

CULTURAL VALUES, BELIEFS, AND ATTITUDES
OF IMMIGRANT CHINESE WOMEN
TOWARDS PHYSICAL ACTIVITY AND EXERCISE:
A QUALITATIVE INQUIRY

by

Carol A. Fancott

A thesis submitted in conformity with the requirements
for the degree of Master of Science
Graduate Department of Rehabilitation Science
University of Toronto

© Copyright by Carol Ann Fancott 2001



National Library
of Canada

Acquisitions and
Bibliographic Services

395 Wellington Street
Ottawa ON K1A 0N4
Canada

Bibliothèque nationale
du Canada

Acquisitions et
services bibliographiques

395, rue Wellington
Ottawa ON K1A 0N4
Canada

Your file *Votre référence*

Our file *Notre référence*

The author has granted a non-exclusive licence allowing the National Library of Canada to reproduce, loan, distribute or sell copies of this thesis in microform, paper or electronic formats.

The author retains ownership of the copyright in this thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without the author's permission.

L'auteur a accordé une licence non exclusive permettant à la Bibliothèque nationale du Canada de reproduire, prêter, distribuer ou vendre des copies de cette thèse sous la forme de microfiche/film, de reproduction sur papier ou sur format électronique.

L'auteur conserve la propriété du droit d'auteur qui protège cette thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation.

0-612-58883-1

Canada

Cultural values, beliefs, and attitudes of immigrant Chinese women
towards physical activity and exercise:

A qualitative inquiry

Carol Ann Fancott

Master of Science, 2001

Graduate Department of Rehabilitation Science, University of Toronto

Abstract

This qualitative study has explored cultural values, beliefs, and attitudes of immigrant Chinese women (aged 50-70 years) towards physical activity and exercise. Symbolic interactionism within a cultural model provided a theoretical framework in which to understand the findings of this study. Meanings of physical activity and exercise were subsumed under the broader rubric of health, which may be viewed through a Chinese cultural lens related to values of family and longevity. These women see health as increasingly important as they age. At this life stage, they are receptive to messages about health, particularly in regards to diet and exercise, which they have identified to be elements that they can control and take responsibility for. Exploring underlying cultural meanings may help to direct appropriate interventions and strategies by health care professionals to promote and enhance health and well-being in diverse, multicultural populations in Canada.

Acknowledgments

I would like to extend my thanks to many people who made this thesis a reality.

To my thesis co-supervisors, Dr. Dennis Raphael and Dr. Rebecca Renwick, and my thesis committee member, Dr. Karen Yoshida, for their on-going guidance, support, and patience throughout this process.

To the Graduate Department of Rehabilitation Science, University of Toronto, for their financial support.

To the women who shared their experiences with me, and to all of those who helped me find these women.

To Stephanie and Barb for shining a light on the path.

To my family and Brigeen and Leanna for their complete faith in my abilities.

To my Mom and Dad for inspiring this project.

And to Patrick, for his unwavering love and encouragement, and for his enthusiasm for my learning.

Table of Contents

| | |
|----------------------------------------------------------------------|------|
| Abstract..... | ii |
| Acknowledgments | iii |
| Table of Contents..... | iv |
| List of Figures and Tables | vii |
| List of Appendices..... | viii |
| | |
| Chapter 1 Introduction | 1 |
| Background | 2 |
| Purpose and Rationale for the Study | 3 |
| Definition of Terms..... | 4 |
| Overview of Thesis Chapters | 5 |
| | |
| Chapter 2: Review of the Literature..... | 7 |
| Physical Activity and Exercise Related to Health..... | 7 |
| Benefits of Physical Activity and Exercise..... | 7 |
| Physical activity recommendations. | 10 |
| Prevalence of Physical Activity and Exercise | 11 |
| Potential measurement errors in prevalence. | 12 |
| Socioeconomic factors related to prevalence. | 13 |
| Barriers to physical activity and exercise. | 14 |
| Understanding Attitudes Towards Physical Activity and Exercise | 16 |
| Summary | 17 |
| Chinese Cultural Beliefs Toward Health | 18 |
| Taoism..... | 19 |
| Buddhism | 20 |
| Confucianism | 21 |
| Chinese Culture and Physical Activity and Exercise..... | 22 |
| Summary | 24 |
| Purpose of the Study and Research Questions | 25 |
| Theoretical Basis of the Study | 26 |
| Cultural Model: The Cultural Diamond..... | 26 |
| Symbolic Interactionism | 29 |
| | |
| Chapter 3: Methodological Principles and Study Design | 32 |
| Methodological Principles..... | 32 |
| Reflexivity and Positionality in Research..... | 33 |
| My role in data collection. | 34 |
| Interviewer-participant matching. | 36 |
| My role in data analysis..... | 38 |
| Study Design | 38 |
| Participant Selection | 38 |
| Participant Recruitment | 40 |
| Participant Characteristics | 42 |

