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Investigating the Health Meanings of Young Saudi Women

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Supervisor: Dr. Lilian Magalhaes, *The University of Western Ontario* A thesis submitted in partial fulfillment of the requirements for the Master of Science degree in Health and Rehabilitation Sciences © Tagreed Alnajjar 2017

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Abstract

Women's structural position within society and their family roles significantly influence their health. Previous studies have shown women hold lower health and socioeconomic status because of their gender within the Saudi culture. This study aimed to provide an understanding of how Saudi women value health and define being healthy within their social contexts. Adopting an ethnographic perspective, three focus groups (31 participants in total) were conducted with volunteer undergraduate Saudi female students on campus during a nine-week field trip to the participants' university, King Abdulaziz University in Jeddah, Saudi Arabia. Three themes were generated from this study that characterize the meaning of health for the participants: 1) societal influences, 2) personal experiences and interactions, and 3) strategies developed from the interactions of both domains. The study findings demonstrate how societal norms and institutional policies, combined with women's personal experiences and interactions within their environment, negatively impact the lifestyle of Saudi women, which in turn shapes their health perspectives and practices. The significance of this study and implications for research and service delivery are discussed.

Keywords

Health meanings, health perceptions, Saudi university women, ethnography, critical theory, qualitative research.

Dedication

I dedicate this work to the brave, smart, talkative, strong, and ambitious Saudi women who participated in this project. I am deeply appreciative of your participation. Your insightful comments and personal stories are inspiring, and I thank you all for your courage, kindness, time and input. Continue to be who you are and how you want to be. I also thank those who expressed interest in participating in this study even after I could no longer accept participants because I had reached saturation. Thank you for your interest and passion.

And to my dearest and beloved father, whose soul resides in heaven, I dedicate all my success to you.

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Love and peace to all

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Thesis Layout

In this dissertation, I present a research study undertaken to investigate the definition of health held by young Saudi women in Jeddah, Saudi Arabia. It is comprised of five chapters. The first chapter includes a brief conceptualization of the meaning of health, as well as how gender differences play a role in its definition. Then I provide some background on Saudi Arabia such as social and cultural practices, healthcare system and challenges in health delivery and a personal declaration. In chapter two, I provide a summary of the existing literature to explore Saudi women's health status and discuss gaps in the literature. Next, in chapter three, I describe the methodological framework of the study, situate my project within the critical theory paradigm, further critique ethnography as a methodology, and describe the methods of participant recruitment, data collection, data analysis, and quality criteria completed for this study. Chapter four includes the general findings, as well as themes and discussion. In the final chapter, I reflect on the methodological considerations, emphasize the study's strengths, limitations and highlight implications for research, service delivery and future directions before offering final remarks.

Chapter One: Introduction and Background

Lately the definition of health has moved from a focus on the biological factors to one that encompasses social, political, and economic factors that can positively or negatively influence an individual's health (Cook, 2005). The meaning of health is uniquely personal and dependant on an individual's experiences, social interactions, and personal values; thus, the definition of health is considerably diverse across the population (Crawford, 2006). Accordingly, the meaning of health can be understood as how an individual views and values one's health (Cook, 2005). A person's values, perceptions, and beliefs about health impacts her/his illness experience and treatment process, and it further determines her/his ability to function in daily life (Evangelista, Kagawa-Singer, & Dracup, 2001). For instance, information about how health is defined by a population is very important in order to provide adequate health services, and it can be used to design programs that are commensurate with a population's interests and perceptions. Furthermore, articulating this information through the lens of gender provides valuable knowledge about individual needs that will help policymakers and experts better serve the public (Mikkonen & Raphael, 2010).

Models of Health

Health can be defined in distinct ways through an adopted model, such as the biomedical model, the World Health Organization (WHO) broad definition, and the social model. The biomedical definition of health is based on the concept of sickness and consists of three categories: etiology, pathology, and symptom (Minaire, 1992). Many scholars have noted that this model addresses an individual's illness through a biological lens, and the physical, cultural, and social factors are ignored (Minaire, 1992). In part to address this shortcoming, in 1946 WHO defined health as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (World Health Organization, 2017, p. 1). WHO's definition of health is broader; it views health from a multidimensional perspective and incorporates non-physical symptoms as important elements to being healthy. Schuiling and Likis (2013) stated that to achieve optimal health an individual must have: freedom from fear of war; equal opportunity; secure work; a useful role in society; political wellbeing; public support; and the satisfaction of basic needs such as access to food, water, sanitation, education, and proper housing. Thus, there are social, cultural, and environmental external factors that affect individual health and are beyond human control.

In fact, the social model of health places the emphasis on community and cultural practices that influence individuals' health (Schuiling & Likis, 2013). According to Yuill, Crinson, & Duncan (2010) the social model of health "embraces all aspects of human experience and places health fully in the dynmanic interplay of social structures and embodied human aganecy" (p. 11). Consequently, person's health status is developed and/or inhibited solely by social context and the person surrounding (Yuill, et al., 2010). When exploring women's health, the social model of health acknowledges the biological components of health and emphasizes the significance of women's lifestyles and habits that may shape and influence health, such as gender differences in everyday life, access to healthcare services, socioeconomic status, racial and ethnic identity, and individual membership within the community (Schuiling & Likis, 2013). For example, Douki, Ben-Zineb, Nacef, and Halbreich (2007) discussed ways that cultural factors can negatively

impact women's health in Arab communities such as Tunisia. These authors identified a set of cultural risk factors (e.g., the right to education, the right to work, sexuality, reproductive rights, marriage traditions, and infertility) that initiate or considerably worsen mental diseases in women (Douki et al., 2007). In this research paper, the social model of health is utilized because it incorporates not only biomedical elements but also the social, cultural, environmental, and economic factors that influence health.

Health and Gender

Gender is one of the social determinants of health that influence one's health and quality of life (WHO, 2017). Schuiling and Likis (2013) define gender as "a person's self-representation as man or woman or the way in which social institutions respond to that person based on the individual's gender presentation" (p. 3). Therefore, gender is both embedded in one's biology and shaped by environment and experience. In general, previous studies have shown that women's structural position within society and their familial role significantly affects their health whereas men's health is not especially impacted by their familial role (Arber & Cooper, 1999). Further, the difference in mortality and morbidity rates between men and women have been linked to gender roles (Arber & Cooper, 1999). Gender inequalities in health are well documented in the literature; aside from biological and inherited characteristics, variables such as social structural, behavioural, and psychosocial factors are linked to gender health inequalities (Denton, Prus, & Walters, 2004). For example, women live longer and yet they experience poorer health such as higher levels of depression, psychiatric disorders, distress, and a variety of chronic illness as compared to men (Denton, Prus, & Walters, 2004). Social structures such as social support, socio-economic inequalities in income,

education, working status, and employment status have also been linked to the health and illness of an individual (McDonough & Walters, 2001). Higher demands, more obligations, and an increase in stressful life events at the personal and professional level negatively impact women's health (Prus & Gee, 2003). In order to contextualize this study, in the next section, I will provide a brief background on Saudi Arabia.

Background on Saudi Arabia

The Kingdom of Saudi Arabia, also known as Saudi Arabia, is the second largest Arab country, by land area, after Algeria (World Population Review [WPR], 2014). Currently total population in Saudi Arabia is estimated to be 31.742 million, with approximately 20,064,970 citizens and over 11,677,338 million additional foreigners (General Authority for Statistics, 2016). Saudi Arabia is divided into 13 administrative districts, and the most populated regions were Riyadh, the capital, with 8.021 million people; Makkah, with 8.325 million; the Eastern region, with 4.780 million and Al-Medinah, with 2.080 million (General Authority for Statistics, 2016). The official religion is Islam. Saudi citizens are 85 to 90% Sunni and 10 to 15% Shia (two branches of Islam). Non-Saudi residents may be Muslim or practice other faiths (Indexmundi, 2014).

Compared to Canada's aging population, Saudi Arabia has a considerably young population (WHO, 2014) (see Table 1 and 2). Children aged 0 to 14 account for 27.6% of the population, those aged 15 to 64 represent 69.2% of the population, and people 65 and older account for 3.2% of the total population (Indexmundi, 2014). According to the WHO (2014), the average life expectancy in Saudi Arabia is 76 years (74 years for males

and 78 years for females). As a comparison, in Canada, the life expectancy is 79.3 for males and 83.4 years for females (Milan, 2015).

Culture and Customs

Saudi Arabian culture is considered to be conservative, as its people practice habits and traditions that are derived from the traditional customs of the Bedouin in the Arabian Peninsula and slightly the interpretation of the religion of Islam (Long, 2005). Generally, cohesion, traditional practices, and family values dominate Saudi society (Mobaraki & Söderfeldt, 2010). Saudi women require the permission of a male guardian (father, son, or uncle) to seek work, obtain or renew government identification or passports, travel inside or outside of Saudi Arabia, and to conduct official business (Mobaraki & Söderfeldt, 2010). It is illegal for women to drive vehicles in Saudi Arabia, thus for transportation they rely on either the help of a male relative, a private driver, or taxi (Al-Eisa, & Al-Sobayel, 2012). Marriage and parenthood are encouraged and honoured (Al-Eisa, & Al-Sobayel, 2012). More than 50% of marriages are consanguineous (Mobaraki & Söderfeldt, 2010). Although polygamy still exists in Saudi Arabia, it is rarely practiced (Long, 2005); one reason being the increased cost of living means only wealthy males can afford to support multiple wives and the subsequent children (Kechichian, 2005). Despite modernization, extended families continue to play an important role in Saudi society. In terms of gender roles within the family, men are expected to meet the financial needs of their families and women are responsible for household tasks, raising children, and caring for aged family members (Long, 2005).

There has been significant progress in the status of Saudi women's education, health, and employment (United Nations Development Programme [UNDP], 2014). In January of 2013, for the first time in the history of the kingdom, 30 women were appointed to the Shura Council, a male-dominated committee that advises the Saudi King on policies and legislation (UNDP, 2014). Although obtaining and pursuing law degrees has been permitted for women since 2006 in Saudi Arabia, they were not allowed to practice law or defend clients in court until late 2013 (UNDP, 2014). Women's employment rates have also increased over the years (Le Renard, 2014).

Saudi Healthcare System

The government of Saudi Arabia plays a large role in managing and developing the healthcare sector. In 1970, during a five-year development program, the government put plans in place to rapidly expand and enhance its healthcare system (Royal Embassy, 2013). For instance, the number of hospitals increased from 74 to over 350 over a 35 year span (Royal Embassy, 2013).

The government funds healthcare services, and the Ministry of Health (MOH), along with various semi-publicly funded organizations, provides healthcare and manages its various services (Kingdom of Saudi Arabia, 2012). This structure delivers healthcare services to all citizens, with the combined use of private and public hospitals. To enable this system, the government created a two-tier health service plan. The first tier is a network of primary healthcare centres and clinics throughout the country (Albejaidi, 2010; Colliers International, 2012). The second tier consists of networks, including secondary care hospitals and specialized treatment facilities (Albejaidi, 2010; Colliers International, 2012). The MOH operates over 60% of the hospitals in Saudi Arabia. These hospitals provide basic healthcare services and, sometimes, specialized facility centres (Colliers International, 2012). The ministry specifically operates the public sector and, additionally, supervises the employees and staff training in the private sector (Royal Embassy, 2013). The government endorses the private sector through interest-free and long-term loans for the establishment of hospitals, clinics, and pharmacies (Royal Embassy, 2013).

Health Coverage

In terms of healthcare coverage, the Saudi government provides free healthcare to all Saudi citizens. All citizens or any expatriate that works in the public sector has full and free access to all public healthcare services (Health Systems, 2006). All expatriates are required to have compulsory healthcare insurance. Furthermore, private workplaces and other ministries provide healthcare insurance for both citizens and expatriates, who then have the choice to access the healthcare with their private or/and public insurance (Colliers, 2012). Insurance companies offer the same basic coverage, which includes pharmaceuticals, x-rays, lab tests, etc. (Almalki et al., 2011). Within the first tier of networks, basic, preventative, prenatal, and emergency services are provided (Collier, 2012). Moreover, mobile clinics are tailored to provide care for remote and rural areas, with services such as vaccinations and basic medical care (Collier, 2012).

Financing Healthcare

The government's sources of income include oil and gas exports, as well as agriculture (e.g., the cultivation of dates). In fact, oil export is the main source of government funds in Saudi Arabia because it provides the largest financial contribution towards the Saudi government (WPR, 2014). Citizens do not pay tax on any products and do not have an annual income tax (Health Systems, 2006). Therefore, the financing of public healthcare in Saudi Arabia is provided by government revenues. The government increased its national yearly budget on expenditure on the MOH from 2.8% in 1970 to 11.8% in 2011 (Collier, 2012). By 2009, the total expenditure on public health was 5% of the gross domestic product (Almalki, Fitzgerald, & Clark, 2011).

There are 20 regional directorates of health affairs across the country organized by the MOH. Each regional health directorate has several hospitals and health sectors, and every health sector supervises many primary healthcare centres (Almalki et al., 2011). These 20 directorates are responsible for executing "the policies, plans and programs of the MOH; managing and supporting MOH health services; supervising and organizing private sector services; coordinating with other government agencies; and coordinating with other relevant bodies" (Almalki et al., 2011, p. 787).

