing programs that will be the most beneficial for sustaining the effectiveness of students in the maintenance of positive sports behaviors (Haible et al., 2019).

When studying the implementation of programs promoting sports health education in educational facilities, researchers have reported differences between the actual and expected program outcomes (Darlington et al., 2018). The

successful implementation of such programs has been attributed to the mode of their introduction, the home/school relationship, leadership management within educational facilities, as well as the level of delegated power (Darlington et al., 2018). Importantly, there is no unified program that can benefit all educational facilities, which points to the need for the management of schools and universities to be more attentive to the demands of their students in terms of introducing health promotion programs into the curriculum. Therefore, context matters when it comes to the integration of such programs at various educational facilities. While some may have more resources and training to enable the integration of sports education into the curriculum, other facilities may be limited in their capabilities and thus unable to be effective in its integration.

A critical perspective on sports health education was offered by Althuwaini (2018) who investigated the integration of the sports education model in the teaching of athletics in the context of a Kuwait middle school. While this study was primarily focused on the athletics curriculum, the researcher identified the need to integrate sports education into any curriculum to facilitate group learning, self-assessment, the promotion of student engagement, and positive health and lifestyle choices. Athletic challenges, as well as goals intended for promoting health education among students, encourage students to plan and evaluate their sports capabilities as well as to get motivated to become better through the integration of valuable experiences associated with various athletic skills.

Within the context of sports education as a curriculum approach, the role of educators should not be undermined. As physical education is a multi-faceted subject, teachers are expected to have appropriate education in order to be

accountable for the various demands of the subjects (Stroebe et al., 2019). This points to the need to evaluate the capabilities of teachers in facilitating the effective integration of physical education into the curriculum. According to Stroebe et al., such issues as assessment problems, the inappropriate allocation of teachers and their inefficient rotation, the lack of knowledge and understanding, as well as insufficient in-service training prevent teachers from facilitating the effective integration of health education into the curriculum. As found by the researcher, there is a need for re-skilling to equip teachers with essential skills and knowledge for facilitating the efficient and effective teaching of physical education.

Chapter 3: Methodology

Introduction

Researchers and medical practitioners have explicitly described the correlation between physical activity and the health of an individual. Many studies show that physical exercise is good for the overall health of a person. It is an effective method of preventing and controlling conditions such as diabetes, obesity, and coronary disease. However, physical activity among Saudi Arabians is still relatively low, considering people are knowledgeable about the advantages of physical activity. Furthermore, students in colleges and institutions of higher learning are not sufficiently active. This puts many people at risk of developing diseases. Among the methods of controlling physical inactivity and chronic health disorders among students in institutions of higher learning and the general Saudi Arabian population is the introduction of sports health education instruction programs. These programs have been available to male students for the past 20 years and only recently have these programs been expanded to the curriculum for female students. The program explored in Alkhateeb et al. study was used in the past, but it has not been tested with female students, only with males. Nevertheless, the effectiveness of such an intervention has not been adequately studied with female students. Additionally, the willingness of faculty members and their ability to effectively implement the program have not been well examined. It is also necessary to study the benefits and difficulties that expanding such a program would pose to the university, Saudi Arabian government, and other stakeholders. This chapter describes the research methods employed by highlighting the research questions, hypotheses, research design, research variables, participants, instrument, data collection, and analysis procedures. This

study focused on a sports education program for female students at the University of Jeddah.

Research Questions

The main research question addressed in this study was “What are the thoughts and experiences of students and faculty members participating in the integration of a sports health education instructional program into the curriculum for female students at the University of Jeddah in Saudi Arabia? The supporting sub questions were:

R₁ Are the faculty well equipped to provide sufficient health education to female University of Jeddah students?

R₂ Does the University of Jeddah provide sufficient resources to facilitate the integration of a sports health education program into the curriculum for female students?

R₃ What barriers may prevent the implementation of a sports health education instructional program as a compulsory discipline for female students?

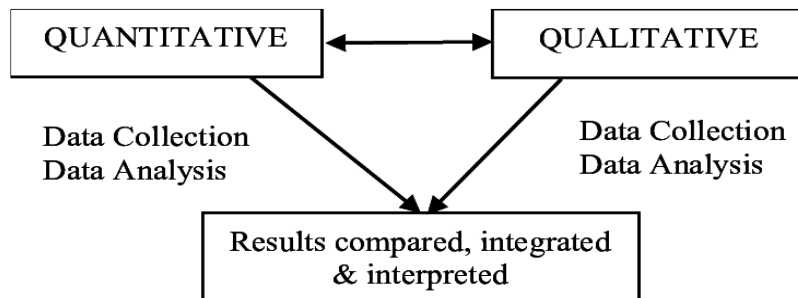
R₄ What are the benefits of the implementation of a sports health education instructional program as a compulsory discipline for female students?

Research Methodology

This section of the research report is dedicated to describing the procedures used for conducting data collection and analysis procedures. This study used both quantitative and qualitative data and followed a concurrent triangulation mixed-method format (see Figure 1). This design provided more in-depth information about the perspectives and experiences of students and teachers

concerning the integration of a sports health education instructional program into the curriculum for female students at the University of Jeddah in Saudi Arabia.

Figure 1. *Data Analysis Process*



Triangulation is one of the main objectives of mixed methods research. It allows the researcher to corroborate and to support the results relative to the same phenomenon with different methods and to ensure internal and external validity. The concurrent aspect of the study is connected to the collection of two types of data qualitative and quantitative to explain the phenomenon of physical education using different sources of data (Onwuegbuzie & Combs, 2011; Onwuegbuzie et al., 2007). This aspect is an implication of the chosen research design concurrent triangulation mixed method.

Research Design

In this section, the research design of the study is explained and outlined in detail. This study used a mixed-method design, which implies the systematic investigation of a given phenomenon through collecting both quantitative and qualitative data. This study involved the collection of quantitative data, which helped answer several essential questions about the efficiency of the chosen program. These data assisted this answering these questions by explaining some aspects of sport health education incorporated into the curriculum that could have

been missed in closed-ended questions. Additionally, the participants were able to express their beliefs, perceptions, and attitudes toward sports health education at the University of Jeddah, which helped me, explore the research questions more accurately.

The concurrent design allows connecting each variable of the closed-ended questions to the open-ended questions; for instance, the current level of physical activity, perception of the university's readiness, the willingness of faculty members to assist students, and then using these connections to answer the research questions. This helped me evaluate the constructs examined by this study because it provided a multi-dimensional perspective on the issue. It should be noted that different data were collected through open-ended and closed-ended questions to answer the research questions. Additionally, this research was explorative because this approach was designed for an initial exploration of a phenomenon; hence it helped relate the variables to the main question.

Study Population and Sample Selection

Data were collected from 113 students and four faculty members, who were already recruited to the program and were introduced to the program on 2/6/19. The students were recruited from different cohorts and classrooms. The main characteristic of the students is that they were females enrolled in a 3-year program at the University of Jeddah, who had already completed their first two semesters. All of the participants were female because the focus of this research implies the need to address the gap in physical training programs tailored for women. Four female lecturers recruited from Egypt and Jordan were currently working with the students. The characteristics of the students and faculty members were chosen to ensure that the study results would be reliable, which is

the reasoning behind the targeted gender of the participants. Examining the purpose of the research, outlining key variables and future application of the program, and selecting appropriate individuals were identified as key research tasks.

Purposeful sampling is used for choosing research participants. The purposeful sampling method was applied since the design of this study implied that students and faculty members with specific characteristics would be recruited. It is a random sampling method and allows recruiting a sufficient number of participants to mitigate errors. The participants, both students and faculty members, were recruited through advertisements and the candidates were selected based on their gender, age, and study year. All individuals received a form that outlined the key aspects of the research, implications, and ethical considerations. This study achieved a 5% margin of error with a 95% confidence level.

Instrumentation

For this study, during the data collection process, the participants were given a variety of questions in order to achieve variability in perspectives and experiences.

The study's survey had four sections: the first one focused on collecting general information and consisted of three closed-ended questions where only one response could be chosen. The second section contained 10 closed-ended questions with the application of a Likert-type scale and evaluated the levels of physical activity, barriers that obstructed students and faculty members from being more active, and general institutional problems connected to regular exercising. The third section included 10 closed-ended questions with two options - yes or no and examined the participants' attitudes toward physical activity,

planning specifics, costs, and other related factors. Finally, the fourth section consisted of five open-ended questions that allowed for the adequate evaluation of the opinions the research participants had toward health education programs that targeted physical activity at the University of Jeddah.

Validity and Reliability

There were two methods used to validate the Arabic survey: first, it was sent to two professors at a university in Saudi Arabia and they read and approved the translation. Second, Translation Shop has a service to confirm the translation of the survey from English to Arabic and Translation Shop confirmed that the translation matched the two languages. There are two main issues related to examining the validity and reliability of results: the translation of the survey and tests for reliability. According to Briggs et al., (2008), triangulation allows checking the validity of a study, since it involves comparing information from different sources in the case of this research from quantitative and qualitative questionnaire responses.