| | |
|----------------------------------------------------|---------|
| Data Collection | 47 |
| Semi-structured interviews..... | 47 |
| Acculturation Scale..... | 48 |
| Demographic Information Sheet. | 52 |
| Data Analysis..... | 52 |
| Verification of data | 54 |
| Credibility..... | 54 |
| Transferability. | 56 |
| Dependability..... | 57 |
| Confirmability. | 58 |
| Ethical Considerations | 59 |
| Chapter 4: Results..... | 61 |
| Health Is A Cultural Object..... | 61 |
| How Health Is Defined By These Women..... | 62 |
| “The Body is Good” | 63 |
| “Be Happy” | 64 |
| Socializing brings happiness. | 66 |
| Body-Mind Relationship..... | 67 |
| “Good Luck” and “Good Genes” vs. Control..... | 68 |
| Health is valued..... | 71 |
| Health Is Increasingly Important As They Age | 72 |
| Cultural values of aging and family. | 74 |
| Chapter 5: Results..... | 80 |
| What These Women Do For Health | 81 |
| Diet and its Relationship to Health | 82 |
| The Impetus for Diet..... | 83 |
| Growing older..... | 84 |
| Receptiveness to health messages. | 85 |
| Relationships between Culture and Diet..... | 88 |
| Health-enhancing herbal remedies and soups. | 89 |
| Physical Activity and Exercise..... | 92 |
| Exercise and its Relationship to Health..... | 95 |
| What These Women Do For Exercise | 98 |
| The Impetus for Exercise | 100 |
| Growing older..... | 100 |
| Receptiveness to health messages. | 102 |
| Relationships between Culture and Exercise | 103 |
| Barriers To and Facilitators of Exercise | 108 |
| Summary of Results | 111 |
| Chapter 6: Discussion and Conclusions..... | 112 |
| Understanding Health through a Cultural Lens..... | 114 |
| The Meaning: Health as a Cultural Object. | 116 |
| Sources of Meaning of Health | 117 |
| Interpretations of Meanings of Health | 120 |

| | |
|----------------------------------------------|-----|
| Situating This Study in the Literature | 122 |
| Limitations of the Study | 127 |
| Implications for Practice | 128 |
| Implications for Future Research | 129 |
| Summary and Conclusions..... | 132 |
| References..... | 134 |
| Appendices..... | 150 |

List of Figures and Tables

| | |
|--------------------------------------------------------------------------|----|
| Figure 1: Cultural Diamond | 28 |
| Table 1: Participant Characteristics | 45 |
| Table 2: Participant Involvement in Leisure-Time Physical Activity | 46 |
| Table 3: Participant Scores on Acculturation Scale..... | 51 |

List of Appendices

| | |
|---------------------------------------------------------------|-----|
| Appendix A: Information Letter to Potential Participants..... | 151 |
| Appendix B: Interview Guide..... | 153 |
| Appendix C: Acculturation Scale | 154 |
| Appendix D: Demographic Information Form..... | 155 |
| Appendix E: Informed Consent Form..... | 157 |

Chapter 1

Introduction

Immigration patterns have changed dramatically in recent decades, altering the face of Canada. Before 1960, the vast majority of immigrants to Canada were from Europe and the United States. Since then, most immigrants have come from Asia, Latin America, Africa, and the Caribbean (Masi, Mensah, & McLeod, 1993). This shift has significant ramifications for health and health care delivery. Specifically, Canada's health care system is built on a biomedical model of practice, which has resulted in a western model of health care delivery with a primary focus on curative services. For those whose backgrounds may not include familiarity with the biomedical model, conflicts in attitudes, values, and beliefs concerning concepts of health and health care may exist (Masi, 1988). These differences may translate into difficulties such as accessing health care, understanding the basis for treatment and prevention, or predicting successful outcomes.