Challenges Faced by Female Healthcare Providers

Female medical personnel such as doctors and nurses experience discrimination in the workplace and because their job entails them interacting with male colleagues and patients and working shiftwork, their choice of profession is not praised by family and society (Almalki et al., 2011; Vidyasagar & Rea, 2004). For example, Saudi society view women medical occupations, especially nursing profession as a disrespectful profession because it conflicts with family, cultural and communal values in terms of working long hours, interacting with the opposite gender and raise the risk of not being "marriageable" (Miller-Rosser, 2006). Thus, low job satisfaction is well-documented in research among Saudi women medical personnel, especially Saudi nurses (Almalki et al., 2011; Miller-Rosser, K. 2006; Vidyasagar & Rea, 2004).

Challenges Women Face Accessing Medical Treatment

Saudi women often experience challenges accessing and receiving medical care. One of the main features in Saudi Arabia is sex segregation (Tønnessen, 2016). Female doctors and nurses are available to assess and deliver care to women in both public and private health sectors. Primary care centres and hospitals are segregated as female doctors and nurses examine women patients in private; only if it is an emergency and it has been approved by her male guardian can a woman be treated by a male doctor accompanied by a female nurse (Almalki et al., 2011; Tønnessen, 2016; Vidyasagar & Rea, 2004). Male guardianship greatly impacts Saudi women's ability to access and receive medical care. Without a male guardian's presence and signature, the MOH prevents women from being admitted to a public hospital (Almalki et al., 2011; Rawas, Yates, Windsor, & Clark, 2012). Men have even more power over women in remote areas and villages where women absolutely cannot receive care from a male obstetrician or gynecologist even in an emergency (Almalki et al., 2011; Rawas et al., 2012). Furthermore, women cannot sign for any invasive medical procedure without their male guardian's approval, especially in public hospitals (Almalki et al., 2011; Rawas et al., 2012).

Although many of the cases of delayed medical access experienced by Saudi women go unreported, a few striking examples are well-documented. When a major fire occurred in an elementary school for girls in Mecca in 2002, the religious police hampered the civil defence and ambulances from entering the school and stopped the school guard from opening the school's gate until all 800 students were wearing their abaya (long black dress); as a result, 15 students died in the blaze (Harbi, 2014). In another incident, a female professor called the Red Crescent to get immediate medical care; however, the operator refused to send an ambulance because the professor mentioned that she has no male guardian with her (Alhaseen, 2014). As a result, the woman ended up taking a cab to the hospital (Alhaseen, 2014). In January 2014, a master's student at King Saud University in Riyadh died of a heart attack on campus due to the university administration's refusal to allow male paramedics entry to the campus for two hours (Harbi, 2014). Lastly, a pregnant university student gave birth on campus after the university denied male paramedics from campus access because they did not have her husband's consent (Harbi, 2014).

Researcher's Personal Statement

After finishing high school, I received a scholarship to continue my education abroad. In 2009, I moved from Jeddah, Saudi Arabia, to London Ontario, Canada to start my undergraduate degree. Throughout my time in Canada, as a young Saudi female student, I noticed Canada's extraordinary cultural diversity. I experienced the opportunity to study, volunteer, and interact with a much more diverse population than my limited network back home.

During my undergraduate program, I volunteered at different healthcare settings such as the Mount Hope Centre for Long-Term Care, VON Middlesex-Elgin, the Health and Stroke Foundation, and the Canadian Cancer Society. My time at the Heart and Stroke Foundation and the Canadian Cancer Society taught me about promoting healthy behaviours, and I have noticed a very significant reason for the success of each health fair I volunteered at: the community's interest in learning more about healthy lifestyle choices. I reflected on my experience in Saudi Arabia and its lack of health promotion programs. The definition of health promotion extraordinarily resonates with me "the process of enabling people to increase control over, and to improve, their health" (WHO, 2017) and thus I started to realize the need for a dialogue about health promotion in Saudi. Although it is not uncommon to develop preventable illnesses, public awareness and health information about healthy options are rare in Saudi Arabia. For example, there is little to no discussion of screening programs, healthy diet, physical activity, and blood pressure control in schools or with the public. I strongly believe health information and services should be accessible to everyone so that people can be aware of diseases, risk factors, and make informed choices.

Furthermore, the courses I took during my undergraduate program in Health Sciences at Western University inspired me to learn more about how health is defined within different cultural, religious, political, social and behavioural contexts. I hope this study's findings will encourage more research on Saudi women's opinions of health to better serve women and improve their quality of life. As a new researcher, I was honoured to work with such incredible young Saudi women and had the opportunity to explore and learn more about their definition of health with respect to their personal, environmental, social, and cultural norms. Further, as a researcher, I hope to increase awareness about Saudi women's health views through this study.

Chapter Two: Literature Review

A scoping review (Arksey & O'Malley, 2005; Levac, Colquhoun, & O'Brien, 2010) was conducted to: 1) explore the current literature relevant and related to Saudi women's health beliefs and perceptions; 2) summarize the findings; and 3) identify gaps in the current literature. In this chapter, I will describe the search strategy, provide statistics on Saudi women and report the findings of the scoping review of the existing research regarding Saudi women's health status and health practices.

Search Strategy

In a scoping literature review, the aim is to provide in-depth information about a specific topic by reviewing the existing literature, guided by specific research questions (Arksey & O'Malley, 2005; Valaitis et al., 2012). Thus, Google Scholar and databases such as PubMed, Scopus and CINAHL were used for the search. I used some inclusion and exclusion criteria to find relevant studies in this review. For example, the search terms used were: women, female, young women, Saudi women, female university students, Saudi Arabia, Kingdom of Saudi Arabia, health, definition of health, health meanings, health beliefs, perception and health values. Due to the low number of publications related to this research topic, I included some non-Saudi studies in journals that were based in countries around Saudi Arabia such as Tunisia. The search was conducted in Arabic and English languages.

As an adaptation of a scoping review was utilized (Arksey & O'Malley, 2005), twelve articles were used to create this literature review. No Arabic articles were included, one out of the included papers was qualitative research project, one used mixed methods, three were review papers of the exsiting research, and the rest used quantitative measurements. The found articles were published either in Saudi medical journals or Western and/or European health journals. Additionally, most articles found were research studies that either measured or assessed health concern outcomes among Saudi women or the Saudi population in general. Elizabeth Daly's (1995) article was foundational for this project and served as the springboard for my research. The other articles provided a much more general overview of women's health status in Saudi Arabia and their health problems, needs, challenges, and experiences. In the following sections, I will summarize the articles included in this review.

Statistics on Saudi Women

Women in Saudi Arabia comprise 42.148% of the total Saudi population (WPR, 2014), as compared to Canada, where women and girls make up 50.4% of the population (Milan, 2015). The fertility rate in Saudi Arabia is 2.7 children per woman (WHO, 2014), which is higher than Canada's average rate of 1.5 children per woman (WHO, 2014). Moreover, the birth rate for Saudi women is 18.78 births/1,000, and the death rate is 3.32 deaths/1,000 (Indexmundi, 2014). The maternal mortality is 24 deaths per 100,000 live births (Alyaemni, Theobald, Faragher, Jehan, & Tolhurst, 2013), whereas in Canada the maternal mortality is 5 deaths per 100,000 live births (WHO, 2004). Moreover, in Saudi Arabia the infant mortality rate is 7 per 1,000 live births (Human Development Report, 2014) (see table 3). In comparison, in Canada the infant mortality rate is 5 per 1,000 live births (see table 4).

Literature on Saudi Women's Health

Self-Reports in Saudi Women Health

Due to a lack of research on the health meanings amongst Saudi women, Daly (1995) developed a research project to fill this gap, and to this date it is one of the few studies about Saudi women's health perceptions. Daly (1995) conducted a mixed method of quantitative and qualitative research in Jeddah, Saudi Arabia, with 58 young Saudi women aged 17 to 20 to explore their meanings of health. Daly (1995) used a questionnaire followed by short interviews to explore meanings of health. The study questionnaire included demographic questions and one interview question asking, "What does being healthy mean to you?" (Daly, 1995), p. 854). Daly (1995) then compared the study's findings with the existing literature that examined the experiences of Western women.

Daly's (1995) findings indicated that Saudi women valued practicing a healthy lifestyle (e.g., food choices, sleeping habits, personal hygiene, clothes), the performance of roles (e.g., prayer, study, work, housework, help family), and harmony in life (e.g., being relaxed, calm, inner and outer peace) more than physical fitness (e.g., being active, strong, energetic), being productive (e.g., purpose in life, accomplishments, mobility), positive moods (e.g., enjoyment, happiness, reasonableness), and adaptation (e.g., organization, community knowledge). In addition, Saudi participants reported health as a spiritual expression (gift from Allah/God) and did not report any characteristics of body image, cognitive function, social involvement and positive self-concept in relation to health as Western women did in previous studies. Although Daly's (1995) study proposed to investigate the health meanings of Saudi women, neither the findings nor the discussion revealed how Saudi women defined or perceived health.

The practices reported in Daly's study have likely changed since the study was conducted. In fact, a recent research project by Al-Bannay, Jarus, Jongbloed, and Dean (2017) asked 407 Saudi women to self-report their health status, health beliefs and healthy practices to gather information for the development of health programs that best suit Saudi women. Participants were given an interview survey questionnaire to measure their health status and lifestyle-related health beliefs and practices. Only 44% of women participants reported having an average health, 43.7% reported their weight as being average and 97% of participants thought that there was a direct relationship between health and specific lifestyle practices such as exercising, a healthy diet, not smoking and managing stress. However, an individual's knowledge about healthy options does not always mean they adopt these practices. When the participants were asked about their own lifestyle practices, they reported insufficient levels of exercise, unhealthy diet selections, high stress and a lack of sleep. For example, 89% of the participants described being under a moderate to high level of stress. Lastly, 51.2% of participants stated that they engaged in moderate to intense physical activity.

Cultural Norms and Saudi Women Health Practices

Like in other countries, cultural norms and gender inequalities influence Saudi women's health. The increasing number of overweight and obese Saudi women could be explained by changes in socioeconomic status, traditional food style, lack of physical activity and social barriers (Al-Nozha et al., 2005). Culturally, exercising in public and smoking are unacceptable behaviours for Saudi women (Alenazi, 2014). For instance, eating unhealthy food and rich, fatty food with less vegetables and fruits is common for Saudi women. Likewise, some Saudi women reported consuming more unhealthy food to cope with stress and anger (Rasheed, 1998). In addition, the WHO (2015) revealed that 46.0% of Saudi males and 75.1% of Saudi females were engaging in lows levels of physical activity, which accounted for 60.3% of the total population of Saudi Arabia. In another report, it was stated that 75% of Saudi women are overweight, and 44% are obese (Alenazi, 2014). This is problematic because 78.3 % of the Saudi women population is under the age of 40 (Daoud et al., 2016). Moreover, a cross-sessional study by Al-Nozha et al. (2007) revealed that the prevalence of physical inactivity among Saudis aged 30-70 years was as high as 98% among Saudi women. Furthermore, research has found that a lack of physical activity education, social support and willpower could explain why Saudi women are less likely to be physically active (Alenazi, 2014; Al-Nozha et al., 2007; Daoud et al., 2016).

Several studies highlighted that cultural norms and gender roles greatly influence women's health and lifestyle behaviours. Al-Nozha et al. (2007) emphasized the need for culturally and gender specific guidelines for cardiac rehabilitation and secondary prevention that tackles the unique circumstances of Saudi women. A study of 161 Saudi women aged 18-45 years that assessed the level of physical activity (PA) and the relationship between PA and health beliefs determined that low levels of sufficient physical activity were reported among the study participants (Al-Eisa & Al-Sobayel, 2012). Like other studies that stressed the importance of cultural influences, the authors attributed the reason for the low levels of physical activity to the hot climate and societal restraints, such as participants' limited opportunities to attend health centers due to restrictions on their mobility.

In addition, some research projects examined specific circumstances within the Saudi society. For instance, Saudi women who are younger and single have better health outcomes than married, divorced and widowed women (Daoud et al., 2016). A literature review was completed by Rawas, Yates, Windsor and Clark (2012) to examine the cultural characteristics that impacted the secondary prevention of both coronary heart disease and cardiovascular disease in Saudi women. The authors identified that smoking, obesity and physical inactivity were the predominant risk factors for heart disease in Saudi women. Furthermore, Saudi women reported that due to their social roles and cultural norms, they were more affected by these factors (e.g., smoking, weight gain, physical inactivity) than Saudi men. For example, the daily smoking of both cigarettes and shishas (water pipes) among Saudi women is rapidly rising because it is considered fashionable for women due to the influence of social media. To understand gender inequalities in health, Alyaemni, Theobald, Faragher, Jehan and Tolhurst (2013) conducted a qualitative study in Riyadh, Saudi Arabia and explored 66 married Saudi women's (25 years or older) views of how societal constructions influence their health. It was found that Saudi women get sick more than men due to social constructs and gender roles, such as childbearing roles, domestic and paid work roles, caring roles, mobility restrictions, and the exposure to stress due to poverty and marital conflict (Alyaemni et al., 2013). In addition, the outcomes from the study elucidate how Saudi women hold lower health and socioeconomic status because of their gender and how their status is constructed within the Saudi culture.