Data Collection Procedures

The method for collecting the quantitative data and qualitative data was the use of a questionnaire. In the context of quantitative research, questionnaires are useful for data collection. Qualitative methods allow examining a phenomenon, which is helpful for studies that initiate research on a particular topic. To ensure that all participants completed the survey, I explained the purpose and implications of this study to the participants. The questions were developed using simple language, and the survey participants were recruited based on the selection criteria explained in the previous section. The survey was distributed via email to participants at the University of Jeddah in Saudi Arabia.

Two kinds of data were collected and used in the study: primary and secondary data Rohilla, et al (2010). The secondary data were collected through desktop research. Elements of the research included the selection of extensive, quality, relevant, and recent research elements that had been used before to provide additional information. The kind of data collected from the secondary data collection model was useful in indicating the patterns that similar studies have undertaken in society. The Sports Health Instruction program remains a useful program for female students at the University of Jeddah where it has been rolled out.

Primary data, on the other hand, were collected through the use of the questionnaires. The respondents, mostly female students from the University of Jeddah who had enrolled in the Sports Health Instruction program were allowed to participate and give their personal opinions about the program. This kind of data needed to be coded using the scientific data analysis software, the Statistical Package for the Social Sciences (SPSS), so that scientific-analytical results could be drawn from the data. The outcomes of the two analytical elements were compared in the spirit of triangulation to come up with accurate and viable answers to the research questions.

Data Analysis Procedures

The study's survey was distributed, data were collected to analyze the responses from the students and faculty members, and SPSS software was used. Descriptive statistics methodology was applied because of the exploratory design of this research. The survey consisted of four sections, three of which were dedicated to closed-ended questions, with the fourth section containing 10 open-

ended questions. This author examined the open-ended questions to locate information that could help answer this study's research questions, and drew conclusions to explain these answers and the rationale for physical activity and sports health education.

Using responses to the closed-ended questions, levels of statistical significance for these quantitative data were tested. SPSS software was used to evaluate the data from the responses. Concurrent triangulation was applied in addition to the survey analysis software. This methodology allows collecting a combination of qualitative and quantitative data, analyzing the two, and drawing conclusions based on the combined results. Finally, the data were analyzed from the closed-ended and open-ended questions, and by applying descriptive statistical analysis methods, I drew conclusions regarding the implications of physical activity and a sports health education program at the University of Jeddah. The research analysis was aligned with the design of this study.

Ethical Considerations

When collecting data from students and faculty members with the help of questionnaires, it was imperative to consider the ethical issues that could arise from such a data collection method. This author had to ensure that the information provided by the study participants was kept confidential. This was possible through assigning numbers to the participants to avoid the disclosure of their names, email addresses, as well as other personal and professional information. In this way, respondents could be more open to giving honest answers to questions because their data were not included in the questionnaires. Moreover, the postal option of questionnaire administration was not included in the data collection

procedure. Survey data were collected via email and software, which strengthened the security of the participants' information.

All students and faculty members involved in the study were presented with informed consent forms prior to completing the questionnaires. These forms introduced the study and provided the purpose of its implementation so that participants' would be aware of the reasons why the research was conducted. In addition, the informed consent form let participants know that when they decided to get involved in the research, they voluntarily allowed me to share vital information confidentially. By signing the informed consent form, participant confirmed their willingness to participate and add to the vast body of knowledge associated with the integration of sports health education into the curriculum. It is important to obtain informed consent to protect the researcher from potential litigation from study participants and make sure the researcher and the participants share a mutual opinion of the study.

Limitations

In the current study, there were several research limitations that must be mentioned. One significant limitation of the study refers to the limited availability of secondary data that could be applied to the context of the research. While the subject matter is widespread, there has been limited research conducted on the topic of implementing sports health education instructional programs in educational facilities. Another limiting factor is that the participants in this study were from Saudi Arabia.

Summary

This study employed a concurrent triangulation mixed-method research design. The study involving 113 female students and four faculty members as participants was expected to facilitate a high degree of representativeness and provide robust findings on the basis of the participants' experiences in the education field. The random selection of participants, as well as institutions in which they worked was another essential step in achieving representativeness and limiting bias. Evidence-based findings were acquired to facilitate the understanding of how the integration of sports-related health activities benefits the health and well-being of students at the University of Jeddah.

Chapter 4 Data Analysis and Results

Data Analysis and Results (Quantitative)

For this research, a mixed methodology was applied to collect quantitative and qualitative data, using triangulation and an explorative study design (Caracelli & Greene, 1993; Onwuegbuzie et al., 2007; Onwuegbuzie & Combs, 2011). This section includes the results of the survey and an evaluation of the data. In total, seven faculty members (three more than anticipated) and 110 students of the 113 surveyed agreed to participate in the survey and answered the questions. Evaluations of the results of the survey are presented for each research question in the order in which they were presented initially. Tables are also provided with each analysis of the data.

Descriptive Data Results

Table 1 presents the results of the first section of this survey which was dedicated to general questions regarding the participants' demographic characteristics. All of the participants were female. The participation of only female students and female faculty members was a part of the design since this research focused exclusively on the Sports Health Education Instruction for Women Program at the University of Jeddah, and thus, the female opinions were crucial to answering the research questions. .

Education Level

In regard to education levels, the study sample consisted of 117 participants at the University Jeddah in Saudi Arabia, all of whom were female (see Table 1). Participants were asked to answer a question indicating their education levels. Twelve of the students were pursuing a bachelor's degree and 98

were studying for a graduate-level diploma. Of the seven faculty, five have a PhD degree and two have MAs

Physical Activity

Each participant was also asked to answer the question, “How often do you participate in physical activity” and write her response in the open-ended text box.

Position at the University

Each participant was also asked to answer a question indicating their position at the university and to write her response in the open-ended text box.

Table 1

Question	
Education level	Students:
	<input type="checkbox"/> BA 10.9% (12)
	<input type="checkbox"/> MA 89.1% (98)
	Faculty:
	<input type="checkbox"/> MA 28.6% (2)
	<input type="checkbox"/> PhD 71.4% (5)
How often do you participate in physical activity?	<input type="checkbox"/> Once 9.3% (11)
	<input type="checkbox"/> Twice 44.1% (51)
	<input type="checkbox"/> Three or more 46.6% (55)
What is your position at the university?	Undergraduate student 93.2% (110)
	Professor 5.9% (7)

Answers to Survey Questions, Part 1

Principal Components Analysis Result

The principal component analysis is a method that allows clearing the data for the analysis to ensure that the researchers work only on the variables that correlate and help answer the research questions. In this research, four questions relating to the perceptions of students' physical activity levels, the university's facilities capability, and curriculum were explored as the main variables.

SPSS software was used to perform the principal component analysis, which allowed reducing a large number of variables in this study to a smaller number of so-called "artificial" variables. The latter helps explain the majority of the variance in the primary variables of this study. The questionnaire with the Likert-type scale that contained 10 questions represents all the variables examined in this research, which are ordinal variables on a 5-point scale. Next, the linear relation between the variables was tested using a Pearson correlation to confirm that the variables correlated. Finally, SPSS was applied to this survey questionnaire to enable the principal component analysis.

Survey Responses Results

This research aimed to assess the university's readiness to implement the sports health education program for female students, with the main concern being the inability to implement a sports health education program due to lack of resources and other problems, such as inadequate curriculum and a need to invest in developing a sports health education program. The second part of the survey included 10 questions with a Likert-type scale for the students and faculty to evaluate the university's readiness to implement a sport health education program. Each question used a scale that asked participants to provide their opinions from strongly agree to strongly disagree with the statement.

The results are presented in Table 2 for students and Table 3 for faculty as to their agreement on their readiness to implement sports health education for female students. Notably, responses to Question 4 differ dramatically for the two groups, with the majority of students perceiving health education as inexpensive in terms of incorporating it into the curriculum and the majority of faculty members disagreeing. For Questions 8 and 9, the majority of students and faculty agreed that physical education is beneficial.