The Lalonde Report (1974), *A new perspective on the health of Canadians* highlighted lifestyle behaviours as a primary determinant of health. Early health promotion efforts focused around lifestyle factors such as smoking cessation and exercise and many health professions have embraced lifestyle health promotion in their practice. Physical therapy is one such profession that provides not only rehabilitation services, but increasingly has turned toward health promotion strategies to increase its role in primary prevention. In particular, physical therapists are using their expertise in the prescription of exercise and physical activity to promote, maintain, and restore physical and psychological health to

achieve maximum independent function for each client (American Physical Therapy Association [APTA], 1997; Canadian Physiotherapy Association [CPA], 1998).

The movement toward healthy lifestyle behaviours in the 1970's also saw the birth of the ParticipAction movement in Canada (Burton, 1992). Increasing evidence supports the benefits of physical activity and exercise, with many studies linking moderate to high levels of physical activity to reduced morbidity and mortality rates of certain diseases (U.S. Department of Health and Human Services [USDHHS], 1996). As such, the public health message remains clear: engage in physical activity and exercise for a healthier, longer life. However, this public health message may not be as clear to some groups in North America, with prevalence of physical activity and exercise shown to be the lowest among older women, particularly those in ethnic minorities (Kriska & Rexroad, 1998; Weist & Lyle, 1997). While barriers to and facilitators of physical activity and exercise have been examined, there is little in the literature that explores cultural meanings of physical activity and exercise, which may help to provide greater understanding of health behaviours among these groups.

Background

As a child growing up in the 1970's, I was greatly affected by the ParticipAction movement, which was pervasive, particularly through the school system. The value and importance that I held for physical activity and exercise for health led me to a career in health care as a physical therapist. It is assumed that the meanings of physical activity and exercise that I have had since childhood are also relevant to others in Canadian society and forms the basis for this study. However, this same message may not be as evident to others, for

example, to those of an older generation, or particularly those who have immigrated to Canada from vastly different cultures.

My extensive travels through Asia and brief volunteer work in a local trauma hospital in Vietnam exposed me to daily life in less developed nations. I witnessed first-hand the struggles and hardships of routine activities and work. Exercise and physical activity for leisure or as physical therapy intervention appeared to be an unknown concept. Physical activity and exercise may not necessarily be associated with health when daily life and work are so labour-intensive.

Having seen and experienced the living conditions from which many immigrants have come, I have questioned the type and use of physical activity and exercise in treatment, prevention, and health promotion. Such experiences have made me query if physical activity and exercise are effective and appropriate interventions when they are based on western cultural values and beliefs. Working as a physical therapist in a large Canadian urban centre, I interact daily with people from various ethnic backgrounds and cultures. This setting brings to the forefront how culture is one factor that shapes differing values and beliefs and how these differences may impact on the health and well-being of others, particularly those not in the dominant culture.

Purpose and Rationale for the Study

The purpose of this naturalistic study is to identify values, beliefs, and attitudes towards physical activity and exercise of immigrant women of Chinese ethnicity (aged 50 – 70 years) and to understand how Chinese culture shapes these values, beliefs and attitudes.

The outcomes of this study have implications for health care and physical therapy as well as for health promotion initiatives. In order to offer relevant and meaningful programs or interventions to engage these women in increasing forms of activity, a greater understanding is needed regarding the meanings of physical activity and exercise to these women. Cultural meanings need to be understood, to determine if Western ideals and values towards physical activity and exercise are culturally relevant or not. If the underlying meanings are not understood, diverse populations may be under-serviced or given inappropriate and/or ineffective care (Dyck, 1989). A better understanding of health issues, through a cultural lens, is needed in a pluralistic society, in order to provide appropriate and culturally sensitive programs and interventions by physical therapists and other health care professionals. With the demographic shift not only in immigration patterns, but also to that of an aging population, disease prevention and health promotion will play a large role in keeping this diverse and aging population healthy.

Definition of Terms

The following terms have been defined to allow for clarification for their use throughout this thesis.

Physical activity comprises “any body movement produced by the skeletal muscles that results in a substantial increase over the resting energy expenditure” (Bouchard, Shephard, & Stephens, 1993, p.11). Physical activity can be categorized in a variety of ways, and is frequently classified by the context in which it occurs. Common categories include occupational, household, leisure-time, or transportation. *Exercise* is a “form of leisure-time physical activity that is usually performed on a repeated basis over an extended period of

time with a specific external objective such as the improvement of fitness, physical performance, or health” (Bouchard et al., 1993, p.12). These definitions are based on Western ideology and may be inconsistent with how this group of ethnic Chinese women defines physical activity and exercise. This study aims to clarify these definitions for this group of women.