Health Problems Experienced by Saudi Women

Due to the increased rate of sedentary behaviours, caused mainly by gender restraints, Saudi women have a higher risk of developing non-communicable diseases than Saudi men, such as diabetes, hypertension, osteoporosis, and heart diseases (AlQuaiz et al., 2014). Again, physical inactivity and the low intake of fruits and vegetables were highlighted as a common among Saudi women (Daoud et al., 2016). In a cross-section study, a sample of 227 Saudi female students completed the questionnaire and 119 of these participants agreed to donate blood samples for analysis (Desouky, Omar, Nemenqani, Jabbar, & Tarak-Khan, 2014). In order to determine the prevalence of smoking, physical inactivity, and obesity, the researchers examined diets, body mass indexes, activity levels, and lipid profiles (cholesterol and triglyceride). For instance, lifestyle practices such as physical inactivity, fast food consumption (1-5 times per week), and inadequate fruits and vegetables consumption were reported among participants (61.7%, 70.9%, 74.9%, 59.5%, respectively) (Desouky et al., 2014). In addition, hypertension and diabetes were high among the participants; these issues can eventually lead to devastating health consequences—effects that could cost lives (Desouky et al., 2014).

Consequently, advocacy for health education and awareness programs that focus on how to live a healthy lifestyle and the removal of obstacles that may hinder health are urgently needed (Desouky et al., 2014). Furthermore, a review of Saudi women's health statuses between 1996 and 2011 revealed that among Saudi women, the incidence of obesity has increased from 23.6% to 44%, self-reported physical inactivity has increased from 84.7% to 98.1%, smoking has increased from 0.9% to 7.6%, and the prevalence of metabolic syndrome is 42%, which is greater than in men, of whom 37.2% are affected (AlQuaiz et al., 2014).

Additionally, the implementation of health promotion programs that target women's physical activity and diet and take into consideration family and social influences is crucial (Al-Nozha et al., 2007; Khalaf, Westergren, Berggren, Ekblom, & Al-Hazzaa, 2015). A sample of 663 Saudi university students completed a self-reported questionnaire that measured socio-economic, cultural and environmental factors, level of physical activity, sedentary behaviours and nutritional habits. The findings showed that 56.9% of participants were within the normal weight average whereas the rest were either underweight (19.2%) or overweight/obese (23%) (Khalaf et al., 2015). Examples of factors that were correlated with being underweight or overweight/obese were identified as low level of physical activity, the presence of obese parents or siblings, parents' level of education, marital status and unhealthy eating habits.

In summary, most of the existing research on Saudi women has focused on the increase of preventable diseases and unhealthy lifestyle behaviours. Less attention has been paid to the individual's experience and perceptions of health, especially the influence of cultural values, beliefs and personal perceptions on Saudi women's health. Research that investigates how Saudi women perceive their health in daily life and why they engage in healthy or unhealthy behaviour is rarely undertaken. Currently, however, there is a fair amount of literature cataloguing the consequences of bad lifestyle behaviours on the health of Saudi women, such as the prevalence of unhealthy eating, smoking, physical inactivity, and obesity (Al-Nozha et al., 2007; AlQuaiz et al., 2014; Desouky et al., 2014). Other researchers have spoken about specific health conditions and

behaviours that are on the rise among the Saudi women population such as breast cancer, diabetes mellitus, contraception attitudes and experiences, vitamin D status and breastfeeding knowledge (Al-Mogbel, 2012; Alqurashi, Aljabri, & Bokhari, 2011; Al-Turki, 2011; Amin, Al Mulhim, & Al Meqihwi, 2009; Saied, Mohamed, Suliman, & Al Anazi, 2013).

Gaps in the Literature

Few studies focus on the barriers to accessing health care services or address the health care needs of women living in Saudi Arabia. Furthermore, to better understand the root causes of prevalent diseases among Saudi women, it is necessary to explore Saudi women's perceptions of health. The review of the literature suggests that more studies are needed to understand Saudi women's perceptions of health. The continued increase of risk factors (e.g., unhealthy diet, smoking, and lack of physical inactivity) that have led to a rise in non-communicable diseases (e.g., heart disease, hypertension, and diabetes), which account for 71% of all mortality in Saudi Arabia (WHO, 2013), certainly demands investigation.

In addition, there are social and cultural constraints that prevent women from accessing health care, such as cultural norms and mobility issues. For example, women are forbidden by law to drive in Saudi, which impacts women's mobility (Alyaemni et al, 2013), especially given the lack of public transportation. Unexpectedly, on September 26, 2017, a historical decision made by the Saudi King, Salman bin Abdulaziz Al Saud, passing a law to allow women in the Saudi Kingdom to drive, this will be effective late June 2018 (Al-Shihri, & Batrawy, 2017). Although this positive change is forthcoming, there is still a lot of work to be done to improve women's rights to self-guardianship, mobility, accessibility, etc. toward positive impacts to their health and quality of life. It will be important and needed to conduct studies on how this new law will affect Saudi women's health and wellness.

Daly's (1995) findings support the need to examine Saudi women's perception of health in conjunction with the cultural norms in Saudi Arabia to better understand women's health and any obstacles they might face. For instance, the assessment of family dynamics, cultural norms, and spatial mobility in relation to women's experiences would offer a better understanding of women's health. The interaction of these factors may explain how Saudi women view and value health. Furthermore, the benefit of defining health from Saudi women's perceptions may help to understand the causes of some of the risk factors that are increasingly growing within this population.

Chapter Three: Theoretical Frameworks and Research Design

In this chapter, the theoretical frameworks used for the study are described. Overall, I utilized a critical ethnography inquiry approach to explore how young Saudi women view and value health in relation to their cultural context.

Philosophical Position

The study is situated within a critical theory paradigm. The ontological positioning of critical theory is based on historical realism, which contends that reality is shaped by multidimensional factors formed over time, such as social, cultural, political, economic, ethnic, and gender values (Guba & Lincoln, 1994). As Ponterotto (2005) states, the "critical-ideological paradigm is one of emancipation and transformation, one in which the researcher's proactive values are central to the task, purpose, and methods of research" (p. 4). The study aimed to explore how Saudi university women view and practice health with respect to the social, cultural, gender, and historical contexts in which they live. A fundamental concept for critical theory is the emphasis on dialectical interaction leading to either liberation (emancipation) or an egalitarian (democratic) society (Ponterotto, 2005). Consequently, it is important to understand the historical and political factors that form individuals' experiences and beliefs. I undertook this position to present the participants' experiences and views without trying to contrast it to an external perspective as previous work may have done in the past, such as Daly's (1995) study. The purpose of this study was to be as precise as possible in describing women's perceptions and definitions of health within the Saudi culture, rather than comparing their perceptions and definitions to ones found in the West.

Additionally, this research study aimed to engage with the social model of health. Dorothy Broom explained that "the social model locates people in social contexts, conceptualises the physical environment as socially organised, and understands ill health as a process of interaction between people and their environments" (as cited in Germov, 2005, p. 12). The addition of the social model of health is useful for this project, as social construction and the context of gender may affect women's health because a woman's status in society influences her interaction with and perception of healthcare (Schuiling & Likis, 2013). Both critical theory and the social model of health are concerned with power, which inevitably involves dominant and marginalized discourses. Thus, these frameworks seem to be an appropriate avenue for the exploration of Saudi women's concepts of health. The proposed study aimed to investigate the factors that shape and structure Saudi women's views of health and how they perceive a healthy lifestyle with respect to the social, cultural, gender, and historical contexts in which they live. Through the knowledge and understanding of these values and perceptions, a clearer understanding of the issue being investigated is hoped to be obtained. The understanding of health values and perceptions is fundamental for increasing awareness about Saudi women's health needs.

School of Inquiry

An ethnographic inquiry has been implemented for this study because it addresses the complexities of defining health and understanding women's health perspectives within their cultural and daily practices. Cook (2005) described ethnography as "a qualitative research technique used both to elicit the participants' point of view and to understand their world" (p. 131). The purpose of ethnography is explained well by Holloway and Todres (2003):

The aim of ethnography is to reveal structures and interactions in a society, the contested nature of culture, the meaning that people give to their action and interaction. It also reveals how people are situated within a cultural context. Through this, it demonstrates internal coherence. These elements or building blocks of ethnography are consistent with its foundations but also with recent changes. (p. 354)

As the goal of this study is to understand women's health perspectives within their cultural and daily practices reflecting on the power-relation differences between men and women in this cultural environment, an ethnographic approach works well for this project. Madison (2012) elucidated that critical ethnography "begins with an ethical responsibility to address processes of unfairness or injustice within a particular lived domain" (p. 5). In Madison's *Critical Ethnography: Method, Ethics, and Performance,* Michelle Fine (1994) outlined three possible positions that researchers take as ethnographers:

1. The ventriloquist stance that merely "transmits" information in an effort toward neutrality and is absent of a political or rhetorical stance. The position of the ethnographer aims to be invisible, that is, the "self" strives to be nonexistent in the text.

2. The positionality of voices where the subjects themselves are the focus, and their voices carry forward indigenous meanings and experiences that are in opposition to dominant discourses and practices. The position of the ethnographer is then vaguely present but not addressed.

3. The activism stance in which the ethnographer takes a clear position in intervening on hegemonic practices and serves as an advocate in exposing the material effects of marginalized locations while offering alternatives. (p. 7)

In this study, I embraced the second position, the positionality of voices, as a way to present the participants' own opinions and meet the study's goal of achieving understanding without the explicit influence of the researcher's perceptions and values.

Research Questions

This project examined the following research questions:

- 1. How do Saudi women define health and wellbeing?
- 2. How do Saudi women value health and view being healthy?
- 3. How do Saudi women practice (view) health within the context of their cultural values and beliefs?

Methods

Setting

This study took place at King Abdulaziz University (KAU) in Saudi Arabia. The university is in Jeddah, the largest city in the province of Mecca, with a total number of 124,062 students enrolled in the university (King Abdulaziz University, 2015). Research for this project took place on KAU's female campus, which has 55,599 female students enrolled (52,555 undergrad and 3,044 postgraduate/diplomas) (King Abdulaziz

University, 2015). The focus group sessions were held at KAU because the location was accessible to study participants and convenient in that it saved them the trouble of meeting elsewhere.

Recruitment of Participants

To conduct this study, I proposed forming three focus groups with eight to 10 participants in each group. Upon receiving Research Ethics Board (REB) approval from The University of Western Ontario (UWO) (**Appendix A**), as well as KAU (**Appendix B**), recruitment began and lasted until the number of needed participants was achieved. Participants were recruited through advertisement flyers distributed and displayed in the university cafeterias, hallways, student lounges, rooms during students' committee events, classrooms that were home to the researcher's classes, and malls (Aljamaa Plaza, Andalus Mall & Alslaam Mall) near the university frequented by female students. Recruitment flyers (**Appendix C**) included the contact information for the student researcher and supervisor, and identified the aim and purpose of the study as well as the eligibility criteria for participation. Sixty-four participants contacted the student researcher, mainly via email and WhatsApp (a free on line messaging platform), to express interest in participating in the study.

A sample of 31 Saudi university women aged 18 or older were invited to participate in the study. The inclusion criteria for this study were the following: participants must be 18 years of age or older, Saudi female citizens, residents of Jeddah, Saudi Arabia, and enrolled in KAU as an undergraduate student. The following criteria excluded potential participants from the study: non-Saudi participants, visiting students, non-residents of the city, and post-graduate, faculty and staff members of the selected university. Thus, based on the inclusion criteria and participants needed for this project, 31 undergraduate female students participated in this study.

Ethical Considerations

Ethics approval was obtained from the Health Sciences REB at UWO, the Ministry of Education in Saudi Arabia, as well as KAU prior to data collection. Throughout the study, I employed ethical considerations indicated by the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (TCPS 2: CORE, Canadian Institutes of Health Research, 2014). Participants were provided a detailed letter of information (**Appendix D**) about the study, their right to withdraw from the study at any time, and were assured that confidentiality would be maintained at all times (Hennink, 2014). All collected data and identifying information, such as consent forms, were stored separately in a locked suitcase until returned to Canada where then it was kept in a locked cabinet in Elborn College (room 2584) at UWO. All transcribed data were stored in a password-protected and encrypted-encoded laptop file.

Due to the nature of focus group interviews, confidentially cannot be guaranteed. However, I asked all group participants to respect individuals' privacy within the group, specifying that all personal and identifiable information should not to be disclosed outside of the group discussions. I explained the confidentiality agreement and asked group members to sign the consent form if they did not have any further questions or concerns (Hennink, 2014). Written consent (**Appendix E**) was obtained from the participants prior to the first meeting and stored separately from the discussion transcripts and field notes. In terms of the discussions, I did not aim to specifically identify participants; rather, I focused my attention on the culture and structure of their community in general. The study's potential risks to participants were anticipated to be very minimal; it was believed there would be little to no emotional upset caused by their reflection on their experiences related to health and healthcare. I was prepared to assist if a participant felt uncomfortable, annoyed, or cried at any point of the study. If this occurred, the group discussion would be stopped for a break and I would check with the participant to determine whether she wanted to continue in the study. Fortunately, no incidents occurred. In addition, refreshments (savoury and sweet bakery goods, coffee, water, and juices) were provided during the group interviews (**Appendix F**), as per tradition at this kind of gathering. Moreover, participants were thanked for their time and opinions put forward during the discussions with a simple token gift (e.g., two Western pens and a thank you note) at the end of the session (**Appendix F**).