Table 2

Student Responses – Agreement on Readiness to Implement Sports Health Education

Part 2 Item	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1. Students at Saudi Arabian universities do not engage in physical activity because of tight academic schedules.	21.2% (25)	53.4% (63)	21.2% (25)	3.4% (4)	0 (0%)
2. Deteriorating health conditions among students at Saudi Arabian Universities and the general population are related to low participation in sporting and physical activities.	41.5% (49)	51.7% (61)	3.4% (4)	2.5% (3)	0 (0%)
3. Saudi Arabian universities are not equipped to provide sports health educational instructional programs.	45.8% (54)	46.6% (55)	4.2% (5)	2.5% (3)	0 (0%)
4. Instructors and teaching staff will accept the introduction of a sports education program for female students at Saudi Arabian universities.	13.6% (16)	63.6% (75)	22% (26)	0% (0)	0 (0%)
5. There is limited awareness among Saudi Arabian university students about the usefulness and importance of physical activity in alleviating chronic illnesses.	14.4% (17)	66.9% (79)	13.6% (16)	0.8% (1)	0 (0%)
6. The introduction of sports health education instruction programs at Saudi Arabian universities will reduce the cases of chronic illnesses in Saudi Arabia.	50% (59)	44.9% (53)	3.4% (4)	0.8% (1)	0 (0%)
7. Sports will positively impact academic performance for students.	45.8% (54)	50.7% (61)	1.7% (2)	0% (0)	0 (0%)
8. If introduced, a sports education program for female students will translate into better educational	34.7% (41)	61.9% (73)			

outcomes for learners at Saudi Arabian Universities.			2.5% (3)	0% (0)	0 (0%)
9. The Saudi Arabian university teaching curriculum needs to accommodate more physical education activities.	37.3% (44)	55.9% (66)	5.1% (6)	0.8% (1)	0 (0%)
10. The Saudi Arabian university curriculum is skewed to discriminate against women's participation in sports and physical activities.	12.7% (15)	37.3% (44)	23.7% (28)	25.4% (30)	0 (0%)

Table 3

Faculty Responses – Readiness to Implement Sports Health Education

Part 2 Item	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1. Students at Saudi Arabian universities do not engage in physical activity because of tight academic schedules.	1 (14.2%)	5 (71.4%)	1 (14.2%)	0 (0%)	0 (0%)
2. Deteriorating health conditions among students at Saudi Arabian universities and the general population are related to low participation in sporting and physical activities.	2 (28.3%)	3 (42%)	2 (28.3%)	0 (0%)	0 (0%)
3. Saudi Arabian universities are not equipped to provide sports health educational instructional programs.	0 (0%)	5 (71.4%)	2 (28.3%)	0 (0%)	0 (0%)
4. Instructors and teaching staff will accept the introduction of a sports health education program for female students at Saudi Arabian universities.	1 (14.2%)	6 (71.4%)	0 (0%)	0 (0%)	0 (0%)
5. There is limited awareness among Saudi Arabian university students about the usefulness and importance of physical activity in alleviating chronic illnesses.	0 (0%)	6 (85.4%)	1 (14.2%)	0 (0%)	0 (0%)
6. The introduction of sports health education instruction programs at Saudi Arabian universities will reduce the cases of chronic illnesses in Saudi Arabia.	0 (0%)	4 (57%)	2 (28.3%)	1 (14.2%)	0 (0%)
7. Sports will positively impact academic performance for students.	0 (0%)	5 (71.4%)	0 (0%)	2 (28.3)	0 (0%)
8. If introduced, a sports health education program for female students will translate into better educational outcomes for learners at Saudi Arabian Universities.	1 (14.2%)	5 (71.4%)	0 (0%)	1 (14.2%)	0 (0%)
9. The Saudi Arabian university teaching curriculum needs to accommodate more physical education activities.	0 (0%)	6 (85.4%)	0 (0%)	1 (14.2%)	0 (0%)
10. The Saudi Arabian university curriculum is skewed to discriminate against women's participation in sports and physical activities.	0 (0%)	0	4 (57%)	3 (42%)	0 (0%)

This research also aimed to assess student and faculty beliefs regarding health education in Saudi Arabia.. Notably, Tables 2 and 3 show that students and faculty have similar views on many aspects of physical education in Saudi Arabia. For example, 5 out of 7 faculty members agree that students do not engage in insufficient physical activity. A significant difference in responses can be seen when evaluating question 10, where faculty members either feel neutral (57%) or disagree (42%) with the idea that the university's curriculum in the state discriminates against women. In comparison, 37% of the students agree with the statement. There is an agreement within both groups regarding the positive effect that sports will have on the academic performance of the students, with 50% of the students, and 71% of faculty members agree with the statement. Similarly, 61% of the students and 71% of the faculty believe that if introduced, the sports education program will have a beneficial effect on the students and their education, as reflected by the responses to question 8. 85% of the faculty and 55% of the students believe that the teaching curriculum has to include more sports activities in question 9. In general, based on Tables 2 and 3 there is an agreement between the students and the faculty in need to change the way sports education for female students is addressed in Saudi Arabia.

The survey also asked students and faculty yes/ no questions regarding their beliefs and the results are presented in Table 4 for students and in Table 5 for faculty as to their beliefs regarding health education in Saudi Arabia. Notably, the results of the survey from Table 3 and Table 4 show an agreement between the opinions of the faculty and students. Both in the case of students and the faculty members, most questions received the “agree” or “strongly agree” answer,

supporting the initial hypothesis of this paper. For example, Question 2 regarding the deteriorating health of students and the connection of this to physical activity, 51% of students and 42% of faculty members replied that they agree that a connection between the two exists. Moreover, both the faculty and the students agree that the University is not equipped well to facilitate physical activities for female students. Based on the responses to question 6, both faculty members and students support the introduction of a sports education program as a way to address chronic illnesses problem. As a result, the answers in Tables 3 and 4 show an agreement between the two groups.

Table 4

Student Responses – Beliefs Regarding Health Education in Saudi Arabia.

Questions	Yes	No
1. Instructors and students have neglected physical education in institutions of higher learning.	95.8% (113)	2.5% (3)
2 The sports education curriculum at Saudi Arabian universities is highly effective in impacting physical activity skills for female students.	80.5% (95)	17.8% (21)
3. Saudi Arabian universities have sufficient facilities to support female students' physical activities	5.9% (7)	92.4% (109)
4. Saudi Arabian university facilities are easy to access, and the changing rooms are sufficient for female learners.	1.7% (2)	96.6% (114)
5. More females are inhibited from participating in sports and physical activities due to cultural and gender bias in Saudi Arabia.	91.5% (108)	5.9% (7)
6. Faculty at Saudi Arabian universities are inadequately motivated to provide physical training education to female students.	97.5% (115)	0.8% (1)
7. Physical, education training is cost-intensive and this hinders the implementation of physical education programs for female students at Saudi Arabian universities.	94.9% (112)	3.4% (4)
8. The government has sufficiently supported physical education programs in Saudi Arabia universities.	94.1% (111)	4.2% (5)
9. Rigid academic hours form the greatest barrier to physical exercise.	93.2% (110)	4.2% (5)
10. Physical education programs should be mandatory in Saudi Arabia.	96.6% (114)	0.8% (1)

Table 5*Faculty Responses – Beliefs Regarding Health Education in Saudi Arabia.**Student Responses – Beliefs Regarding Health Education in Saudi Arabia.*

Questions	Yes	No
1. Instructors and students have neglected physical education in institutions of higher learning.	6 (85.7%)	1 (14.2%)
2. The sports education curriculum at Saudi Arabian universities is highly effective in impacting physical activity skills for female students.	3 (42%)	4 (57%)
3. Saudi Arabian Universities have sufficient facilities to support female students' physical activities	5 (71%)	2 (28%)
4. Saudi Arabian university facilities are easy to access, and the changing rooms are sufficient for female learners.	0 (0%)	7 (100%)
5. More females are inhibited from participating in sports and physical activities due to cultural and gender bias in Saudi Arabia.	4 (57%)	3 (42%)
6. Faculty at Saudi Arabian universities are inadequately motivated to provide physical training education to female students.	5 (71%)	2 (28%)
7. Physical, education training is cost-intensive and this hinders the implementation of physical education programs for female students at Saudi Arabian universities.	6 (85%)	1 (14%)
8. The government has sufficiently supported physical education programs in Saudi Arabia Universities.	5 (71%)	2 (28%)
9. Rigid academic hours form the greatest barrier to physical exercise.	4 (57%)	3 (42%)
10. Physical education programs should be mandatory in Saudi Arabia.	6 (85%)	1 (14%)

Additionally, as for the results in Table 4 and Table 5, a brief evaluation suggests that both the students and faculty recognize their failure to address the issue of physical activity adequately. However, there is a difference in perceiving the physical activity of female students and how it is addressed through physical education, with 80% of students reporting that the curriculum is sufficient and 57% of faculty disagree. An essential question of this survey is the motivation of faculty members, where both students and faculty agree that the educators are not properly motivated to develop health education programs. With other questions in this section, there is an agreement between the students and faculty. Hence, one

can conclude that the sports education program for female students is supported by both parties.

Research Question 1

Are the faculty well equipped to provide sufficient health education to female University of Jeddah students?

First, to determine whether the faculty perceived themselves as equipped sufficiently for providing the sport health education to female students, one can examine Table 3, and more specifically, Question 3. The majority of faculty respondents (71%) reported that they strongly agreed or agreed with the statement that the government does not provide enough equipment for institutions to carry out a sport health education program.

Question 5 (There is limited awareness among Saudi Arabian University students about the use-fullness and importance of physical activity in alleviating chronic illnesses) shows a disagreement between the students and the faculty. The faculty believed (81.3%) that there was limited awareness among Saudi Arabian university students about the usefulness and importance of physical activity in alleviating chronic illnesses, and that is why they were ignorant about the provision of physical activity. The students (66%) strongly disagreed with this statement, suggesting that the level of awareness is sufficient. This finding suggested that the responses of the students and faculty for question 5 regarding the provision of physical activity in Saudi Arabian universities remains an area that needs to be explored further. Such disagreements are addressed when the responses to Question 9 are explored.