Culture is a broad term that has many meanings depending on the context in which it is used. For the purposes of this study, *culture* is defined as learned “patterns or standards of behaviour that one acquires as a member of a particular group. These standards may include language, behaviour, concepts, beliefs, and values” (Masi, 1988, p.2174). A *cultural object* is defined as “a socially meaningful expression that is audible, visible, tangible, or can be articulated; it has shared significance embodied in form” (Griswold, 1994, p.11). For example, the concept of family may be considered a cultural object by these women, that is, having shared significance and meaning that they are able to articulate.

Overview of Thesis Chapters

The thesis chapters have been organized in such a way as to guide the reader in an organized manner through the rationale and process of this study, its findings and analysis, leading to conclusions, regarding cultural meanings of physical activity and exercise to a group of immigrant Chinese women in their later years. In Chapter 2, I will explore the literature relevant to the topic, and expose gaps in research done to-date in this area, thus leading into the purpose of the study and research questions. A theoretical framework for the study will also be described. In Chapter 3, I will discuss the methodological principles that frame this study, providing rationale for the methodology used. In this chapter, I will also

outline the study design used for collecting and analyzing the data to explore the research questions. Findings of the study can be found in Chapter 4 and Chapter 5, in which I present major themes and sub-themes relevant to the research topic. In Chapter 4, I focus on the major theme of health as a cultural object to these women; Chapter 5 contains results of the theme what these women do for their health. A discussion of the findings and their interpretations and relevance is found in Chapter 6. I conclude the thesis with limitations of the study, along with recommendations for practice and future research.

Chapter 2

Review of the Literature

In this chapter I will explore the literature relevant to understanding values, beliefs, and attitudes of immigrant Chinese women toward physical activity and exercise. First, the literature will be reviewed in regards to physical activity and exercise as it relates to health and well-being, also examining specific populations, and the development of public health recommendations for physical activity and exercise. Prevalence of physical activity and exercise among certain groups will be explored with associated socioeconomic factors related to prevalence as well as potential measurement errors. Barriers to physical activity, particularly for women will be examined, in addition to attitudes toward physical activity and exercise. Next, traditional Chinese beliefs toward health will be considered, based on traditions of Taoism, Buddhism, and Confucianism in Chinese society. Relevant literature in regards to these Chinese health beliefs, particularly as they relate to physical activity and exercise will be highlighted. The literature will be summarized, leading to the presentation of the purpose of this study and the research questions. A discussion of the theoretical framework used in this study will follow, introducing a cultural model and symbolic interactionism.

Physical Activity and Exercise Related to Health

Benefits of Physical Activity and Exercise

In Canada, there have been strong messages since the days of ParticipAction in the 1970's regarding the benefits of physical activity and exercise to health and notions of self-

responsibility for a healthy lifestyle (Baer, 1997; Burton, 1992). These benefits have been well-supported in the literature and the topic of physical activity and exercise has received much attention in North America in recent decades. An international symposium on Physical Activity, Fitness, and Health in 1992, held in Toronto, Canada, examined the current literature in this area, and concluded with a consensus statement on physical activity and fitness and its relationship to health (Bouchard et al., 1993). As well, the United States Surgeon General issued a significant report, which included a comprehensive review of studies done to-date relating physical activity to health (USDHHS, 1996). These documents point to the strong evidence, which indicates that persons who engage in moderate to high levels of physical activity or cardiorespiratory fitness have a lower mortality rate than those with sedentary habits or low cardiorespiratory fitness (USDHHS, 1996). Higher levels of physical activity appear to have the most benefit in preventing disease, but lower levels have demonstrable benefits for some diseases as well (Bouchard et al., 1993; USDHHS, 1996). Physical activity that improves cardiorespiratory endurance reduces the risk of developing or dying from cardiovascular disease (coronary heart disease in particular), hypertension, colon cancer, and non-insulin dependent diabetes mellitus as well as improving mental health. Endurance-type physical activity may reduce the risk of developing obesity, osteoporosis, and depression and may improve psychological well-being and quality of life (USDHHS, 1996).