Data Collection

Data was collected in the form of focus group interviews and field trip observations both held at KAU. I met with three groups (10 to 11 participants per group) for two sessions; the first session was one hour in duration and the second session was one hour and half hours long (**Appendix F**). The purpose of holding two sessions for each group was to give more time to participants to process, reflect and elaborate on their responses to the questions. Thus, this provided more in-depth accounts and rich data generated by the participants. In addition, the participants were interviewed in their mother language, Arabic. This was done to prevent misunderstandings and allow for a more authentic expression of participants' views and beliefs. All group discussions were audio-recorded with the participants' permission obtained prior to each session.

Focus Group

A focus group, as defined by Morgan (1993), is "a qualitative research technique that includes 8-10 persons brought to a centralized location to respond to questions on a topic of particular interest to a sponsor or client" (p. 30). This interview technique is carried out by a moderator, who facilitates the discussion, asks the research questions, directs the flow of the interview, and makes sure participants are given time to answer, reflect, and participate freely throughout the interview (Morgan, 1993). Focus groups combine two elements of qualitative data: individual interviews and participant observations in groups (Morgan, 1988). Hence, the significant contribution of focus groups is "the explicit use of the group interaction to produce data and insights that would be less accessible without the interaction found in a group" (Morgan, 1988, p. 12). Using focus groups to investigate Saudi women's health beliefs was appropriate because the purpose of the study was to learn more about the multiplicity of viewpoints on this topic. The group dynamic revealed multiple perspectives and furthered the understanding of these women's experiences.

To ensure the quality of the focus groups, I needed to actively listen, ensure project sincerity, and be flexible and reflexive to prevent the manipulation of opinions (Morgan, 1993). I moderated the semi-structured group interviews, guided by the scripted questions (**Appendix G**), engaged in the conversation when needed, and ensured a safe and friendly environment. For this study, the first round of focus group interviews included three groups (10, 10, 11 participants per group) that met for an hour. The second round of interviews included four groups of interviews because group two was split into two mini groups due to scheduling conflicts (10, 5, 5, 7 participants per group), and consequently each meeting lasted 90 minutes for group one and three. Upon participants' request, group three was also divided into two mini groups and each met for an hour. My volunteer assistant, Mona Alshehri, a Saudi friend, helped me set up the meeting rooms and assisted during the group interviews.

Observation

Observation is a defining feature of ethnography (Fetterman, 1998). I proposed to observe the environmental culture for nine weeks. I observed Saudi university female students by going to the university, visiting shopping malls near campus, and attending women's events (Appendix I). The data gathered from the field notes and interactions with the women helped to provide a better understanding of the historical, cultural, and political factors shaping participants' beliefs (Fetterman, 1998). Observations took place in the cafeteria or other areas where the university sells food to see the consumption patterns of Saudi women; this would be relevant to diet-related morbidities like diabetes, cardiovascular disease, obesity, etc. I also observed outdoor areas for activities and to see if smoking was practiced on campus. Observation was undertaken to answer the following questions and to determine other potential sites of observation: Is there a gymnasium or physical activity centre on campus? What types of health promotion resources does the university have? Do Saudi women tend to exercise in groups or individually? What kind of exercise do they typically engage in? Are there health campaigns or student clubs on campus? (Appendix I).

Transcription and Translation

I used two audio recorders in case one recorder experienced technical problems. Since all the collected audio-recorded group interviews were in Arabic, I transcribed the collected data into Arabic Microsoft Word documents and then translated these documents into English transcripts. The transcription involved listening to each group session as many times as needed to ensure every detail of the group's discussion was correctly included in the transcripts. After the documents in Arabic were generated, I validated the data entry by listening to the recorder and proofreading the transcripts.

As cited in Tweney and Hoemann (1973) the collected data and observation field notes were then translated to English using the Back-Translation method developed by Warner and Campbell. An expert translator, who signed a confidentiality agreement (**Appendix H**), translated the transcribed interviews into English. After the expert translator translated the data into English, the second translator (myself) translated the items back into Arabic. Afterwards, the two versions of data were compared by the researcher to see if they were the compatible. If they were the same, then the target language (English) version was used, and if they were not the same, the process was repeated until compatible copies were achieved (Tweney & Hoemann, 1973). This process was done to prevent any misinterpretation or missing any data during the translation process, thus ensuring the quality of the translated data.

Data Analysis

Thematic analysis was used to analyse the focus group data. Thematic analysis, as Vaismoradi, Turunen, and Bondas (2013) identified, "involves the search for and identification of common threads that extend across an entire interview or set of interviews" (p. 400). This approach involves breaking-up data into segments or themes for analysis (Hennink, 2014). I first listened to each group's transcript several times. After that, I started compiling thematic units. I had to re-read the transcripts several times to accomplish a written thematic analysis. After transferring the group discussion into a written document, the data was organized and divided according to characteristic details. I broke-up the data into segments or themes that were identified in the group discussions and then developed a verbatim transcript to represent the participants' voices and perspectives by using direct quotations. Lastly, using the NVivo software program, the data was analytically coded by each theme, with all the comments and descriptions related to that specific theme (Hennink, 2014). Aside from myself, only my supervisor and advisory committee members viewed the transcripts. They provided insightful feedback throughout the analysis process.

The observation data was used to provide a description of the structure and services within the university and the health-related culture in general (**Appendix I**). Field notes data provided information about participants' lifestyle, eating habits, physical activity, involvement in school activities (e.g., their levels of school engagement), their interaction with others (e.g., their pattern of sociability), cultural practices, etc., as well as my own experiences throughout the research process.

Quality Criteria

Rigorous fieldwork methods, credibility, and reflexivity were the primary quality criteria through which to evaluate this critical ethnographic study (Tracy, 2010).

Approach to Rigour in Fieldwork Methods

Tracy (2010) characterized rich rigour as using "sufficient, abundant, appropriate, and complex" information (p. 840) in which the researcher applies appropriate tools to achieve the intended purpose of a study. In this critical ethnographic study, I justified the sample choice, methodology, and context of the study, and clarified the data collection and the selected method of analysis to ensure the rigor of the study (Tracy, 2010; Davies & Dodd, 2002).

Approach to Credibility

In addition, Tracy (2010) described credibility as "the trustworthiness, verisimilitude, and plausibility of the research findings" (p. 842). Credibility was achieved by providing detailed descriptions from observing the Saudi culture, social events, and the research experiences in relation to these Saudi women. I noted tangible details regarding the complexity and diversity of participants' voices when analysing the data (Tracy, 2010). Direct quotations were included to demonstrate participants' voices since the study was designed to capture the women's perception and understanding of health in relation to their social interactions and cultural context.

I also promoted a friendly and safe environment for the participants to take part in the group discussions (Demuth, 2013). Before each session began, I told the participants that I was not looking for a textbook definition or scientific answer. Rather, I was only interested in hearing their individual perspective and views, which may or may be the same as their neighbour's. I stressed that every answer would be valued and respected. Consequently, participants provided rich information while answering questions and shared personal information and concerns. Participants felt comfortable enough to share their full names and program and year of school without being asked, which I decided not to disclose for privacy reasons. Every participant had a unique contribution. Most of the time participants disagreed when answering the discussion questions but were quite respectful and friendly to each other. Participants were very talkative and willing to open-up about their experiences and what they have witnessed interacting with family and friends.

Approach to Reflexivity

Reflexivity was a vital aspect of this study. Reflexivity is described by Finlay (2002) as a "thoughtful, conscious self-awareness" (p. 532) process that involves continual assessment of subjective responses, inter-subjective dynamics, and the research process itself. Reflexivity was achieved by recognizing my own opinions and assumptions throughout the study, specifically during group discussions and data analysis, to avoid influencing the participants' responses and data interpretations (Holloway & Todres, 2003). Aside from keeping a self-reflexive journal, I also continuously debriefed with my research supervisor and advisory committee members throughout the study.

Prior to data collection, I kept notes reflecting on my experience and feelings during research stages, how the existing literature on Saudi women made me feel, and my experience receiving ethics approval from KAU, the Saudi Ministry of Education, and UWO. There were some challenges to receiving ethics approval, as both KAU and the Saudi Ministry of Education did not have a set standards or protocol on how to obtain ethics approval. After I conducted the literature review, I became alarmed when I learned Saudi women often experience greater health problems than men due to their gender. The literature review revealed that Saudi women are generally disadvantaged due to their gender because Saudi culture is mostly a male-dominated culture in which women are deprived basic rights (Mobaraki & Söderfeldt, 2010; Long, 2005; Almalki et al., 2011). For example, physical activity and physical education are banned for schoolgirls (Mobaraki & Söderfeldt, 2010). Therefore, I assumed that my potential participants would be physically inactive individuals, unhappy about how our cultural norms limit women's mobility, and unable to access the basic resources such as transportation or gym access. I assumed I would find limited awareness about the importance of physical activity and healthy eating for achieving optimal health.

The data collection in Jeddah, Saudi Arabia and the data analysis stages were an incredible experience because I had the opportunity to meet and talk with brilliant and marvellous young women. I was made aware that my background and experiences in my home country and my experiences in Canada have both influenced my perspectives and beliefs and I actively kept this in mind during group discussions and data analysis. Saudi Arabia and Canada each has distinct cultural and social practices that have shaped my responses and behaviours. This dual cultural position was beneficial to this research project, as participants viewed me as an insider with whom they could share their stories openly and as someone who understands differences and perceptions because I was studying abroad. These reflections were shared with my supervisor who was very understanding and supportive, and I am thankful she encouraged me to challenge my own

assumptions and interpretations and suggested analytic directions throughout the research study.

Chapter Four: Findings and Discussion

The purpose of this study was to understand how young Saudi university women define and perceive health, as well as to examine how they practice and maintain a healthy lifestyle within their cultural norms. The first three chapters of this dissertation offered an introduction to Saudi Arabia, a review of the existing literature concerning Saudi women's health, and the methodological design that was utilized for this study. In this chapter, I will discuss the findings that emerged from the data collected and were analyzed using the conceptual framework that was constructed for this study.

As mentioned in chapter three, this study was framed using the critical theory paradigm and social model of health. Social context enables or inhibits individual health (Yuill, et al., 2010). Human agency drives individual choices and enables healthy or unhealthy behaviours, yet social circumstances influence and determine the settings in which people can practice that agency (Yuill, et al., 2010). The objectives of this study were to understand how Saudi women value health and view being healthy and to explore perceived facilitators and barriers that occur in their daily routine that encourage or detract from Saudi women leading a healthy life. Also, based on the understanding of the social model of health and how it concedes the influence of social aspects on individuals' health experiences (Schuiling & Likis, 2013) three themes were generated from the collected data.

According to the participants, meanings of health are formed by three interrelated dynamics: 1) societal influences (e.g., public policies and social norms); 2) personal experiences and interactions within their environment; and 3) the strategies developed

from the interactions of both domains. To highlight participants' quotations and differentiate them from the analysis, they will be presented in italics throughout this chapter.

Societal Influences

From the group discussions, examples of social influences are social policies that ban physical education or engaging in physical activity in girls' schools. Also, cultural norms and built environments that impact women's experiences and choices were discussed:

"The Ministry of Education has banned any sports in both private and public girls' schools." (Participant 2, Group 2).

"It's [physical activity] a violation, as girls are not allowed to engage in physical activity." (Participant 8, Group 2).

"We used to stay at school for 8 hours on our chairs, and only at the lunchbreak time could we go to eat, then we go back to the class and continue sitting until we go home after. How do you expect me to walk every day for an hour then? We talk about how walking an hour is a big deal because we are not used to that." (Participant 8, Group 2).

In contrast, when the participants were asked to delineate obstacles that prevented them from maintaining a healthy lifestyle some women reported internal and external barriers that sometimes were contradictory with the previous statements: "I think that the biggest and most important obstacle in one's life ... [is] the person herself." (Participant 1, Group 1).

"Our society represents an obstacle." (Participant 3, Group 1).

"The family." (Participant 5, Group 1).

"Being occupied with studying." (Participant 2, Group 2).

"[I] want to walk on the walking track, but the rude boys represent an obstacle, and my family are worried for me." (Participant 3, Group 2).

"The healthy food options are so limited inside the university." (Participant 5, Group 2).

"There's not enough time." (Participant 3, Group 3).

"Another thing that takes lots of my time is internet browsing." (Participant 5, Group 3).

Social norms of eating were also a significant influence on women's habits. Participants said that parents saw eating homemade food as the most important element to staying healthy. Here are some instances that the participants shared:

"One of the things that represents the biggest obstacle in my life is when my father disagrees with me when I finish eating and want to get up. He tells me, 'I swear to Allah (God) you don't get up, you have to keep eating."" (Participant 3, Group 1). "So, eating for my family doesn't incorporate the concept of being healthy or not ... you must eat against your will." (Participant 3, Group 2).