Question 9 (The Saudi Arabian University teaching curriculum needs to accommodate more physical education activities) shows a disagreement between the students and the faculty since the students thought that the education system was well equipped to carry out physical education lessons 92.4%, while the faculty disagreed (85%). Most of the students and faculty agreed that the Saudi Arabian University teaching curriculum needs to accommodate more physical education activities to promote physical activity among students, based on their responses. However, such contradictions are substantiated by Question 1 of Part 3 that showed that both students and faculty had neglected physical activity in Saudi Arabia, and that is why the concerned stakeholders mutually blame each other because the curriculum lacks physical activity education and students dedicate little time to physical activity on their own.

Research Question 2

Does the University of Jeddah provide sufficient resources to facilitate the integration of the sports health education program into the curriculum for female students?

The second research question aimed to determine if the university's curriculum was suitable for the implementation of physical education that targets women. The answers to this question can be drawn from Part 2 and Part 4 of the survey, For Part 2, presented in Table 2 and 3, where were questions were dedicated to the curriculum of the university. In Table 2, responses to Question 10 suggests that 93.2% of the students believed that the University of Jeddah teaching curriculum needed to accommodate more physical education activities. This finding is substantiated by Question 4 of Table 3 because 92.4% of the

respondents did not agree that Saudi Arabian University had sufficient facilities to support female students' physical activities. Question 11 in Table 2 shows a split response (50%) on the aspect that the Saudi Arabian University curriculum is skewed to discriminate against women's participation in sports and physical activities. These findings indicate that the University of Jeddah did not provide sufficient resources to facilitate the integration of the sports health education program into the curriculum for female students because Questions 3, 4, and 5 of Table 3 showed that 96.6% of the participants did not believe that Saudi Arabian University facilities were easy to access or that the changing rooms were sufficient for female learners and 91.5% believed that females were inhibited from participating in sports and physical activities due to cultural and gender bias in Saudi Arabia. The responses suggest that faculty believed that the existing physical health curriculum was sufficient to accommodate all students, while students believed that it was not enough. In summary, there was a consensus regarding the curriculum of the University of Jeddah being discriminative against women, and the students would want to see changes made to it.

Research Question 3

What barriers may prevent the implementation of the sports health education instructional program as a compulsory discipline for female students?

The third research question suggests that there are some perceivable barriers that obstruct the integration of sports education for female students as a compulsory discipline. The anticipated barriers that I aimed to test were the lack of equipment, lack of faculty preparedness and the inability of the students to integrate physical activity into their already tight schedules (Alahmed et al., 2016;

Awadalla et al., 2014). Regarding the inability to exercise due to tight schedules, according to answers to Question 1 in Table 2 both faculty and students (74.2%) though that their tight academic schedule was a serious obstacle to engaging in physical activity. This was supported by Question 9 in Table 3 because 93.2% of the participants agreed that rigid academic hours formed the greatest barrier to physical exercise. Such observation is surprising because Question 2 in Table 2 showed that 93.2% of the participants agreed that deteriorating health conditions among students at Saudi Arabian University and in the general population, are related to low physical activity. Therefore encouraging the University of Jeddah students to engage in routine physical activity should be a top priority for faculty and university management.

Based on Question 5 in Table 2, one can suggest that limited awareness regarding the benefits of sports activity is the main barrier. This is because 81.3% of the participants agreed that there was limited awareness among Saudi Arabian University students about the usefulness and importance of physical activity in alleviating chronic illnesses. The other barriers include the neglect of instructors and students' physical education in institutions of higher learning, discrimination against women, and lack of opportunities for them to engage in physical activity. Regardless, in summary, the main barriers to introducing this program are a lack of awareness of the positive aspects of physical activity the perception of the staff regarding the impact of this program on their workloads, and the limited availability of resources necessary to facilitate the implementation.

Next, the survey asked the two groups to answer either Yes or No a set of 10 questions. The results are presented in Tables 4 and 5 for both groups - faculty and students. Notably, responses to Question 4 differ dramatically across

the two groups, with the majority of students (92%) perceiving health education as inexpensive in terms of integrating it into the curriculum and the majority of faculty members (85%) disagreeing. For Questions 8-9, the majority of students and faculty agree that physical education was beneficial. However, its implementation was hindered. The next section links the results presented above with the remaining research questions.

Research Question 4

What are the benefits of the implementation of the health sports education instructional program as a compulsory discipline for female students?

When answering Question 1 of Part 2, participants revealed that they did not exercise regularly, mainly because they were not sure about the effects that such activity had on their health. The outcomes related to compliance with physical activity could be seen in two domains per the present study better education and improved health. This is because Question 8 in Table 2 indicates that 96.2% of the participants, both students and faculty, agreed that a health sports education program for female students would translate into better educational outcomes for learners at University of Jeddah while Question 2 in Table 2 shows that 93.2% of the participants believed that deteriorating health conditions among students at and in the general population, are related to low levels of physical activity. This suggests that physical activity is warranted in Saudi Arabian University students and especially in the female population.

Data Analysis and Results (Qualitative)

This study also involved qualitative research methods. A convenient sampling approach was used to select respondents for this study. A convenient sampling approach was adopted because students and professors with similar features needed to participate in this research. It is a simple random sampling technique and enables an adequate group of people to be recruited to reduce mistakes. The fourth part of the survey was the most important since it included open-ended questions, where the participants could express their opinion regarding the state of sports and health activity at the University of Jeddah. In this section, the analysis of the students' and faculty members' responses to the open-ended questions is presented.

Findings

Each participant was asked to indicate their perception as to the of a significant relation between a person's healthy lifestyles and physical exercises. Most of the findings indicated that the student and faculty participants saw physical activity as beneficial for an individual's psychological well-being. This is an important because physical activity is an important tool for the treatment and management of diseases like blood sugars, overweight, and cardio-vascular illnesses (Hridya Nand, 2014). Exercise levels are indeed; significantly low in Saudis.

Regarding physical activity in the open-ended questions section of the survey, the participants were asked to cite how many hours per week they dedicated to sports. The student's responses varied from 2-3 hours to 5 hours, with

some indicating even 7 or more hours per week. However, some cited “lack of time” due to work or other reasons. The majority of respondents cited the lack of sports facilities or time to engage in sports as the primary barrier that did not allow them to participate in sports. One of the participants from the students group cited the "lack of facilities and lack of time" as a response to questions regarding the barriers that did not allow for regular physical activity. Other respondents referred to the issues with access to sports facilities and curriculum as well. As a result, the conclusion drawn from this section allows determining the following. The survey responses suggest that female students and faculty members at University of Jeddah feel the need for change in the public's support for female sports engagement and recognize the importance of sports for one's physical health. However, the university lacks facilities and curriculum that would allow female students to integrate sports into their lives, based on the answers of both students and faculty. Table 6 presents the responses to the survey’s open ended questions from both students and faculty.

Table 6

Open-Ended Questions Responses from Students and Faculty Members.

Level 1		
1. What is the importance of sports and physical activities in alleviating chronic diseases among students and the general population?		
Initial Code	Transcript	Memo
Physical activity	1 Regular physical activity, fitness, and exercise are critically important for the health to reduce the morbidity and mortality from many chronic	Specifies that aerobic fitness is as important as

	diseases. 2 It is third component after medication and diet use 3 The most prominent benefit of exercising is that it helps with weight management. 4 Boosts mental health. ... 5 Energy level boost. ... 6 Improvements in mood. 7 Promoting physical activity is an important part of enhancing public health	combatting the increase of illnesses among the students and the general public. And also, that aerobic exercise has a lot of further advantages along with improving somebody's emotional state
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Level 2

3. To what extent do you feel that general attitudes toward sports and physical activities affect female students' participation in extracurricular activities?

Initial Code	Transcript	Memo
Feel that general attitudes toward sports and physical activities	1 a significant impact	The memo; the real understanding of physical exercise has vastly enhanced and also had a massive positive effect.

Level 3		
5. What are the existing gaps in the Saudi Arabian university sports health education program curriculum that need to be corrected to sufficiently address the problem of chronic diseases for female students?		
Initial Code	Transcript	Memo
Corrected to sufficiently address the problem	<p>1 Take courses with teaching physical education or sports.</p> <p>2 Focused on improving diet and fitness</p> <p>3 Physical activity program that can help the students</p>	<p>Increased physical exercise as well as increased dietary schooling throughout the student curriculum; the majority of instances of the serious condition might well decrease significantly.</p>
Level 4		
5. What are the existing gaps in the Saudi Arabian university sports health education program curriculum that need to be corrected to sufficiently address the problem of chronic diseases for female students?		
Initial Code	Transcript	Memo
Gaps in the Saudi Arabian university sports	<p>1 don't provide sporting facilities for females</p> <p>2 there are few health education programmers</p> <p>3 the effectiveness of health-related</p>	<p>Deficiencies mostly in the physical education curriculum at the Saudi Arabia universities will not render the</p>

education program	physical education programmers in Saudi	improvements as important as they should become
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Reflection

The participants, female students and faculty from the University of Jeddah, participated in this study and expressed their views about the program. This author believes it is essential to consider the substantial limitations of this study. Overall fitness and instructional services foster many advantages regarding chronic disease in learners (Robinson et al., 2019). The aim of this research was to measure the thoughts and experiences of student and faculty engaged in a collaborative physical education instructional system, highlighting the suggestion for regular physical exercise, particularly for women. Regular exercise is a vital lifelong indicator of well-being (Dima-Cozma et al., 2014). A lack of physical exercise affects well-being exceeds the ill-effects of consuming tobacco products (Dima-Cozma et al., 2014). The occurrence, safety benefit, and proof of variation have all shown to increase a person's life span (Mosconi et al., 2018).