Elward and Larson (1992) reviewed the current literature to explore if similar health benefits existed for an elderly population. They examined the literature for physiological response to exercise in relation to cardiovascular disease, diabetes mellitus, functional ability, neuro-psychological function and osteoporosis. A summary of the findings supports the

benefits of physical activity and exercise for whole groups of elderly persons, in the areas listed above, with relatively few complications associated with such increases in activity, in particular, a lack of serious cardiovascular or musculoskeletal complications. Thus, physical activity and exercise could be viewed as safe for most older adults and its potential benefits great enough to encourage widespread efforts to increase activity in this group (Elward & Larson, 1992). These findings were supported by work done by Jarvis and colleagues (1997) who found that physical activity and exercise decrease the risk of osteoporosis and depression, and increase function in elderly women. As well, muscle strengthening (resistance) exercise reduces the risk of falling and fractures among the elderly (USDHHS, 1996). There is also evidence to support the psychological well-being of elderly women who engage in physical activity and exercise (Gill, Williams, Williams, Butki, & Kim, 1997; Weist & Lyle, 1997).

While the evidence is overwhelmingly favourable regarding the benefits of physical activity and exercise, it should be noted that “much of the research summarized is based on studies having only white men as participants; it remains to be determined whether the relationships described here are the same for women, racial and ethnic minority groups, and people with disabilities” (USDHHS, 1996, p.85). In response to this gap, many new projects have targeted female populations exclusively. For example, Kushi and colleagues (1997) looked at all-cause mortality in 40,417 post-menopausal women in Iowa (aged 55-69). They concluded that there was an inverse association of physical activity with mortality, found most strikingly for death due to respiratory ailments and cardiovascular disease. These findings are consistent with many studies that have been done on men, strengthening the confidence that population recommendations to engage in regular physical activity are

applicable to white post-menopausal women. Using data from the Canada Fitness Survey, Weller and Corey (1998) found that by including measurements of non-leisure activity (e.g., household chores) strengthened the inverse association with all-cause mortality in women (aged 18+). Non-leisure activities constitute an average of 82% of women's total activity; by not including these measurements leads to underestimation of women's activity levels, thus weakening the relationship to mortality (Weller & Corey, 1998). As well, Eyler et al. (1997) provide an overview of current literature related to women and physical activity, which parallels findings made in the Surgeon General's Report (1996) regarding the benefits of physical activity and certain chronic diseases (e.g., cardiovascular disease, breast cancer, osteoporosis, mental health).

Physical activity recommendations.

As a result of existing evidence on health-related benefits of physical activity, Health Canada and the Canadian Society for Exercise Physiology (1998), following the lead of the Centers for Disease Control and Prevention and the American College of Sports Medicine (USDHHS, 1996) issued new guidelines for physical activity: adults should accumulate at least 30 minutes of moderate physical activity most days (preferably all) of the week. Recommendations from the Physical Activity Guide to Healthy Active Living for Older Adults (Health Canada, Active Living Coalition for Older Adults, & Canadian Society for Exercise Physiology, 1999) are also consistent with these guidelines. These new recommendations provide a valid option for obtaining health benefits from the previous recommendations (which suggested 20-60 minutes continuous of moderate/high level of physical activity 3 – 5 times per week at 60-90% maximum heart rate). These

recommendations may be more relevant for women as they may be more likely to adopt moderate activities (e.g., walking) rather than vigorous activities. Also, women's lifestyles may be more conducive to incorporating short bouts of activity throughout the day rather than a long block of time for continuous physical activity (National Leadership Conference on Physical Activity and Women's Health [NLCPAWH], 1998). These recommendations highlight the recent shift in emphasis from exercise to improve fitness to that of activity to improve health and decrease risk, part of a new "wellness" paradigm that has been evolving since the 1980's (Weist & Lyle, 1997).

Prevalence of Physical Activity and Exercise

Despite evidence regarding the benefits of physical activity to health, data from the 1998 Physical Activity Monitor indicates that only 37% of Canadians (adults aged 18+) are sufficiently active to gain optimal health benefits. Only 33% of women over 18 are active to 41% of men aged 18+ (Canadian Fitness and Lifestyle Research Institute [CFALRI], 1998). Throughout the 1980s, more Canadians (aged 18+) engaged in moderate levels of physical activity (CFALRI, 1995; Stephens & Caspersen, 1992). However, the number of Canadians participating in physical activity has plateaued since the mid-1990s at 37% of the population (CFALRI, 1998). Data from the United States reflect similar prevalence rates. Specifically, more than 60% of American women do not meet the recommended amount of physical activity needed to provide health benefits and 25% of women in the United States are not active at all (Howze, 1997; Jarvis, Friedman, Heeren, & Cullinane, 1997; Masse et al., 1998; Pinto, Marcus, & Clark, 1996). Minority populations consistently are found to have relatively lower physical activity levels, women even more reduced than men (Kriska &

Rexroad, 1998; Weist & Lyle, 1997). Overall, in North America, prevalence of inactivity increases with age, for both men and women (CFALRI, 1998; NLCPHWH, 1998; Weist & Lyle, 1997) and women participate less in physical activity than do men (Bouchard, 1999; CFALRI, 1998; McTiernan, Stanford, Daling, & Voight, 1998).