Furthermore, women reported to find themselves in a difficult position when they were invited to family/friends' social gatherings and were not in control of the food selection. They felt obligated to eat what others offered them because they did not want to offend anyone:

"Dinner invitations here are disastrous." (Participant 9, Group 1).

"You can't go for a dinner invitation and [not] eat [the] food! This is shameful, as if you don't like their food ... Even if all your family members are there and everybody is happy and so on, and then they noticed that you are not eating, they will think that something is wrong with you." (Participant 4, Group 2).

"You can't go for dinner and not eat the food! This would be disrespectful." (Participant 2, Group 2).

"If I don't eat ... while visiting other people, not eating ... their food or not having a dessert at their home makes them ask, 'Why not? Are you angry with us or something?'" (Participant 6, Group 2).

In these situations, participants reported feeling hopeless and an inability to gain control over these cultural norms:

"So what if you are at your grandmother's home? Elders don't approve [of] such an act. You have to eat against your will. You can't leave the dining table even if you [have] finished eating and you are full." (Participant 5, Group 1).

"They get bothered if you don't eat their food, although it doesn't suit me and it ruins my body ... They say 'No, you just don't like our food.' That [is] how you are forced to eat." (Participant 7, Group 2).

Social expectations based on gender differences, such as practicing specific exercises and the accessibility of joining the gym, were also discussed. According to the participants, men are encouraged to go to the gym and be physically active to sustain strength whereas women are expected to stay home and do housework, which is considered an appropriate form of exercise for them. For example:

"Even if I told them that I will lift light weights, they [parents] will still refuse." (Participant 1, Group 1).

"You know that weight lifting/building muscles is something that isn't acceptable for girls in general, according to our parents." (Participant 4, Group 1).

In addition, joining a gym for women was portrayed as challenging and expensive:

"And sometimes clubs are so expensive, too expensive to join." (Participant 4, Group 2).

"I was shocked when I knew that [the] joining fee for boys for 6 months is 1300SAR (~ 445 \$CAD) and for us girls..." (Participant 7, Group 2) "Yes, for us a month would cost 1300SAR (~ 445 \$CAD). Like why?" (Participant 4, Group 2).

Lastly, there was a clear lack of public health messages and minimal awareness about women's health, as described by the women:

"To be honest, we don't have enough awareness about diseases and which symptoms are related to a certain disease. All we know is the symptoms of the flu." (Participant 1, Group 1).

"I haven't seen any 'public health messages'." (Participant 7, Group 2).

"No, to be honest, there're the ones that are related to the smoking cessation campaigns." (Participant 4, Group 2).

"They should raise awareness about the importance of physical activity at school as we said earlier." (Participant 7, Group 2).

Women's Personal Experiences and Interactions within their Environment

In this theme, the participants shared their own views (positive and negative) on different behaviours related to health and wellbeing. Physical health was often mentioned in all the group discussions when participants were asked to define health or to describe someone healthy. Mental, spiritual and environmental health instead, were disregarded:

For example:

"Health is living without getting a disease, and that as the person grows older, InshAllah (God willing) is free of diseases." (Participant 1, Group 1).

"Health is to be free of any disease. The person should be fit and strong, too." (Participant 3, Group 2).

"I don't feel pain in my bones/joints. To be flexible, as well." (Participant 5, Group 3).

In addition, participants compared being healthy to being physically fit and/or attractive:

"That means things I want to change I should change ... by exercising, I know it's not by eating more ... I mean, by exercising I can get some part of my body bigger and others smaller, not by eating." (Participant 4, Group 1).

"It's for someone to have a weight that is suitable to her/his height and his age." (Participant 1, Group 2).

"That one has a perfect weight. And how they eat and sleep." (Participant 4, Group 3).

"Also considering the person's movements. If one can move much without getting tired or sluggish." (Participant 5, Group 3).

"That you have strong bones because you drink milk. Also, to exercise and not to eat lots of sugar, and so on." (Participant 2, Group 2).

Some participants elucidated their definition of a healthy person based on genderdifferences: "For a girl, it's about how both her hair and skin looks." (Participant 2, Group 3) "To be stronger and [to be] able to beat someone, for a boy yeah, to beat someone older than you or so." (Participant 4, Group 3).

In terms of personal practices, the most cited unhealthy behaviours were related to eating habits:

"We also lost the feeling of hunger, we don't feel hungry anymore. Meaning that food is always available (participant 1: if we get hungry it would be a disaster). We always eat, and that feeling of 'hunger' we don't feel it then go eat. So, I don't know whether I'm hungry or not, I just eat." (Participant 4, Group 2).

"Traditional foods are full of fats. In the south region of Saudi, it's cold there, so people used to eat food that [is] full of fats because it keeps them warm. Here there's no cold weather, but we still eat the same amount of fats." (Participant 5, Group 3).

"I've tried to be healthy but I couldn't. I don't like healthy food, as I don't get full from eating healthy." (Participant 7, Group 3).

"Eat healthy and sleep early, because sleeping affects one's health. I should follow a routine to keep myself healthy. To be honest, I don't follow a routine. I may plan it, but I do not commit." (Participant 3, Group 2).

On the other hand, some participants identified challenges to maintaining or adopting a healthy lifestyle:

"Especially with the heat. It's hard to walk under the sun." (Participant 5, Group 1).

"Yes, the environment controls you ... I think that even if you exercise and eat healthy food, the weather, the sun and so on doesn't help you." (Participant 9, Group 1).

"The environment we live in isn't helpful to make us live healthy." (Participant 7, Group 2).

"Even if you wanted to go for a walk you must do that at night, because the weather isn't helping at all." (Participant 5, Group 3).

Gender aspects were continuously emphasized by the participants:

"I wish there was a sidewalk only for women, so that I can walk without [a] hijab." (Participant 6, Group 3).

"A gym is more important ... Regarding the walking track, we wear abays (long veils) and a scarf, some cover their face. And there are boys around you. (Participant 7: You don't feel comfortable). And there are some boys who are really annoying and rude, so why would you expose yourself to these things? If there's a women's gym it would be better and more decent." (Participant 4, Group 2).

Participants also discussed mobility and accessibility issues that they have encountered when accessing the women's gymnasium. For example: "We have a bad concept of gyms and they are tiring. Also, they are far away. Once I wanted to join a fitness club, and I talked to my mother and father about it. Both said no way. They told me for an hour exercising at the gym, you'll spends 2 hours going and coming back because of the traffic and it's crowded. They also said you're going to tire the driver, and why would I want to do that?" (Participant 4, Group 2).

"If there are transportation means then yes, I have no problem to go to the gym. Because I can't be late, it all depends on the transportation methods." (Participant 9, Group 3).

"There are no transportation methods [to get to the gym]." (Participant 1, Group 3).

"We don't have many gym clubs ... You can find men's gym clubs, praise to Allah, everywhere. Like Fitness Time for men is everywhere you go. (Participant 4 and 7: Agreed: you see it on every corner). My brothers go to the gym by walking because it's close to our home. I mean our old home was near a men's Fitness Time club and they used to walk, and now our new home is near also near another men's Fitness Time club and they just walk ... But for us girls, there are as few as 3 or 4 gyms in Jeddah and that's it." (Participant 8, Group 2).

Moreover, several participants spoke about their families (e.g., parents) as a negative factor pressuring them to eat traditional food and downplaying the importance of healthy eating and physical activity. Others mentioned friends as another influential factor:

"The elders in our family, for example, think that you shouldn't eat fast food and other food that is not useful for you. [They think] you don't have to exercise as long as you eat homemade food. They don't really think that exercising is important for health." (Participant 3, Group 1).

"It's true that I'm thin, but my strength is low, so I want to go to the gym so that I [can] increase it. And the family tells me you only need to eat." (Participant 9, Group 1).

"There's a big difference between a friend and a mother. That if I told my friend that I needed to reduce the amount of food I eat, or that I needed to follow a certain routine, they would support me. But if you went to your mother, at the beginning she will want to see you thin and so she would just get you food and tell you, 'Eat this.' And she gives me food and forces me to eat. So, she ruins my healthy diet." (Participant 2, Group 2).

"Even when I go for a walk, my mother tells me, 'Don't waste your time, come help me.' So, walking isn't important for her." (Participant 3, Group 2).

"My friend was the one who, praise to Allah, encouraged me to be healthy" (Participant 4, Group 1).

"It's embarrassing to tell my friend not to smoke, even if she is in my house." (Participant 4, Group 3).

"Maybe when I have lunch I eat salad as I want to eat it along with my sister because she eats like that." (Participant 7, Group 3). Health Strategies Developed from the Interactions of Both Domains

Health strategies developed from the interactions of both domains was also a main theme, and this represents how participants across groups were aware of internal and external factors such social restraints; yet, they demonstrated autonomy and control when it came to engaging in the self-determination of health behaviours.

Participants named different forms of activities they engaged in to stay active:

"I walk on the roof of our home and roller-skate." (Participant 3, Group 1).

"I must walk every day for one hour." (Participant 4, Group 2).

"Moving a lot, because I'm one of those who, praise to Allah, moves a lot." (Participant 6, Group 1).

"You have to keep moving and don't stay still." (Participant 2, Group 2).

During the group discussions, participants shared examples of how to overcome both individual and societal challenges to maintain or adopt healthy practices:

"When you have a strong will you will be strong." (Participant 3, Group 1).

"When I registered at the gym, everybody at home was against the idea. Also, transportation to the gym was so hard. However, I registered at the gym. I used to go there and was committed until the membership expired." (Participant 4, Group 2). "I broke all the rules. I used to be prohibited from going to the fitness club and from buying certain things like exercising tools, and so on. But still, I didn't listen and insisted on going to the fitness club and continued this habit." (Participant 3, Group 1).

"For me, the biggest stressor is my sisters. They mock me about everything. They tell me, 'Why don't you eat? Oh, you are just trying to be so thin' ... But I still don't care about their criticism that much. In the end, I do whatever I like." (Participant 6, Group 2).

"I decided to reduce the amount of food I eat and that's it and to eat small amounts of what I like. Because diet makes me so tired and it didn't work with me." (Participant 4, Group 3).

In addition, participants pointed out that society, especially the young generation, is becoming more aware of healthy practices and how to accomplish their health needs, especially in big cities like Jeddah. There are some signs of change, both personal and social:

"Now, society has started to be more understanding, and you rarely hear about a girl that wouldn't like to care about her food or her weight." (Participant 7, Group 1).

"I feel like they have some health awareness and everything, but there is certain stuff that we don't want to stop doing despite knowing it's bad, like smoking, for example." (Participant 1, Group 3). Lastly, participants noted an increase in purposeful walking and walking tracks in their neighbourhoods in recent years:

"I've noticed that everywhere I go, I find people who, praise to Allah, are walking." (Participant 9, Group 1).

"I see women walking in the morning after dawn." (Participant 6, Group 1)

"There are some nice things in Jeddah, especially the walking tracks numbers are growing now." (Participant 2, Group 2).

"They are opening many walking tracks across the city, and there are a lot of men and women walking now." (Participant 5, Group 3).

"In every new neighbourhood there is a walking track for people." (Participant 3, Group 1).

Discussion

Elizabeth Daly (1995) developed a research project to understand health meanings among 58 young Saudi women in Jeddah; she asked, "What does being healthy mean to you?". Daly (1995) compared her findings to previous research on non-Saudi women. This section elucidates the similiarties and differences between the findings of this research and previous research such as Daly's (1995) study.

The collected data in this project revealed an interesting dynamic within each group of participants and across the groups. The participants contributed a significant amount of rich data relevant to the study's objectives. In the following sections, embracing the social model of health, I will discuss this study's three research questions by articulating the multi-dimensional factors that surround women's life and practices, and contrast these aspects to the previous literature.

Social Norms and Cultural Values

Similarly, to previous research, public policies and societal norms were highlighted during the group discussions. In a male-dominant culture, government rules regarding driving, physical activity education and exercising in schools are solely genderbased (Al-Eisa & Al-Sobayel, 2012; Alenazia, 2014; Mobaraki & Söderfeldt, 2010). As exemplified in this study, such rules allow boys to engage in physical activity at school while at the same time girls are forbidden from physical activity at school, which was also found in prior studies (Al-Eisa & Al-Sobayel, 2012; Alenazia, 2014; Rawas et al., 2012). Participants expressed that authorities did not promote healthy habits in females. This prevents women from practicing healthy living habits at a young age, which affects their health later in life as shown by Al-Eisa and Al-Sobayel (2012) and Daoud et al., (2016).

Gendered socialisation has a great influence on Saudi women's lives, and this has been well documented by previous research (Al-Eisa & Al-Sobayel, 2012; Al-Nozha et al., 2005; Alyaemni et al., 2013; Daly, 1995; Daoud et al., 2016; Rawas et al., 2012). Definitions of health and health practices may be directly influenced by gendered socialisation and, in line with previous studies, this study found definitions of health and health practices were affected by gender differences (Al-Eisa & Al-Sobayel, 2012; Daoud et al., 2016; Rawas et al., 2012). For example, participants stated that their families do not want their daughters to build muscles, so they discourage the women from going to the gym. Furthermore, as discussed by the participants, gym membership for women is more expensive than for men. This could be because fewer women frequent gyms because they face more obstacles (e.g., transportation, family approval). It is worth mentioning that the study participants described walking outdoors as being difficult due to harsh weather, which was also found by Al-Eisa and Al-Sobayel (2012). Further, in this study women disclosed a fear of harassment by men when walking outdoors. This topic was discussed several times across all three groups.