Triangulation of the Quantitative and Qualitative

To conclude, this research aimed to explore the thoughts and experiences of students and faculty participating in the integration of the sports health education instructional program into the curriculum for female students at Jeddah University in Saudi Arabia. An additional purpose was to explore whether the implementation of a sports health education program at the University of Jeddah for its female students would be necessary to promote the health of this population.

The main assumptions regarding the lack of sports in the lives of female students included lack of time, a barrier in the form of curriculum, and having no access to sports facilities. Triangulation of the quantitative and qualitative responses was used to verify the findings of this study mainly, the fact that female students at University of Jeddah recognize that sport activity is essential for health and the females need better access to sports facilities to engage in physical activity. Despite the fact that the respondents cited increasing public support for female engagement in sports and their dedicating from 2 to 7 hours a week to sports activities, they saw issues with curriculum and facilities as significant barriers to their engagement in sports. This study showed a significant relation between how much learners know regarding overall fitness and whether people work out. The respondents also mentioned a need to participate in extra curricular activities . The triangulation of the qualitative and the quantitative results, mainly the comparison of the open-ended and closed-ended responses suggest that curriculum improvements are necessary, with 96.2% of the respondents agreeing that a health sports education program would enhance their well-being and a majority of respondents cited lack of proper facilities or curriculum as the main barriers to implementation of such a program. This is consistent with the hypothesis regarding tight academic schedules and work since 74.2% of the participants agreed that their academic schedules did not allow for more physical activity. In comparison, in the open-ended responses, students cited that they could dedicate at least 2 hours per week to physical activity, while some referred to their long work hours as a barrier for not exercising..

For Question 4 of the open-ended section survey, one participant from the students' group revealed that she could "see a strong correlation between how

much fellow students know about physical health and how often they exercise," which is why the participant noted a lack of engagement in extracurricular activities based on her response to Part 2 of the survey, for example she answered "agree" to question 2 about the increasing deterioration of student's health and part 3. Similar results were found from other participant from the student group , suggested that the curriculum should be modified to increase awareness and provide women with an opportunity to exercise.

In most cases the findings of the open-ended survey confirmed the results of the closed-ended questions regarding the perception and availability of resources at the University of Jeddah. Regular exercise is a vital lifelong indicator of well-being. As a result of triangulation, one can conclude that the main assumptions of this research were supported through the quantitative and qualitative assessment female students at University of Jeddah will benefit from an improvement of the health sports education curriculum.

Chapter 5: Discussion and Conclusions

Introduction

This chapter elaborates on the findings and includes a discussion of their practical application at the University of Jeddah. The purpose of this study was to understand how the integration of sports and other health-promoting activities could be done at the University of Jeddah. The main question was as follows: "What are the thoughts and experiences of students and faculty members participating in the integration of the sports health education instructional program into the curriculum for female students at the University of Jeddah in Saudi Arabia?" The sample consisted of female students. In total, 113 participants were enrolled in this study, and four faculty members provided their insight. The findings will help design a sports health education program targeted toward students' needs, which considers their preferences and time constraints, and is suitable for the cultural and social environment of Saudi Arabia.

Significance of the Research Findings

The research findings support the initial hypothesis about the willingness of female students to participate in the sports health education program at the University of Jeddah. Moreover, the results confirm that these students understand the health benefits brought by physical activity concerning decreasing the likelihood of developing a disease and supporting health. The majority tried to dedicate at least 2 hours per week to sports. The findings uncovered an unforeseen barrier: tight schedules, both academic and work-related that some cited as the main reason why they could not exercise regularly.

The perceptions of these students and faculty members of a sports health education program at the University of Jeddah are positive, suggesting that they

would support such an initiative. No cultural or social barrier was a significant issue. Moreover, the students cited that new programs in the university and in Saudi Arabia, in total, promoted health and participation in sports for female students. Mainly, the findings suggest that the students are well aware of the positive effect of sports on their health. However, the instructors and students neglect physical activity, and there are no facilities for women, such as changing rooms, to enable engagement in physical activity. Therefore, the question of students' physical activity has to be addressed both in the form of curriculum changes and by investing in the construction or redesign of facilities for sports that female students can use. The findings correspond with the initial hypothesis about the barriers to the physical education of female students at the University of Jeddah.

When comparing the findings of this study to research by other scholars, one can conclude that the findings are consistent with conclusions of Quennerstedt (2019), Human Rights Watch (2017), and Al-Hashem (2016): that the country of Saudi Arabia dedicates specific attention to the health education of youth, mainly because of the declining number of young people and an increasing number of preventable conditions. Despite this, there are barriers, specific to individual educational institutions and the system of education in general, that should be addressed to help female students participate in sports.

Implications

First, the applied theoretical framework presented in Chapter 2 is the cognitive learning theory, which was used to design this study. This model helps us comprehend the internal and external processes affecting an individual's behavior and how they can be changed. According to Harasim (2017) with

physical education, little attention is dedicated to exploring the factors that can impact a student's desire to do sports or the barriers that may hinder them.

Moreover, Usher et al., (2015) stated that little attention is dedicated to examining the theoretical basis for physical activity integration at educational institutions.

The existing research, for example, the study of chronic conditions prevalent among university students by Al-Hazzaa and AlMarzooqi (2018), indicates that the physical health of this population is a concern. This study supports this finding by suggesting a cause of the problem: lack of time and facilities that can help students take care of their physical health. Moreover, Sieppel (2019) and Zarotis et al. (2017) pointed out that a person's decision to participate in sports activity is connected to a plethora of factors. The current study helps to better comprehend these factors (i.e., lack of time and facilities), specifically for female students at the University of Jeddah.

Next, it is necessary to discuss the limitations and strengths of current research, which will help design future studies and interpret the findings. Mainly, the weakness of the current study is the limited number of participants and limited insight from the faculty members. The latter could have explained why the university did not address the issue of physical education more in-depth. However, the study design and research question implied assessing data from the students to determine if such a program would be popular. The study findings show disagreement between the perceptions of costs associated with implementing a sports health education program, with the students responding that the program should not cost much and faculty members stating that it is expensive to implement.

Another limitation of this study is the data collection for the open-ended questions, since some students responded in English, while others used Arab. Hence, the answers required a translation for an accurate assessment, and some information could have been lost as a result. The main strength of this study is the research design: triangulation allowed comparing the findings of the quantitative combined with qualitative data collection methods, further solidifying the conclusions (Malamatidou, 2017). Moreover, the inclusion of the qualitative method into the design allowed a better understanding of what the students saw as the main issue, and some valuable insights, such as stress and having to work long hours, were assessed using this survey.

Therefore, in total, the study and its findings are credible because triangulation and methods for checking validity were used to determine if the findings were accurate, and the comparison of the qualitative and quantitative allowed for drawing valid conclusions about this problem. Given the methodology, collected data, and research design, the findings and recommendations are found to be valid and reliable because the results were tested, and the outcomes of the study are based on the intersection of the qualitative and quantitative findings.

Theoretical Implications

Future research, based on these findings, should focus on exploring the best ways to integrate sports health education for females into university curricula to ensure that these activities are sufficient to support health but do not hinder the education of the students. In addition, researchers should explore different types of sports activities that can be integrated into university curricula dancing, tennis,

volleyball and running to determine which ones students perceive as the most suitable and enjoyable.

Practical Implication

The purpose of this sports education study was to help improve students' health and well-being at the University of Jeddah, particularly for female students who may face more barriers than male students. The main practical implication is a framework for designing a curriculum and new sports facilities that students can use. First, the study indicates that students did not have enough time to exercise, although many tried to dedicate at least several hours per week to this activity. The issue is caused by tight academic schedules and a need to work, which many cited as barriers. Hence, by integrating more sports-related activities, the university will help the students address their need for regular exercise, without their having to sacrifice the limited time they have available outside of their studies.

Future Implications

In addition to the research into the best practice of implementing a sports health education curriculum for the University of Jeddah, future research can examine its effect on students' health since the premise of this study was the fact that regular exercise promotes health and well-being. A cohort study could examine the sample of female students before the curriculum changes, including their physical health and subjective assessment of their well-being. These data can be compared to information collected before implementing the program with the data collected sometime after it is implemented, using the same sample. Such a study would help examine the actual effects and benefits of physical activity on the physical well-being of individuals.