Potential measurement errors in prevalence.

While the prevalence of activity in North America is lowest among elderly minority women, measurement of physical activity patterns is problematic, particularly among these groups. Surveys may not be able to capture true activity levels, which could result in under-reporting (Tortolero, Masse, Fulton, Torres, & Kohl, 1999). Because women as a group have not been included in much of the baseline research on physical activity, most assessments are tailored for men rather than women. Women in general are found to be less physically active than men if sporting or vigorous activities are a prominent part of the surveys (USDHHS, 1996). However, in some studies, women have rates similar to men if household or other chores are included as underlying assessment measures (Eyler et al., 1998). Additionally, surveys measuring leisure-time physical activity may be misinterpreted by women (especially minority women) who have no "leisure time" as it is conventionally defined (Eyler et al., 1998). In fact, in a study done by Tortolero et al. (1999) with African American and Hispanic American women, leisure-time physical activity received many negative responses as it was equated to inactivity or having time to oneself and not as a time to engage in physical activity. Some women mentioned feelings of guilt if they did take time out for themselves: "wasting time on something that will be of no benefit to you" (Tortolero et al., 1999, p.138).

Definitions of physical activity and exercise used in surveys may be confusing, again impacting on reporting levels. Chinese and Filipino women in the United States clearly indicated that although, by definition they were physically active, most were not “exercisers” (Eyler et al., 1998). When asked to give examples of physical activity, the responses most often included jogging, swimming, bicycling, aerobics, or other forms of what is traditionally defined as exercise. African American and American Hispanic women echoed this response (Tortolero et al., 1999).

Also, many existing surveys may indicate physical activities that are not culturally relevant or meaningful, again leading to under-reporting of physical activity levels (Eyler et al., 1998). Culturally diverse activities need to be included on such surveys (e.g., dancing, religious celebrations, community involvement) as a method to capture participation, relevance and interest to the respondents (Tortolero et al., 1999). These activities may or may not be very physical, but by simply asking these questions, recognizes their importance in the lives of women. It is also important to include all aspects of women’s lives: paid work, housework, free time activities, walking (Masse et al., 1998).

Socioeconomic factors related to prevalence.

Factors such as socioeconomic status, education, and social supports impact on participation rates of physical activity and exercise among women. Poor women have been found to be less active than middle to upper-class women, and uneducated women less active than those more educated (Stephens & Caspersen, 1992; Weist & Lyle, 1997). McTiernan et al.(1998) also found that women (aged 50 – 64 years) who engaged in regular recreational exercise were more likely to have other characteristics related to health such as increased

income, increased education, and be a non-smoker. Highest levels of participation in active living behaviour, sports and exercise were among younger, white, college educated women, who also have higher reported levels of self-efficacy, good social supports, good motivation and no young children at home (Sternfeld, Ainsworth, & Quesanberry, 1999). Those of high occupational or household activity tended to be older, less educated, from an ethnic background, and had younger children at home. These women may not want to engage in recreational physical activity because they feel their daily activities provide adequate activity. Recreational physical activity may not have perceived value if other aspects of life demand increased levels of physical activity (Sternfeld et al., 1999).

Minorities are over-represented in the lower socioeconomic groups, and levels of leisure physical activity are related to socioeconomic status (NLCPAWH, 1998). In fact, socioeconomic status is thought to account for most of the differences in activity between minority and white populations. Clark's (1995) study of physical activity in older adults, revealed that much of the racial variation in activity was accounted for by racial differences in income and educational attainment. Social and cultural contexts of roles and statuses differ with income and education as well as race, leading to the proposition that racial differences in physical activity, in particular, and health behaviours in general, may be related to income and education (Clark, 1995; Tortolero et al., 1999).

Barriers to physical activity and exercise.