Social values and family expectations dominate women's perceptions from their early years (Al-Bannay et al., 2017; Al-Nozha et al., 2007; Alyaemni et al., 2013). In the present study, we found that fathers disapproved of women eating low-fat food; thus, they pressured their daughters to eat traditional food that is full of fat and carbohydrates. In addition, even though mothers want their daughters to be an ideal weight, they believe that healthy eating is not beneficial. The findings of this study somewhat matched Al-Nozha et al.'s (2007) findings who found that a lack of physical activity education and family support may explain why Saudi women are less active. Furthermore, in this study families sought to control women's definitions of health and health choices (e.g., food and exercise); this is supported by the findings of Alyaemni et al. (2013).

Meanings of Health (related to appearance)

Personal opinions can be defined as the person's own experience and beliefs regarding their own health and wellbeing (Cook, 2005; Crawford, 2006). Prior to data collection, I was interested in how these beliefs are formed in relation to social and family influences in Saudi Arabian society. Of course, one must bear in mind that individuals may acquire new perspectives and want to overcome cultural challenges and live their life in a way other than what is considered socially acceptable or familiar (Evangelista, Kagawa-Singer, & Dracup, 2001; Vidyasagar & Rea, 2004; Cook, 2005).

Definitions of health and health practices in this study had many similarities to earlier research. In this study, participants indicated traditional or medical definitions of health when asked to describe health and a healthy person. Dieting and losing weight were of concern to the participants. Additionally, participants mentioned being disease free, mental health, having positive energy, sleeping well, and participating in exercise as definitions of health and practices that can lead to better health. These findings are in line with Daly's (1995) research.

In contrast to previous research, participants of this study linked health to physical attractiveness. Participants identified good health as physical attractiveness and a lack of disease or sickness. These outcomes differ from Daly's (1995) findings, which found an emphasis on body and mind cleanliness, feeling happy, being disease free, productivity, and being active and strong. Although contemporary participants connected health with being disease free and having a strong body, they also suggested that for a woman to be healthy she must have traits typically linked to attractiveness, such as thinness, clear skin, and long, strong hair. In addition, in this study participants linked being active with being in shape and attractiveness.

Furthermore, this study's participants acknowledged the external factors that affect their health and definitions of health, such as gender norms (Alyaemni et al., 2013).

This finding contrasts with the research by Al-Nozha et al. (2007), which found that Saudi women are inactive due to a lack of willpower. In fact, participants of this study demonstrated a strong sense of autonomy over their health behaviours and discussed how to overcome societal challenges to maintain or adopt healthy practices. This sense of agency was illustrated when they practiced healthy activities despite the cultural and social barriers they experienced. Many participants in this study demonstrated an abundance of willpower, as they worked diligently to find a way to exercise and stay fit.

Thinking about Promoting Health

Health promotion can be defined as "the process of enabling people to increase control over, and to improve, their health" (WHO, 2017). In this study, participants showed a good sense of agency and discussed how it is important to maintain good habits, such as walking on a regular basis. Participants acknowledged their lack of awareness and limited access to health resources and information; these barriers were also mentioned in previous research (Al-Nozha et al., 2005; Desouky et al., 2014; Khalaf et al., 2015). In this study, some participants implied that being overweight or experiencing mental illness is strongly stigmatized by others and unintentionally even by themselves. Previous studies have not found similar responses.

In addition, participants noted the importance of the support of family and friends to achieve good health and the use of social media to attain health information and inspiration. Participants also acknowledged the importance of exercising, managing stress, adopting good sleeping and eating habits as leading factors to maintain good health, which confirms Al-Bannay et al.'s, (2017) findings. Social support seems to have a significant influence on women's health. Studies have shown a direct correlation between receiving productive and positive social support and improvements in women's health (Hurdle, 2001). A lack of social support was highlighted throughout this study. Participants explained that they required increased social support from family and friends to be able to pursue a healthy lifestyle. Additionally, participants shared anecdotal tales about motivating health shows that provided examples of how women overcame barriers to good health, prior studies have not found similar responses.

Chapter Five: Final Considerations and Conclusion

In this section, I will provide an overview of methodological considerations. Next, I will examine the study's strengths, weaknesses, and limitations. Lastly, future research directions will be presented.

Methodological Considerations

This study was conducted to explore the definitions of health held by young Saudi women in Jeddah, Saudi Arabia. In addition, the study aimed to explore the thoughtprocess behind the participants' definition of health concepts in relation to their social contexts. Research data was collected at King Abdulaziz University in Jeddah, Saudi Arabia. The study adopted an ethnographic methodology and a sample of 31 Saudi university women. Three focus groups (8 to 10 participants per group) were formed, and each group met for two focus-group interviews. In addition, I observed the participants' university environment over a nine-week period.

Study Strengths

This study was inspired by Daly's (1995) research project that set out to understand the definitions of health held by Saudi women. This study has three main strengths. First, conducting the group interviews in the participants' native language Arabic allowed for more in-depth discussions and superior data (Polkinghorne, 2005; Van-Nes, Abma, Jonsson, & Deeg, 2010; Giampapa, 2011). Second, conducting this research as both an outsider and as an insider student researcher creates a well-rounded perspective (Dwyer & Buckle, 2009; Giampapa, 2011). Participants viewed me as an insider because I am from the same city and I spoke their language; therefore they were comfortable providing answers to me in what they saw as a secure environment. As a Saudi Arabian student in Canada, they assumed I was knowledgeable of factors determining health and wellness, which contributed to a fuller disclosure of views about their personal health. Finally, a strength of this study is that it used ethnography as the methodology and focus groups as its method. Ethnography is used to acknowledge the importance of societal norms that affect and shape an individual's experience (Holloway & Todres, 2003). The dynamic of the focus group discussions facilitated more diverse, self-disclosure and detailed information about these young women's health perceptions (Krueger & Casey, 2009).

Study Limitations

Despite the measures that were taken to improve trustworthiness, there are at least two limitations in this study. First, the observation (**Appendix I**) was completed in only nine weeks, compared to standard ethnographic research that is often longer (Fetterman, 1998). This was due to the limited time of my academic program as a master's student, as well as the King Abdulaziz University's determination to restrict the research project to three months.

Lastly, this study focused on women who are Saudi but are undergraduates at King Abdulazia University. Post-graduates, stay at home women, mothers and women who are not engaged in higher education were excluded from this study. This exclusion was due to anticipated recruitment challenges, such as arranging meetings for groups of Saudi women outside of their homes, transporting participants to the group discussions, and ensuring the public and families accepted such freedoms and mobility. Unquestionably, this exclusion resulted in a lack of diverse perspectives.

Implications of Study

The findings of this study are meant to have a positive impact on both research and service delivery in the following ways.

For Research

The knowledge developed from this study may assist in understanding Saudi women's perceptions about health, which very often are misunderstood and stereotyped. The findings hopefully will fill the existing gap in literature by providing information about Saudi women's health from their own perspective. Findings from this study may help understand and explain the health problems that Saudi women endure and help bridge the gap between health practices and Saudi research, which often lacks the consideration of women's perspectives. Further participatory research is also recommended to advance this line of understanding and promoting women's health in Saudi Arabia. More research is needed to understand Saudi women's experiences and needs when accessing health care resources and services.

For Service Delivery

For service delivery, the findings may inform policymakers, health practitioners, and the public about Saudi women's perceptions of health. This could help these stakeholders better serve Saudi women and improve their quality of life. We acknowledge collaboration in health delivery is complex (Winters, Magalhaes, &

Kinsella, 2015). Regardless, collaboration is badly needed to improve Saudi women's health experience and health outcomes. The findings suggest that policies about sports education in girls' schools, fitness in schools, and rules regarding recreational spaces need to be revised. Public health awareness, health information, health interventions and health programs need to be available and accessible to the public, which must include women. We must also consider the local climate, social norms and family values when designing health promotions and intervention programs for women. Perhaps programs should target communities and families and raise awareness about healthy practices, which will enable women to obtain family and social support. Lastly, healthcare providers of both genders starting from technicians, social workers, nurses, physicians, etc should consider the societal norms that impact women's health. They must coordinate with other healthcare providers and with women themselves to overcome Saudi women's barriers to good health. For example, delivering health information in public spaces such as malls and community centres could promote outdoors activities and help foster public acceptance.

Future Directions

There is a significant need for more research that focuses on Saudi women. More qualitative research, in particular, is needed to understand the reasoning behind their health problems, unhealthy behaviors, and health needs. The information garnered from this project and its methodology hopefully represents an innovative approach to a rather neglected area of study. The findings of this study should be disseminated to key stakeholders in Saudi Arabia and local and international peer-reviewed publications in Canada and elsewhere. The results will also be presented at conferences that deal with different aspects of women's health, social norms, and cultural values.

Conclusions

By conducting this ethnographic study from a critical perspective and presenting Saudi women's own health perceptions, this study offers a valuable contribution to the understanding of Saudi women's perceptions of health in relation to their social and cultural norms. To the best of the researcher's knowledge, there are very few studies that address the perspective of Saudi women and their health perceptions. Thus, the results of this study provide original information about Saudi women's definitions of health and hopefully will encourage more research to better understand this population.

Finally, conducting this research study has provided some powerful insights about women from my hometown. The general perception is that Saudi women are oppressed, unhappy and unassertive. One cannot deny that social policies in Saudi Arabia empower men to make the decisions that impact Saudi women's lives and health choices, such as women's mobility, right to work, study, travel and obtain legal documents. These rules have a great deal of influence; yet, the young women I interviewed were well-spoken, very aware of their social contexts and rights as individuals and did not show any signs of powerlessness or hopelessness. Also, during the focus group discussions, they actively motivated each other to do better and attain their goals. More importantly, even though they live in a male-dominated culture, they work hard to achieve what they desire and are not to be afraid to speak up. Participants were eager to openly share their views regarding their definitions of health in relation to social norms and cultural expectations. I left this project viewing young Saudi women as joyful, socially-oriented and rather optimistic about their ability to achieve increased gender equality and better health in Saudi Arabia.

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Indicators	Statistics	Year
Population (thousands)	28829	2013
Population aged under 15 (%)	29	2013
Population aged over 60 (%)	5	2013
Median age (years)	28	2013
Population living in urban areas (%)	83	2013
Total fertility rate (per woman)	2.6	2013
Number of live births (thousands)	561.2	2013
Number of deaths (thousands)	91.9	2013
Birth registration coverage (%)	•••	
Cause-of-death registration coverage (%)	51	2009, 2012
Gross national income per capita (PPP int \$)	53780	2013
WHO region	Eastern Mediterran	2013
World Bank income classification	High	2013

Table 1: Statistics on Saudi Arabia

World Health Organization – WHO. (2014). Saudi Arabia: health profile

Table 2: Statistics on Canada

Indicators	Statistics	Year
Population (thousands)	35182	2013
Population aged under 15 (%)	16	2013
Population aged over 60 (%)	21	2013
Median age (years)	40	2013
Population living in urban areas (%)	82	2013
Total fertility rate (per woman)	1.7	2013
Number of live births (thousands)	395.7	2013
Number of deaths (thousands)	252.3	2013
Birth registration coverage (%)	100	2012
Cause-of-death registration coverage (%)	100	2009-2011
Gross national income per capita (PPP int \$)	42610	2013
WHO region	Americas	2013
World Bank income classification	High	2013

World Health Organization – WHO. (2014). Canada: health profile

Children under five years of age underweight for age		%	n/a
Under-five mortality rate		Per 1000 live births	29
Infant mortality rate		Per 1000 live births	24
One-year-olds immunized against measles	s (2001)	%	94
Maternal mortality ratio		Per 100 000 live births	23
Births attended by skilled health personnel	1	%	91.4
HIV prevalence among 15-49-years-olds		%	<0.1
Malaria mortality rate		Per 100 000	4
Tuberculosis prevalence		Per 100 000	61
Tuberculosis mortality rate		Per 100 000	5
Tuberculosis cases	Detected under DOTS (2001)	%	40
	Cured under DOTS	%	73
Population using solid fuels		%	<5
Population with sustainable access to an	Urban	%	100
improved water source	Rural	%	64
Population with access to improved	Urban	%	100
sanitation	Rural	%	100

Table 3: Saudi Arabia: Selected Health Indicators

World Health Organization. (2004). World health report: Saudi Arabia.