Recommendations and Future Research

The next steps in forwarding the line of research are further working on understanding how the physical health of students can be supported with programs and curriculum at universities. For example, further work on developing a program that raises awareness of the importance of physical education can be done mainly, because it is essential to be educated on the topic of health to achieve a better level of physical well-being. Notably, although most participants agreed that the University does not have enough equipment to facilitate adequate participation in the sports-related activities for its female students. One issue is the equipment that female students do not have access to gym facilities on the University's territory. To further explore what equipment is necessary for a successful female health education program, such as treadmills and strength training equipment. This would require the University to invest in constructing the gym and adjacent facilities, such as locker rooms and showers for females. Other options include equipment for active types of sports - tennis, volleyball, or others.

Regarding the curriculum, the research indicates that most participants agree on the lack of preparedness of the faculty and inadequate curriculum program that hinders student's access to exercising. One issue is that the health education program for females was modified from a males program with some slight modifications to ensure that it can be applied for female students as well. However, the research suggests that it is necessary to develop a curriculum for female students from scratch, considering the specifics of female physical health.

Another aspect for consideration is having faculty from outside Saudi Arabia. On the one hand, this can have a negative effect on female students because of the faculty's misunderstanding of the local culture and traditions. As a

result, there may be a misunderstanding between the faculty and the students regarding the sports activities because of cultural differences. It is possible that having staff members from Saudi Arabia, who would be in charge of sports education, would be more beneficial because these faculty members would consider the cultural specifics and the context of implementing appropriate female sports education program into the curriculum.

Conclusions

Overall, this chapter has focused on providing a discussion of the research findings and recommendations regarding how these can be implemented into the curriculum and sports practice at the University of Jeddah. The significance of the study is the fact that it confirms the need to dedicate more attention to designing a sports health education program, especially for female students in Saudi Arabia. The findings confirm that the majority of students recognize the effect that sports have on preventing diseases and on their overall physical health; however, the curriculum they have and the work that most students attend to do not allow them to dedicate a sufficient amount of time to these activities. The subject in general, and the findings of this study, in particular, contribute to the understanding of how universities can design programs to enhance the well-being of their students. Future steps include developing and implementing a curriculum that includes sports health education activities at the University of Jeddah and future research that focuses on finding the best practices for sports health education, the cost of implementing such programs, and the effects and benefits they bring to student.

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Appendix A

Survey

This study will explore the possibilities of a successful implementation of sports health education instructional programs and improves the physical activity of students and reduce associated illnesses. The survey will take about 10-15 minutes to complete. This methodology allows collecting a combination of qualitative and quantitative data, analyzing the two, and making conclusions based on the combined results. The data from the close-ended questions analysis and open-ended questions will be analyzed, and by applying the methods of descriptive statistics, the research analysis is aligned with the design of this study. The statistical package for social sciences SPSS will be used to collect and evaluate the data from the responses. Concurrent triangulation will be applied to survey software. You have the right to contact the Principal Researcher If you do not want to be in this study, you may refuse to participate. If you decide to participate and then changes your mind, you may quit participating at any time. You will not be punished or discriminated against in any way if you refuse to participate your job or grade. The statistical package for social sciences SPSS will be used to collect and evaluate the data from the responses. Concurrent triangulation will be applied to survey software. All information will be kept confidential to the extent allowed by a University policy. The information will be kept in a coded SPSS. At the conclusion of the study you will have the right to request feedback about the results.

Part 1 (Please check your appropriate response)

Education level

BA

MA

PhD

How often do you participate in physical activity?

Once

Twice

Three or more

What is your position at the university?

Undergraduate student

Professor

Part 2 (Strongly agree, Agree, Neutral, Disagree, Strongly Disagree)

	Strongly agree	Agree	Neutral	Disagree	Strongly Disagree
1.Students at Saudi Arabian University do not engage in physical activity because of tight academic schedules.					
2.Deteriorating health conditions among students at Saudi Arabian University and, the general population, are related to low participation in sporting and physical activities.					
3.Saudi Arabian University is not equipped to provide sports health educational instructional programs.					
4.Instructors and teaching staff will accept the introduction of a sports educational program for female students at Saudi Arabian University					
5.There is limited awareness among Saudi Arabian University students about the usefulness and importance of physical activity in alleviating chronic illnesses.					
6.The introduction of sports health education instruction programs at Saudi Arabian University will reduce the cases of chronic illnesses in Saudi Arabia.					
7.Sports will positively impact academic performance for students.					
8.If introduced, a sports education program for female students will translate into better educational outcomes for learners at Saudi Arabian University					
9.The Saudi Arabian University teaching curriculum needs to accommodate more physical education activities.					
10.The Saudi Arabian University curriculum is skewed to discriminate against women's participation in sports and physical activities.					

Part 2: (“Yes” or “No”)

1. Instructors and students have neglected physical education in institutions of higher learning.	<input type="checkbox"/> Yes <input type="checkbox"/> No
2 The sports education curriculum at Saudi Arabian University is highly effective in impacting physical activity skills for female students.	<input type="checkbox"/> Yes <input type="checkbox"/> No
3.Saudi Arabian University has sufficient facilities to support female students’ physical activities	<input type="checkbox"/> Yes <input type="checkbox"/> No
4. Saudi Arabian University facilities are easy to access and the changing rooms are sufficient for female learners.	<input type="checkbox"/> Yes <input type="checkbox"/> No
5. More females are inhibited from participating in sports and physical activities due to cultural and gender bias in Saudi Arabia.	<input type="checkbox"/> Yes <input type="checkbox"/> No
6. Faculty at Saudi Arabian University are inadequately motivated to provide physical training education to female students.	<input type="checkbox"/> Yes <input type="checkbox"/> No
7. Physical educational training is cost intensive and this hinders the implementation of physical education programs for female students at Saudi Arabian University.	<input type="checkbox"/> Yes <input type="checkbox"/> No
8. The government has sufficiently supported physical education programs in Saudi Arabia University.	<input type="checkbox"/> Yes <input type="checkbox"/> No
9. Rigid academic hours form the greatest barrier to physical exercise.	<input type="checkbox"/> Yes <input type="checkbox"/> No
10. Physical education programs should be mandatory in Saudi Arabia.	<input type="checkbox"/> Yes <input type="checkbox"/> No

Part 4: (Please answer the following questions as honestly as possible taking into account personal experiences.

- 1.What is the importance of sports and physical activities in alleviating chronic diseases among students and the general population?
- 2.How much time do you allocate each week for sports or physical activities?
- 3.To what extent do you feel that general attitudes towards sports and physical activities affect female students' participation in extracurricular activities?
4. How has the Saudi Arabian University sports education program Saudi Arabian curriculum sufficiently addressed the problem of chronic diseases through sporting and physical activities for female students?
- 5.What are the existing gaps in the Saudi Arabian University sports education program curriculum that need to be corrected to sufficiently address the problem of chronic diseases for female students?

Appendix B

Survey in Arabic

الاستبيان

الاعزاء منسوبي جامعه السعوديه ،،

انت مدعو للمشاركة في دراسته بعنوان برنامج التعليم الصحه الرياضي للطالبات في جامعه جده لانك احد المشاركين في منظومه التعليميه بجامعه الهدف من هذه الدراسة هو ستكتشف الدراسه امكانيات التنفيذ الناجح للبرنامج التعليم الصحي الرياضي وتحسن الاداء والنشاط البدني والتقليل من الامراض المرتبطه بها للطالبات بجامعه جده. سياخذ من الوقت ١٠-١٥ دقيقه ستسمح هذه الاستبيانته بجمع مجموعه من البيانات النوعيه والكميه وتحليل الاثنين واستخلاص النتائج من خلال الاحصاء الوصفي بما يتفق مع تصميم الدراسه واستخدام SPSS تقييم البيانات. في حال قررت المشاركة ثم غيرت رايتك يحق لك الانسحاب دون اي مسؤوليه في مجالك الوظيفي او معدلك .

الدراسة تعتبر تطوعية وسوف يتم التعامل بسرية تامة مع المعلومات المقدمة فيها ولن تستخدم إلا لغرض البحث العلمي فقط وقد تنشر نتائجها وسيكون لك الحق في طلب النتائج هذه الدراسه .المعلومات سوف تجمع لمدة ثلاث اسابيع ومن ثم سوف يتم التخلص منها بعد خمس سنوات من قاعدة البيانات شاكره لكم مشاركتكم في هذي الدراسه

الباحثه اريج كريم الجدعاني

الجزء الاول

ضع اشاره في المربع امام كل فقره من الفقرات الاتيه

مستوي التعليم

- بكالوريوس
- ماجستير
- دكتوراه

كم مره تشارك في الانشطه البدنيه ؟

- مره
- مرتين
- ثلاث مرات او اكثر

ماهو دورك في الجامعه؟

- طالب دراسات عليا
- دكتور

الجزء الثاني

ضع اشاره في المربع الذي يتفق مع رايتك وذلك امام كل فقره من الفقرات الاتيه:

العبارة	وافق	وافق بشده	محايد	لا اوافق	لا اوافق بشده
1. لايمارس الطالبات في الجامعات السعودية النشاط البدني بسبب ضيق الجدول الدراسي.					
2. يرتبط تدهور الأوضاع الصحية بين الطالبات في الجامعات السعودية والناس عامة بقلة ممارسة النشاط البدني.					
3. الجامعات السعودية غير مجهزه لتقديم البرامج التعليمية الصحية الرياضية.					
4. هيئة التدريس سيقبلون ادخال برنامج تعليمي رياضي للطالبات في الجامعات السعودية.					
5. هناك وعي محدود لدى الطالبات في الجامعات السعودية بفائدة واهمية النشاط البدني في التخفيف من الامراض المزمنة.					
6. ادخال برنامج تعليمي رياضي للطالبات في الجامعات السعودية يساهم في الحد من انتشار الامراض المزمنة.					
7. ستؤثر الرياضه بشكل ايجابي على الاداء الاكاديمي للطالبات.					
8. في حال تقديم هذا البرنامج راح يعكس ايجابيا على مستوى طالبات الجامعات السعوديه .					
9. يحتاج تدريس المنهج في الجامعات السعودية النشاط الي استيعاب المزيد من انشطه التربيه البدنيه.					
10. هناك تميز ضد مشاركة الطالبات (النساء) في الرياضه والانشطه البدنيه في الجامعات السعودية					

الجزء الثالث

ضع اشارته في المربع الذي يتفق مع رأيك وذلك امام كل فقره من الفقرات الاتيه:

العبارة	نعم	لا
1. تجاهل الاساتذه والطالبات التربيه البدنيه في مؤسسات التعليم العالي.	نعم	لا
2. ان منهج التربيه الرياضيه في الجامعات السعوديه فعال للغاية في التأثير على مهارات النشاط البدني للطالبات.	نعم	لا
3. تملك الجامعات السعوديه مرافق كافيه لدعم الانشطه البدنيه للطالبات.	نعم	لا
4. يسهل الوصول الي المرافق وغرف تغيير الملابس في الجامعات السعوديه.	نعم	لا
5. يمنع على الطالبات المشاركه في الانشطه الرياضيه والبدنيه بسبب العادات والتقاليد في المجتمع السعودي.	نعم	لا
6. عدم وجود دافع قوي لدى اعضاء هيئه التدريس في الجامعات السعوديه لتوفير برامج تدريبيه على الأنشطة البدنيه للطالبات.	نعم	لا
7. التدريب على الانشطه البدنيه المكلفه ماديا يعيق تنفيذ البرامج علوم الرياضيه للطالبات في الجامعات السعوديه.	نعم	لا
8. دعمت الحكومه بشكل كاف برامج التربيه الرياضيه في الجامعات السعوديه.	نعم	لا
9. تشكل الساعات الاكاديميه الدراسيه اكبر عائق امام ممارسه الرياضه.	نعم	لا
10. يجب ان تكون برامج التربيه البدنيه الزاميه في المملكه العربيه السعوديه.	نعم	لا

الجزء الرابع:

1. ماهي اهميه الانشطه الرياضيه والبدنيه في التخفيف من الامراض المزمنه بين الطلاب وعامه الناس؟
2. كم من الوقت تخصصه كل اسبوع للمارسه الرياضيه والانشطه البدنيه؟
3. الي اي مدي تشعر بان المواقف العامه تجاه الرياضيه والانشطه البدنيه تؤثر على مشاركه الطالبات في الانشطه خارج المنهج الدراسي؟
4. كيف عالج برنامج التربيه الرياضيه بجامعة السعوديه بما فيه الكفايه مشكله الامراض المزمنه من خلال الانشطه الرياضيه والجسديه للطالبات؟
5. ماهي الثغرات الموجوده في منهج برنامج التعليم الرياضي بجامعة المملكه العربيه السعوديه والتي يجب تصحيحها لمعالجه مشكله الامراض المزمنه لدي الطالبات بشكل كافي؟

Appendix D

Permission to Distribute Survey in Arabic

كلية علوم الرياضة
College of Sport Sciences



نموذج موافقة للمشاركة بالدراسة البحثية

عزيزتي أنت مدعوة للمشاركة في دراسة بعنوان " برنامج التعليم للصحة الرياضي لطالبات في جامعه جدة "وذلك لتكون أحد المشاركين في المنظومة التعليمية بجامعة جدة.

- ما هو الهدف من الدراسة؟

تهدف هذه الدراسة إلى كشف إمكانيات التنفيذ الناجحة للبرنامج التعليم الصحي الرياضي لطالبات بجامعة جدة

- من هم المشاركون في هذه الدراسة؟

يشارك في هذه الدراسة حوالي ١١٧ من منسوبي كلية علوم الرياضة بجامعة جدة و هن عبارة عن ١١٣ طالبات الكلية و ٤ من أعضاء هيئة التدريس.

- كيف سيتم حماية خصوصية المشاركين؟

تحليل الدراسة دراسة تطوعية، وسوف يتم التعامل بسرية تامة مع المعلومات المقدمة فيها، ولن تستخدم إلا لغرض البحث العلمي فقط، وقد تنشر نتائجها، وسوف يتم تجميع المعلومات خلال ثلاثة أسابيع ومن ثم سوف يتم التخلص منها بعد خمس سنوات من قاعدة البيانات.

- من هو المشرف الدراسي؟

د. كلتي برد جامعه كنكورنيا بشيكاغو Kelly.bairst@uchicago.edu

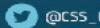
- من هي الباحثة؟ اريج كريم الجديعتي، جامعه كنكورنيا بشيكاغو Crf_aljedaak@uchicago.edu

وفي حالة وجود أي استفسار حول حقوق العينة المشاركة يمكنك التواصل مع IRB [1602609-1] في جامعه كنكورنيا

شيكاغو على البريد الإلكتروني التالي: IRB@CU.Chicago.edu

عميد كلية علوم الرياضة بجامعة جدة

د. أكرم بن أحمد حسين الحقبني



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https://css.uj.edu.sa/Default.aspx?Site_ID=2554&Lng=AR

المملكة العربية السعودية - وزارة التعليم
Kingdom of Saudi Arabia - Ministry of Education
ص.ب 80327 جدة 21589 21589

Appendix E

Permission to Distribute the Survey in English

كلية علوم الرياضة
College of Sport Sciences



Consent Form for Participation in the Research Study

Dear, you are invited to participate in a study entitled "The Sports Health Education Program for Female Students at the University of Jeddah" and thus you will be one of the participants in the educational system at Jeddah University.

- What is the objective of the study?

The study aims to reveal the possibilities of successful implementation of the Sports Health Education Program for female students at the University of Jeddah.

- Who are the participants in this study?

Around 117 staff of the College of Sport Sciences at the University of Jeddah are participating in this study, which are 113 female students and 4 faculty members.

- How will the privacy of the participants be protected?

The study is voluntary, and the information provided in it will be treated strictly confidentially, and it will only be used for the purpose of scientific research, and its results may be published, and the information will be collected within three weeks and then it will be disposed of from the database after five years.

- Who is the academic supervisor?

Dr. Kelly Baird, Concordia University Chicago Kelly.baird@concordia.edu

- Who is the researcher? Areej Karim Al Jedaani, Concordia University Chicago
Crf-aljedaani@concordia.edu

If you have any questions about the rights of the participants, you can contact IRB [1602609-1] at Concordia University Chicago at the following e-mail: IRB@CUChicago.edu.

Dean of the College of Sport Sciences at the University of Jeddah

Dr. Akram Ahmed Hussein Aloqbi

[Handwritten Signature]

Appendix F
Permission JSS

Dear Areej:

You have my permission to use the JSS in your research. You can find copies of the scale in the original English and several other languages, as well as details about the scale's development and norms, in the Assessments/Our Assessments section of my website: paulspector.com. I allow free use for non-commercial research and teaching purposes in return for sharing of results. This includes student theses and dissertations, as well as other student research projects. Copies of the scale can be reproduced in a thesis or dissertation as long as the copyright notice is included, "Copyright Paul E. Spector 1994, all rights reserved." Results can be shared by providing an e-copy of a published or unpublished research report (e.g., a dissertation). You also have permission to translate the JSS into another language under the same conditions in addition to sharing a copy of the translation with me. Be sure to include the copyright statement, as well as credit the person who did the translation with the year.

Thank you for your interest in the JSS, and good luck with your research.

Best,

Paul Spector, Distinguished Professor

University of South Florida

Tampa, FL 33620

Pspector@usf.edu

Website: <http://paulspector.com/>

Appendix G

VALIDATION SURVEY PROTOCOL RECRUITMENT INVITATIONAL LETTER

VALIDATION SURVEY PROTOCOL RECRUITMENT INVITATIONAL LETTER

خطاب دعوة التحقق من صدق بروتوكول الاستبيان (التحكيم)

اني بحاجة لوجه نظرك وخبرتك. فبصفتي مرشح لنيل درجة الدكتوراه بجامعة كونكورديا شيكاغو ، فاني اقوم باجراء دراسته تستخدم استبيانا للتحقق في دراسته بعنوان برنامج التعليم الصحي الرياضي للطلّاب في جامعه جده. ستكشف الدراسة امكانيات التنفيذ الناجح للبرنامج التعليم الصحي الرياضي للطلّاب في جامعه جده المشاركين في هذه الدراسة حوالي 113 من طالّبات الدراسات العليا الذين يدرسون في قسم علوم الرياضه واربعه من هيئة التدريس في جامعه جده بالمملكة العربية السعوديه.