Many barriers that influence participation in physical activity have been cited in the literature. These barriers have been categorized in the psychological and socio-environmental domains. Barriers in particular for elderly women to engage in physical

activity and exercise include lack of motivation, low self-efficacy or lack of self-confidence, limited access to facilities, transportation and child care, health problems, lack of support from family and friends, conflicting demands on time, perceived lack of knowledge or skill, and self-consciousness (Eyler et al., 1997; Jarvis et al., 1997; Jones & Nies, 1996; Kriska & Rexroad, 1998; Marcus & Forsyth, 1998; NLCPAWH, 1998). In a British study looking at South Asian women and levels of physical activity, added to this list of barriers is fear of racism, language difficulties, and the absence of a "tradition of exercise" (Hine, Fenton, O'Hughes, & Velleman, 1995, p.438). There is also the need to consider the lifestage of the woman. Older women are the most sedentary population and tend to be the least ready for change compared to younger women (Marcus & Forsyth, 1998). This group tends to view regular exercise as less enjoyable and less beneficial to them than younger women. For women in the oldest age groups, fear of injury and poor health are more likely to be perceived as barriers to exercise. Most women in this age group are misinformed about exercise, believing the adage "no pain, no gain" (Marcus & Forsyth, 1998).

Yoshida, Allison, and Osborn (1988) suggest that health behaviour occur within a social context. This is particularly important for women, as their health status is often linked to their many social roles and obligations. The women participants were divided up into two groups based on their self-reported activity status: Further Actives (women who are currently active and wish to increase their activity) and Potential Actives (women who are currently inactive and wish to be active). While both groups cited the same hierarchy of perceived barriers (lack of time due to work, health reasons, lack of energy, motivation or need), there were differences in the socio-economic factors influencing the types of barriers reported. These findings demonstrate that while many women may desire to exercise as an individual

lifestyle choice, their behaviour may be influenced by the social context in which they live, which may not be entirely in their control (Yoshida et al., 1988). However, Verhoef and Love (1992) studied specific social roles (i.e., employment, parenthood and marriage and their combinations). Their findings suggest that these social roles did not emerge as a major factor for exercise participation, although being a parent was seen to be the most important predictor for women's lack of exercise participation.

Understanding Attitudes Towards Physical Activity and Exercise

In a qualitative study to understand older women's behavioural, normative, and perceived control beliefs about physical activity, Conn (1998) interviewed 30 Caucasian women (aged 65+ years) in the United States. It was found that the social environment had a positive influence on physical activity and that physical activity seemed to be embedded in social life, rather than episodic exercise (i.e., activity outside of their normal everyday life). The benefits of physical activity were rarely related to health and disease. "Health [was seen] as a resource that enabled them to be physically active rather than as a benefit of physical activity" (Conn, 1998, p.376).

The desire to maintain or improve health for its own sake as motivation for exercise and physical activity was also found lacking in a Scottish study, which examined older people's perceptions of aging and exercise (Stead, Wimbush, Eadie, & Teer, 1997). Fifteen focus groups were held with older (aged 55 – 75+) and younger (aged 18 – 49) people, with the aim of investigating how aging, health, and exercise were conceptualized and to explore factors that influence participation in physical activity. For all ages, the primary motive for exercising was social, to gain perceived psychological and emotional rewards. Among older

people, socializing increased in priority to the extent that the exercise element became incidental. An opportunity to participate socially and on a regular basis was felt to combat social isolation and mental stagnation. Older people in this study also expressed a general acceptance of physical deterioration as inevitable with aging, and consequently, they were reluctant to consider preventative measures that might halt the decline. As well, some older people felt that there were associated risks with physical activity, again providing them with justification for their inactivity. For the more frail or ill elderly, exercise had little relevance as energy was perceived as a finite resource, which had to be used sparingly and not squandered on less useful tasks, such as exercise for exercise's sake (Stead et al., 1997).

In this same study, many older people were irritated by the stereotypical media depictions of older people as frail and helpless and the lack of positive age labels (Stead et al., 1997). Health care professionals were not regarded to be a major source of information or influence in relation to exercise. They felt that most information given by health care professionals emphasized smoking, alcohol, and diet. This perceived "failure" of health care professionals to promote exercise was used as a rationalization by older people for not being more proactive themselves (Stead et al., 1997).

Summary

Strong evidence exists to support the benefits of physical activity and exercise in relation to health and well-being. While many earlier studies in this area included only middle-aged white males, subsequent studies focusing on elderly populations and on women, have also demonstrated health benefits for these sub-populations. Despite the overwhelmingly positive evidence concerning the benefits, demographic studies in North

America reveal that older women, particularly minority women, engage in physical activity and exercise the least. One of the biggest criticisms of these studies revolves around the measurement tools used. These tools may not accurately capture the type and amount of activity done by women, because of the definitions and qualifiers used. Socioeconomic factors have also been shown to affect prevalence of physical activity. Barriers to physical activity and exercise of older women include those in the personal domain, but also highlight socio-environmental barriers, thus moving physical activity and exercise from beyond the realm of lifestyle.