Table 4: Canada: Selected Health Indicators

Children under five years of age underweight for age		%	n/a
Under-five mortality rate		Per 1000 live births	6
Infant mortality rate		Per 1000 live births	5
One-year-olds immunized against measles	(2001)	%	96
Maternal mortality ratio		Per 100 000 live births	5
Births attended by skilled health personnel		%	98
HIV prevalence among 15-49-years-olds		%	0.3
Malaria mortality rate		Per 100 000	0
Tuberculosis prevalence		Per 100 000	5
Tuberculosis mortality rate		Per 100 000	1
Tuberculosis cases	Detected under DOTS (2001)	%	56
	Cured under DOTS	%	80
Population using solid fuels		%	<5
Population with sustainable access to an	Urban	%	100
improved water source	Rural	%	99
Population with access to improved	Urban	%	100
sanitation	Rural	%	99

World Health Organization. (2004). World health report: Canada

Appendix A

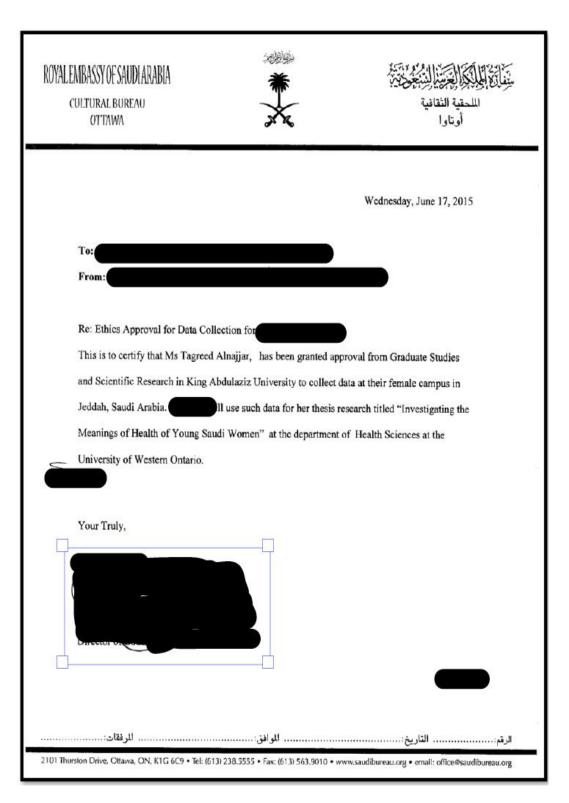
Western Ethics Approval

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		NMREB Delegat	d Initial Appro	val Notice		
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	NMREB Initial Approval Date: Septemb NMREB Expiry Date: September 18, 201	ber 18, 2015 16				
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	Document Name	Comments	Version Date			
	Revised Western University Protocol Revised Letter of Information & Consent		2015/07/24			
	Advertisement	Recruitment Flyer	2015/07/24			
	Other	Focus Group Questions	2015/07/24			
	Advertisement	Script for Classroom Recruitment				
	Other Other	Confidentiality Agreement	2015/07/24			
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	The Western University Non-Medical Res- noted above.	earch Ethics Board (NMREB) has re	viewed and appr	oved the above named	l study, as of the NMRE	B Initial Approval Date
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	The Western University NMREB operates	in compliance with the Tri-Council	Policy Statement	Ethical Conduct for I	Research Involving Hun	nans (TCPS2), the
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Appendix B

King Abduluziz University Ethics Approval

KINGDOM OF SAUDI ARABIA الملكذ العربيت السُعُوديت مذاية النغ الملات إلى Ministry of Higher Education KING ABDULAZIZ UNIVERSITY دامعة الملك عبد الغزيز 50 T 25 Fax 511 http://gssr.kau.edu.sa مكتب وكيل الجامعة للدراسات العليا والبحت العلمي Office of the Vice President for Graduate Studies and Research حذذابه الله ستعادة الملحق الثقلق الستعودي بسفارة خادم الحرمين الشريفين في كندا السلام عليكم ورحمة الله وبركاته ... وكالة جامعة الملك عبد العزيز للدراسات العليا والبحث العلمي تهدي سعادتكم تحيانها، وتشير إلى المبتعثة من قبل وزارة التعليم لدراسة الماجستير في الطلب المقد تخصص The University Of Western Ontario بجامعة Rehabilitatino Health Scienc وترغب في تطبيق استبائها المتعلقة برسالتها للماجستير في جامعة الملك عبد المزيز و الموسومة با مفهوم الصحة لدى الطالبات السعوديات بجامعة المك عبد العزيز آمل التكرم فضلاً.. بالاطلاع والإحاطة إلى أن الجامعة لا تمانع من قيام المبتعثة بتطبيق دراستها بالجامعة، علماً أن ضوابط توزيع الاستبانات بجامعة الملك عبد العزيز مرفوعة على الرابط التالي: http://graduatestudies.kau.edu.sa/content.aspx?Site_ID=306&Ing=AR&cId=241579&URL=www.kau.edu.sa ويمكن للطالبة التواصل مع عمادة الدارسات العليا لطلب المساعدة عن طريق وحدة الخدمات لبحثية، وذلك من خلال الإيميل التال وتقبلوا خالص تحياتي وتقديري... Daig 287/1/29000 BOJY1-VERE MU Encl.: المشفوعات



Appendix C

Recruitment Flyer

FEMALE PARTICIPANTS NEEDED FOR RESEARCH STUDY

We are looking for volunteer Saudi undergraduate female students to take part in a study of *Investigating the Meanings of Health for Young Saudi Women*

You would be asked to take part of focus group discussion (8 to 10 participants per group) to reflect on your personal life to further discuss how you define health, describe a healthy person and if you have experienced facilitators or obstacles to maintaining your health and well-being.

Your participation would involve attending *two focus-group* sessions, each session will be about 60 to 90 minutes long. Focus groups will be held at King Abdulaziz University. Refreshments provided.

In appreciation for your time, you will receive

a simple token gift (e.g. a lanyard, ID holder, pen or pencil from the University of Western Ontario)

For more information about this study, or to volunteer for this study,

please contact:



Email:

This study has been reviewed by, and received ethics approval by the Graduate Studies and Scientific Research at King Abdulaziz University.



Appendix D

Letter of Information

Project Title: Investigating the Health Meanings of Young Saudi Women

Principal Investigator: Faculty of Health Sciences, University of Western Ontario

Letter of Information

1. Invitation to Participate

You are being invited to participate in this research study exploring Saudi women's meanings of health. In order to better understand the root causes of prevalent diseases among Saudi women, there is a need to explore women's health beliefs. Because you are a young Saudi female and you may encounter or witness diverse health experiences, you may be able to provide information that will help us to understand Saudi women's health and health needs to further develop programs that serve this population.

2. Purpose of the Letter

The purpose of this letter is to provide you with information required for you to make an informed decision regarding participation in this research. It is important that you are aware of what the research involves. Please take the time to read this carefully and ask questions if you would like to understand some part of it better. You should feel free to ask any questions you may have at any time.

3. Purpose of this Study

The purpose of this study is to explore the meanings of health of young Saudi women in Jeddah, Saudi Arabia. In addition, the study will explore the thoughtprocess behind their way of defining health concepts such as self-care, life style and health practices. The study's purpose is to provide understanding regarding how Saudi women value health and view being healthy and to explore the facilitators and barriers that occur in daily routines that encourage or prevent a woman to lead a healthy life.

4. Inclusion Criteria

Females who are Saudi citizens, resident of the city of Jeddah (where the research is being conducted), and enrolled as an undergraduate student at the University of King Abdulaziz are eligible to participate in this study. Participants will either be married or unmarried females from different economic, personal, social, and educational backgrounds. The age of the participants will be 18 years or older, as this is considered adulthood.

5. Exclusion Criteria

Females students who are non-Saudi citizens, not registered as undergraduates of the intended university, or who are faculty and staff members of the intended university are not eligible to participate in this study.

6. Study Procedures

If you agree to participate, you will be asked to take part in two sessions of focus-group interviews (8-10 participants per group). It is anticipated that each session will be approximately 60 to 90 minutes in length. The interviews will be

conducted on campus (room location will be determined later). During the interviews, participants will be asked to reflect on their personal lives to discuss how they define health, describe a healthy person and how they view themselves when it comes to health in relation to other aspects of their lives. They will be asked if they have experienced facilitators or obstacles to maintaining their health and well-being.

The focus-group interviews will be audio-recorded. To take part of this study you are required to agree to be audio-recorded during the two focus group discussions you are participating in. The purpose of audio recording is to produce a written summary of the group discussions for research purposes only (e.g. data analysis) and will not be used publicly. There will be a total of 24 to 30 volunteer undergraduate female students in this study.

7. Possible Risks and Harms

The possible risks and harms to you include emotional disturbances and upset due to reflecting about your experiences with health and healthcare in Saudi Arabia. In such cases the focus-group discussion can be stopped at any time to determine whether or not you are fine and want to continue in the study.

8. Possible Benefits

You may not directly benefit from participating in this study but information gathered may provide benefits to society as a whole. The knowledge developed from this study will build a better understanding of Saudi women's health beliefs, contribute to the paucity of literature, which lacks women's health perspectives and inform practitioners, policymakers and public.

9. Compensation

Research participants will receive a simple token gift (e.g. a lanyard, ID holder, pen or pencil from the University of Western Ontario) for your participation in this study. If you do not complete the entire study you will still be compensated for your engagement in the study.

10. Voluntary Participation

Participation in this study is completely voluntary. Refusing to participate, refusing to answer any questions or withdrawing from the study will not impact you in any way (e.g. academic status, health care access, etc.).

11. Confidentiality

Although we will strive to maintain your confidentiality this cannot be guaranteed and this is mainly because of the nature of focus group interviews. . You may refuse to participate, refuse to answer any questions or withdraw from the study at any time. To ensure the confidentiality of individual data, you will be identified by an identification code known only to the researchers and recorded in a master sheet, which will be kept separate from the data collection forms. This code is only going to be used to ensure completeness of data collected. No personal identifiers will be stored. Consent forms and other print documents will be sorted in a locked carry-on suitcase until return to Canada where it will be kept in a lockable cabinet located in Elborn College room 2835 at University of Western Ontario. All transcribed data will be unidentified, stored in a password protected and encrypted encoded laptop file. The research records will be shredded and destroyed after 5 years as appropriate. All data collected will remain confidential and accessible only to the investigators of this study and the translator who will translate the data from Arabic to English, who will be under a confidentiality oath. If the results are published, your name and identification will never be used. If you choose to withdraw from this study after taking part in a focus group discursion, your data will be removed and destroyed.

12. Contacts for Further Information

If you require any further information regarding this research project or your participation in the study you may contact:

(Principal Investigator) Associate Professor, University of Western Ontario. School of Occupational Therapy & Occupational Science Field, Health and Rehabilitation Sciences Graduate Program, Faculty of Health Sciences Western University, 1201 Western Rd. London ON, N6G 1H1 Canada Tel:

OR
(Student researcher)
University of Western Ontario,
Tel:
In Saudi:
In Canada:
Email:

If you have any question about your rights as a research participant or the conduct of this study, you may contact The Office of Research Ethics at Tel: _____; Email: _____

13. Publication

If the results of the study are published, your name will not be used. If you would like to receive a copy of any potential study results, please provide your name and contact number on a piece of paper separate from the Consent Form and give it to the researchers.

This letter is yours to keep for future reference. Thank you in advance for considering your participation in our study.

Appendix E

Consent Form

Project Title: Investigating the Health Meanings of Young Saudi Women

Study Investigator's Name:

I have read the Letter of Information, have had the nature of the study explained to me and I agree to participate and agree to be audio-recorded during the focus group discussion. All questions have been answered to my satisfaction.

Participant's Name (please print):
Participant's Signature:
Date:
Person Obtaining Informed Consent (please print):
Signature:
Date:

Appendix F

Refreshments and Token Offered During Focus Groups





Appendix G

Focus Group Questions

- 1. Let's do a quick round of introductions. Can each of you tell the group your first name or a pseudonym if you want to?
- 2. I am interested to know your thoughts about health and well-being. What comes to your mind when I say health?
 - a. What is good health for you?
 - b. What is important to you regarding health?
- 3. How would you define health, in other words, if you had to explain health to someone, how would you do that?
 - a. What does "being healthy" mean to you?
- 4. How do you know when you are healthy? And the opposite?
- 5. What are the characteristics of a healthy person?
 - a. How would you describe a healthy individual?
 - b. Could you think of a healthy person you know?
- 6. How would you describe the similarities and differences between the way you view health and your family (mom, dad or siblings) or friends would view it?
 - a. What did you learn or hear about health when you were growing up?
 - b. Could you tell us who is your health role model if you have any and how often do you follow their lifestyle or advice?
 - c. What do you do if you get sick?
- 7. How would you describe any measures to maintain a healthy lifestyle?
- 8. What facilitators occur in your daily routines that encourage you to be healthy?

- 9. What barriers occur in your daily routines that prevent you from being healthy?
 - a. Could you tell us about a challenge you have experienced regarding your own health or someone you care for?
- 10. What (if any) official health messages have (had) you experienced/received? For example, what have you been told about health by public authorities?
- 11. How do you think your culture defines health?
 - a. What are your thoughts of maintaining a healthy lifestyle within culture (family, society)?
- i. How do you think is this similar or different from other cultures?12. How do you see the evolution of health beliefs and practices? In 20 years from now, how to you think things will be?

13. Would you like to add anything else? Would you have a message to others about this topic?

Appendix H

Confidentiality Agreement

Name of the researcher:

Topic title: Investigating the Meanings of Health of Young Saudi Women

I...., agree with the following statements:

I understand that I will maintain the privacy and confidentiality of all accessible data and understand that unauthorized disclosure of personal/confidential data is an invasion of privacy. I will not disclose data or information to anyone other than those to whom I am authorized to do so.