وستتضمن مشاركتك مراجعه عناصر الاستبيان التحقق من وضوحها علما بان مشاركتك تطوعية تماما. سيتم استخدام المعلومات في الاطروحه التي اقوم بها فقط ان قررت التطوع ، ستشمل مشاركتك على مراجعه العناصر الموجوده في الاستبيان الموجهه للطلّبات الدراسات العليا واربعه من هيئة التدريس .

من المتوقع ان تستمر هذي المراجعه لمدة 6 دقائق. وسوف يتم التعامل بسريه تامه مع المعلومات المقدمه فيها ولن تستخدم إلا لغرض البحث العلمي فقط وقد تنشر نتائجها. لن يتم استخدام اسمك ومؤسستك في تقريراي من النتائج ولن يتم الكشف عن هويتك الحقيقيه في اي وقت. ومن ثم فلا توجد اشكاليه في مسأله الموثوقيه والسريه ، فساتخذ كافة التدابير الممكنه لحماية السريه . وتظل الهويه سريه، ولن يتم مطلقا ربط الاسماء الحقيقيه للمشاركين او مؤسساتهم بالبيانات المتحصل عليها . وساضمن مسأله السريه بنفسى حتى اضمن خصوصيه المشاركين .

ملاحظه:

وفي حالة وجود اي استفسار حول حقوق العينة المشاركة يمكنك التواصل مع IRB 1602609-1 في جامعه كنكورديا شيكاغو على الإيميل التالي IRB@cuchicago.edu

المشرف الدراسي د. كللي برد
Kelly.baird@cuchicago.edu

الباحثه اريج كريم الجدعاني.
Crf_aljedaak@cuchicago.edu

في حال وجود اي سؤال حول هذه الدراسة يمكنك التواصل مع الباحثه (9293097730)

التحكيم

أنا الدكتور تركي الزهراني ،لقد قمت بمراجعة الاستبيان المقدم من الأستاذة اريج كريم وتم التعديل عليه و كانت العبارات واضحة ومناسبة للقارئ في البيئة السعودية.

كل التوفيق للباحث،

الدكتور تركي الزهراني – قسم علوم الرياضة – جامعة الطائف (rawy1400@gmail.com) -0500805007

Appendix G

VALIDATION SURVEY PROTOCOL RECRUITMENT INVITATIONAL LETTER

خطاب دعوة التحقق من صدق بروتوكول الاستبيان (التحكيم)

اني بحاجة لوجهه نظرك وخبرتك. فبصفتي مرشح لنيل درجة الدكتوراه بجامعة كونكورديا شيكاغو ، فاني اقوم باجراء دراسته تستخدم استبيانا للتحقق في دراسته بعنوان برنامج التعليم الصحي الرياضي للطلبات في جامعهه جده. سنكتشف الدرسته امكانيات التنفيذ الناجح للبرنامج التعليم الصحي الرياضي للطلبات في جامعهه جده المشاركين في هذه الدرسته حوالي ١١٣ من طالبات الدراسات العليا الذين يدرسون في قسم علوم الرياضه واربعه من هيئة التدريس في جامعهه جده بالمملكه العربيه السعوديه.

وستتضمن مشاركتك مراجعه عناصر الاستبيان التحقق من وضوحها علما بان مشاركتك تطوعية تماما. سيتم استخدام المعلومات في الاطروحه التي اقوم بها فقط. ان قررت التطوع ، ستشمل مشاركتك على مراجعه العناصر الموجوده في الاستبيان الموجه للطلبات الدراسات العليا واربعه من هيئة التدريس .

من المتوقع ان تستمر هذي المراجعه لمدته ٦ دقائق. وسوف يتم التعامل بسريه تامه مع المعلومات المقدمه فيها ولن تستخدم إلا لغرض البحث العلمي فقط وقد تنشر نتائجها. لن يتم استخدام اسمك ومؤسستك في تقريراي من النتائج ولن يتم الكشف عن هويتك الحقيقيه في اي وقت. ومن ثم فلا توجد اشكاليه في مسأله الموثوقيه والسريه ، فسأأخذ كافه التدابير الممكنه لحمايه السريه . وتسظل الهويه سريه، ولن يتم مطلقا ربط الاسماء الحقيقيه للمشاركين او مؤسساتهم بالبيانات المتحصل عليها . وسأضمن مسأله السريه بنفسه حتي اضمن خصوصيه المشاركين .

ملاحظه:

وفي حاله وجود اي استفسار حول حقوق العينه المشاركة يمكنك التواصل مع IRB 1-1602609 في جامعهه

كونكورديا شيكاغو على الإيميل التالي IRB@cuchicago.edu

Kelly.baird@cuchicago.edu

د. كللي برد

المشرف الدراسي

Crf_aljedaak@cuchicago.edu

اريج كريم الجدعاني.

الباحثه

في حال وجود اي سؤال حول هذه الدرسته يمكنك التواصل مع الباحثه (9293097730)

اسم المحكم الاول: د. تركي مهدي القرني

الرتبه العلميه: أستاذ مساعد

الجامعه: جامعهه نجران

التوقيع /

Appendix H

Validation Survey Informed Consent Pilot Study Participants:

You are invited to participate in research study about Sports Health Education Instructional for Woman Program At The University of Jeddah. The purpose of this study is to the study will explore the possibilities of a successful implementation of sports health education instructional programs. Can successfully implement the program to enhance the physical activity of it students and reduce associated illnesses. The validation study should take 6-10 minutes. While there are no direct benefits to you, some indirect benefits of participating may be for you to consider the issues raised by the research.

This methodology allows collecting a combination of qualitative and quantitative data, analyzing the two, and making conclusions based on the combined results. The data from the close-ended questions analysis and open-ended questions will be analyzed, and by applying the methods of descriptive statistics, the researcher will make a conclusion regarding physical activity program implications at Jeddah University. The research analysis is aligned with the design of this study. Your name or organization will not be used in any reports of the results. At no time will your actual identity be revealed. Therefore, there is negligible risk of loss of confidentiality; I will take all possible measures to protect confidentiality. Identities will remain confidential; at no time will an individual's name or agency/agency be linked to data. Confidentiality will be maintained by me in order to ensure the privacy of the participants. Another minimal risk would include possible stress from providing opinions or perceptions. The statistical package for social sciences SPSS will be used to collect and evaluate the data from the responses. Concurrent triangulation will be applied to survey software.

You have the right to contact the Principal Researcher or Faculty Advisor as listed above for any concerns that you may have. If you do not want to be in this study, you may refuse to participate. If you decide to participate and then changes your mind, you may quit participating at any time. You will not be punished or discriminated against in any way if you refuse to participate your job or grade.

The statistical package for social sciences SPSS will be used to collect and evaluate the data from the responses. Concurrent triangulation will be applied to survey software. The information will be kept in a coded SPSS. At the conclusion of the study you will have the right to request feedback about the results. If you agree to participate in the validation study, please sign the form, take a photo and email the photo to me, then I will send you the link to the validation survey. If you have any questions about this study, please feel free to contact me at Kelly Baird, Ed, D. at kelly.baird@cuchicago.edu

Researcher, Areej Kareem at crf_aljedaak@cuchicago.edu

Appendix I The Institutional Review Board (IRB) Approval



7400 Augusta Street
River Forest
Illinois, 60305-1489
Fax 708-209-3167
www.CUChicago.edu

DATE: May 20, 2020
TO: AREEJ ALJEDANI
FROM: Concordia University Chicago IRB
PROJECT TITLE: [1602609-3] SPORTS HEALTH EDUCATION INSTRUCTIONAL FOR
WAMEN PROGRAM AT THE UNIVERSITY OF JEDDAH
STUDY #: 1602609-1
SUBMISSION TYPE: New Project
ACTION: APPROVED
APPROVAL DATE: 20 May 2020
EXPIRATION DATE: 01 June 2020
REVIEW TYPE: EXEMPT

Thank you for your submission of New Project materials for this project. The Institutional Review Board has APPROVED your submission. This approval is based on an appropriate risk/benefit ratio and a project design wherein the risks have been minimized. All research must be conducted in accordance with this approved submission.

This submission has received EXEMPT REVIEW based on the applicable federal regulation.

Please remember that informed consent is a process beginning with a description of the project and insurance of participant understanding followed by a signed consent form. Informed consent must continue throughout the project via a dialogue between the researcher and research participant. Federal regulations require that each participant receives a copy of the consent document.

Please note that any revision to previously approved materials must be approved by this committee prior to initiation. Please use the Modifications/Changes form for this procedure.

All UNANTICIPATED PROBLEMS involving risks to subjects or others (UPIRSOs) and SERIOUS and UNEXPECTED adverse events must be reported promptly to this office. Please use the Adverse Events form for this procedure.

All NON-COMPLIANCE issues or COMPLAINTS regarding this project must be reported promptly to this office.

Please note that all research records must be retained for a minimum of three years after the completion of the project.

If you have any questions, please contact IRB@CUChicago.edu. Please include your project title and study # in all correspondence.