I will access the data only for the purposes for which I am authorized explicitly, which is translation of the data from the Arabic language to the English language. On no occasion, will I use project data, including personal or confidential information, for my personal interest or advantage, or for any other business purpose.

I understand that where I have been given access to confidential information I am under a duty of confidence and would be liable under common law for any inappropriate breach of confidence in terms of disclosure to third parties and also for invasion of privacy if I were to access more information than that for which I have been given approval or for which consent is in place.

Translator name:
Signature:
Date:

Appendix I

Field Notes Summary

King Abdulaziz University

King Abdulaziz University (KAU) is in the city of Jeddah in a southern district named Al-Sulaymaniyah. Some statistics pertaining to KAU were obtained from the research services unit on Dec. 7th 2015. Like other universities and schools in Saudi Arabia, KAU is segregated by sex; thus, there are two campuses each serving one sex. The following information pertains to the women's campus at KAU. The academies on the main university campus employ 1916 female facility members and 1516 female administrators and technicians. The total number of female university students is 55,599, including both BA (full-time, part-time, distance learning) and graduate students. In comparison to the male campus, a total of 68 465 male students were currently enrolled. KAU encompasses 37 colleges and these colleges are organized into 139 divisions. Studying at any public school like KAU is free for Saudi citizens and children of Saudi women and each science student receives a monthly incentive worth of 990SAR (~345\$CAD) and each social science student would receive 850SAR (~295\$CAD). This incentive is offered to full-time students starting the first day of university and continues until graduation.

In terms of school hours, the gates open at 7AM, the first class starts at 8AM, and the last class ends at 4PM. Classes for second and upper year students end by 2:30PM while first year classes can continue until 4PM. The campus library opens at 8AM and closes at 4PM and the administration office is open from 8AM to 2PM. Most students leave by 3PM and at 5PM the majority of the gates on the female campus are closed; however, one gate is open until 6PM at which time security escorts any students remaining off of campus.

Entering the University

There are six gates for the women's campus and each gate has security personnel who organise traffic and make sure only women enter the search room situated between the outside street and campus. The search room consists of a large room waiting area, bathrooms, and the actual entrance to the campus. In the search room area, women can take off their abay (long veil), uncovering their face and hair. At the entrance, there are several female supervisors and security escorts that check student ID cards and ensure students adhere to the university regulations concerning general appearance and clothing (e.g., short clothes or light clothes that show the body's silhouette). Affiliated and part-time students are not allowed to enter the university except through one particular gate on certain days and must also present their university ID card.

Unless they are a student, no woman can enter the university without a prior appointment or a valid reason. When this situation occurs, each visitor must present a government identity card, complete a form listing the department and the person they are visiting, and sign in and out of the campus. When any woman leaves the university, security checks their ID to make sure that no one has entered the university without proper authorization. Female students must return their student ID cards after they graduate and prior to receiving their diploma to ensure they will not be able to gain access to the campus past their graduation date.

I was not allowed to enter the KAU campus until I obtained written permission from the Department of Graduate Students and Affairs. The authorization was sent to West Gate 2, which I was only allowed to enter for period of three months. Although I was not permitted to obtain a copy of the written permission for my records, I had to show my Saudi ID every time I passed the security guards when I entered or exited the university.

Health Unit

There is a health clinic unit on the women's campus where all services are delivered to and by women. The clinic accommodates a maximum of 100 students and provides primary health care, initial detection, non-serious treatments, and dental care. Staff at the health unit also provide referrals to KAU's hospital, which is located in the men's campus and is within walking distance from the women's campus. Referrals to the hospital include consultations, laboratory analysis, xrays, and more advance medical assistance. In the event of a circumstance that needs immediate assistance from the university hospital, the women's campus provides transportation and sends an employee to accompany the student to the hospital while contacting her family to meet them at the hospital.

The policy of absolutely no admittance of men to the women's campus during regular school hours is strictly enforced, with exceptions made for emergencies. Any maintenance that requires male workers occurs on holidays, weekends, or after 6PM when no women are on campus. However, in case of fire or other serious emergency men can enter the campus as needed.

Although men are allowed onto campus to attend to an emergency, the procedures that must be followed can delay female students from receiving the help they require. One morning while I was sitting outside of building 420 a female student lost consciousness inside the building. Female paramedics responded from the women's health unit, and after assessing the student they decided to transfer her to the university's hospital. The female paramedics contacted the hospital and requested male paramedics be sent to transfer the student. Female supervisors and security guards then began to evacuate the building and its courtyard. Fortunately, there was a gate near this building, as the route between the gate and the building also needed to be evacuated. Students were asked to cover up (wear their abaya and cover their hair) and move to another building because the male paramedics were not allowed to enter campus until the building and their path to the building was cleared. This process took about two hours from the time the university's hospital was called to the time the student was transferred to the hospital.

Food on Campus

Food courts were widely available across campus in various buildings. Other food courts were designed as separate buildings just for purchasing and eating food and socialization. Food selections included cheeses, burgers and chicken sandwiches, pizza, French fries, sweet and savoury pastries, donuts, ice cream, assorted candies and chips, chewing gum, various types of coffee, soft drinks, and pre-prepared fruit cocktails. Most of the food offerings were unhealthy options, with very few healthy meals available. The few healthy options advertised were wheat bread, low fat sandwiches, grilled chicken, and low fat cheese; however, whenever I ordered one of these options I was informed they were temporarily unavailable. Although salads such as Caesar and green salads were available, the quality, contents, and packaging of the salads were not appealing. For example, the pre-prepared green salad consisted of wilted lettuce, three cherry tomatoes, and maybe a slice of cucumber and onion.

Food courts are open from 7AM-7:30AM and remain open until 1PM-2 PM. There are cleaning ladies placed in each food court to maintain cleanliness. Food courts get crowded between 10:30AM-12PM, as during this timeframe many students have either a late breakfast or lunch and socialise with friends or quickly stop in to grab a drink or food before heading to class. Although not university policy, I noticed that faculty members and university staff got priority if there was a long line of students; they cut the line and got served before students. This behaviour is frowned upon by the university and unnecessary for faculty members as they can send a cleaning lady to place their order and bring it to their office.

I also noticed that unhealthy food was often delivered to campus. Faculty members, other employees, and groups of students ordered fast food and had it delivered to one of the gates where the person who placed the order had to meet the delivery driver outside of the gate to pick up the order. Then the person who met the driver outside of the gate would go through the process of entering campus again, checking in with the women security guards stationed at the gate. I saw many orders of McDonald's, Burger King, Hardee's, pizza, and other fast food sandwiches like shawarma and Al-baik (Saudi fast food restaurant that predominantly serves deep fried chicken) brought onto campus.

Events and Activities

On Tuesdays from 10AM-11AM there are no classes held on the women's campus; this time is designated for activities held in each department or across departments. Each college's Activities Committee organizes events for this time block for students throughout the year. This committee is coordinated by at least two faculty members and several volunteer students. Most of the activities are directly related to the specialization of the college itself and other activities are generally used to engage with other colleges. They announce these activities by hanging posters at the entrances to the college and using word-of-mouth advertising. There were public workshops and lectures on family relations, marriage, married life, and other various religious and cultural activities. A very popular workshop on campus is the License on Principles of Married Life Workshop; it is a three-day workshop with a long waiting list thus I was not able to attend this workshop. However, I attended other workshops such as the World Diabetes Day, mental health talk, trace Relay and some competitions.

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There was great variety in the lectures and events held by the colleges' Activities Committees. For example, there was a lecture delivered by Student Services that explored whether female students should wear their abays on campus. The speaker (a University employee) discussed how female students should not wear abays on campus because not wearing them follows social norms set when female students did not wear abays to elementary or high school. Also, the speaker added a student should look like a seeker of knowledge and not a person who is going to a funeral consolation. Some of the attending students explained they would rather wear their abays than carry it in their bag with their books and notes. Another event held was the Knowledge Race Contest; it was coordinated with 12 colleges of the university. The competition was comprised of a series of questions that tested the general knowledge of contestants. Each college was represented by four to five students. Participants had the opportunity to select questions from four categories: religion, history, sociology, and science. Two groups competed at a time and there were three rounds. The Faculty of Arts won first place, the Faculty of Economics and Administration second place, and the Faculty of Science placed third.

Health-Related Events

I noticed many events about health awareness were held on KAU's female campus. There was a booth set up for two days to educate students about type 1 and 2 diabetes on World Diabetes Day. There was an immediate test for blood sugar level, information about the signs, symptoms, and prevalence of the disease, and information on the best ways to manage diabetes. Great emphasis was placed on healthy foods choices and the importance of being active. Correspondingly, there was a running competition held between the Faculties of Law, Economics, and Science. Three students from each college took part and around 100 students attended to cheer

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on participants. The Faculty of Law runners won the event, and the Faculty of Economics placed second.

There was also an outdoor event about mental health presented by three professors from different faculties. Speakers emphasised how being physically active, eating healthy, sleeping well, volunteering, and spiritual peace (faith and religious practices) all positively correlated with mental health. A number of social workers and psychological counsellors gave a short talk about the mental health services available and how they could be accessed. Less than 80 students attended this event; nevertheless, it was engaging as speakers asked questions and gave prizes and awards to whomever provided the right answer. I did not know in advance about this event, but happened upon it and stopped to listen. Additionally, The Department of Food and Nutrition staffed a booth about osteoporosis and educated students about its causes, symptoms, signs, and treatment. One of the key tips provided was the recommendation that students need to eat healthy food and exercise to reduce their risk of osteoporosis.

Another public lecture I attended was the Health is the Title of Life lecture, which was designed by students and employees. This three-hour lecture was delivered by five speakers, including professors and social workers. It began with the question, Are you in good health?" Speakers cited the World Health Organization's definition of health, which specifies that the wellness of a person is achieved through a balance of physical, mental, spiritual, social, environmental, emotional, intellectual, and professional comfort. Some daily practices were cited as important such as personal hygiene, walking, getting enough sleep, and eating healthy food. There were strong messages on the importance of eating breakfast, drinking water, spiritual practices, proper walking techniques, and ways to reduce time sitting in front of computers.

Additionally, eating fast food, drinking soft drinks, and wearing high heels were all described as harmful to one's health.

General Notes

It is important to mention that the medical colleges (medicine, medical sciences, nursing) are separate from the women's campus where all non-medical disciplines are taught. The women's medical colleges are located near the university hospital and are thus within the men's campus. Female medical students experience fewer restrictions than the students at the women's campus.

When female students enter the security room at the gates of their campus, they take off their scarves, open their abays, and it is apparent they wear mostly casual clothing. I noticed the majority of the students actually keep their abays on but open throughout the day but some students place both their abays and scarf in their bag. In addition, every building on campus has at least one prayer room, including the cafeteria building. Also, in each of the food court spaces there are at least two supervisors or guards who ensure clothing and behaviour guidelines are followed. There is absolutely no smoking on campus and it is considered a significant infraction. There are no microwaves accessible for students due to safety concerns regarding fire hazards.

Studying is done mostly at home unless students are waiting to write an exam. The public library on campus does not allow undergraduate students to enter the library with any food, drinks, personal books, and big purses, bags, and abays must remain outside of the building. Students can bring in their phones, laptops, and wallet only. Post-graduate students are not subjected to these resections and are given individual or group study rooms to conduct their

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research. There are at least two security guards at the entrance of the library checking in and out students.

Checking in and out of campus is completed quickly and harmoniously. In the morning, students enter the search room, take off their scarves, and open their abays or remove them. Then they show their student ID to the security guard to enter campus. Later when students are leaving campus, women again enter the search room, show their student ID to the security guard personal who then match the students photo ID with their face before leaving the campus again. The student then check their phones to see if their driver (family member or private driver) has arrived outside. At the same, the students chat with their friends while they close or put on their abays, fix their hair and scarves, and walk outside of the campus. I found this practice smooth and efficient; the women completed all the above complex personal actions (checking their phones, chatting & getting covered) without needing a mirror to check their outcomes.

I noticed most undergraduate students were very social and talkative. Often when not in class, they were in groups chatting and walking together. Birthdays, pre-graduation events, and engagements were celebrated with cakes, gifts, and pictures on campus under a tree or on the grass. Many young women wore jeans, sport shoes, sunglasses, and often checked their overall appearance by fixing their hair and light makeup.

Curriculum Vitae

Name:	Tagreed Alnajjar
Post-secondary Education and Degrees:	Western University London, Ontario, Canada 2010-2014, BHSc. Hons. (Specialization in Health Sciences) Western University
	London, Ontario, Canada 2014-2017, MSc. Candidate (Health and Rehabilitation Sciences)
Honours and Awards:	King Abdullah Scholarship Program 2009-2014, 2014-2017
Related Work Experience	Graduate Research Assistant Lab for Knowledge Translation in Health Supervisor: Dr. Anita Kothari Western University Winter 2016
Certificates:	Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans Course on Research Ethics (TCPS 2: CORE) Oct 2014
	Two All-day Qualitative Software Analysis Workshop: NVivo University of Alberta June 2015
	The 15th Annual Thinking Qualitatively Workshop Series University of Alberta June 2015
	The Western Certificate in University Teaching and Learning Western University Jan 2016-In progress

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