Few qualitative studies have been done in the area of physical activity and exercise with minority women and older persons. Those that have been reported reveal that these women use or define the terms physical activity and exercise differently and that the types of activities they would consider to be physical activity and exercise are often not reflected in the measurement tools used. As well, socializing has been perceived by older people to be the greatest motivator to participate in physical activity. What remains unclear in all of these studies are the meanings that people attach to physical activity and exercise. Further, these meanings, especially for minority populations, may be understood using a cultural lens to illuminate values, beliefs, and attitudes toward physical activity and exercise.

Chinese Cultural Beliefs Toward Health

Chinese cultural traditions may be traced to elements of Taoism, Buddhism, and Confucianism, all dating back thousands of years. Each of these philosophies has evolved over the millennia and has been integrated into Chinese society in a seamless

conglomeration. These philosophies may shed light on values, beliefs, and attitudes, particularly in relation to health and to physical activity and exercise.

Taoism

Chinese health beliefs have been well-documented, particularly in relation to traditional Chinese medicine and its holistic approach toward health. These beliefs may be seen as vastly different from the biomedical model of the West which is based on Aristotelian logic (Chan, 1995). Classical Chinese medicine is an ancient body of knowledge, the roots of which lie in Taoist philosophy. All people and nature are related to each other in a harmonious balance. The person is inseparable from his universe, which is viewed as a vast, indivisible entity, comprising of the five elements – wood, fire, earth, metal, and water. There is also a strong belief in nature and nature's laws, which may be manifested in a "let nature take its course" approach to health and illness (Fung, 1998).

The universe is regulated by two opposing yet interdependent forces, *yin* and *yang*, from which all elements of the universe are composed (including the human body). In relation to health, yin and yang are in dynamic equilibrium and any disruption of this balance results in disease or illness. Yin is conservative, female, and cold, as well as restoring and storing vital energy. Excess yin results in infections, gastrointestinal problems, and anxiety. Yang is positive, male and hot. It is protective and activates the stress response at any sign of threat or danger. Excess yang results in dehydration, fever, and irritability. Maintaining this balance of yin and yang provides peace and harmony in all aspects of life and in good health (Chan, 1995; Fung, 1998; Lai & Yue, 1990; Matoucha, 1998).

Central to Chinese folk traditions is the concept of *qi*, also found within Taoist philosophy. *Qi* is the cosmic force of vitality that unites man and the universe (Chan, 1995; Fung, 1998; Matoucha, 1998) and is present in all living organisms. *Qi* flows through the fourteen meridians or interconnecting channels of the body to provide nourishment. A balance in the flow of *qi* is necessary to maintain health. Folk traditions such as acupuncture and massage aim to restore and maintain a balance in this flow. Herbal medicine is also rooted in the notion of balance and the concepts of hot and cold. *Qi* may either be a cold yin energy force or a hot yang energy force. Illnesses caused by yin excesses are treated by hot foods or herbal remedies; those caused by yang excesses are treated by cold (Campbell & Chang, 1981; Chan, 1995; Lai & Yue, 1990; Matoucha, 1998). The basic premise of this balance is that extremes should be avoided. Physical activities like Tai Chi follow this principle as they involve modest, smooth, small movements that do not “shock” the system.

Qi may also be disrupted by excessive emotions (Fung, 1998; Ikels, 1997). The Chinese have isolated seven emotions: happiness, anger, worry, pensiveness, grief, fear, and surprise, all of which have a potent influence on health. An excess of these emotions weakens the body’s immunity and makes the body vulnerable to the disease-causing factors (Fung, 1998).

Buddhism

In China, the religion of Buddhism evolved from its original Indian roots. Buddhists seek enlightenment, an internal peace and happiness, separate from the physical body or mind. To attain enlightenment will relieve pain and suffering of others. Buddhism asserts that all life is in a constant state of transition, that life is impermanent and cyclical. Death is

merely part of the endless cycle of life-death-re-birth, in which deeds from a previous life will have consequences in future lives. Therefore, death does not offer respite from one's actions (Fung, 1998). Karma is the belief that suffering is the direct effect of negative deeds, committed either in one's past or in a previous life. Some believe that unless the karma is given a chance to be worked out during one's lifetime, the suffering is likely to enter the next life (Fung, 1998). The interpretation of karma may influence one's belief about control over life (and health) as well as end-of-life decision-making.

Confucianism

In the second century BC, Confucianism became established as the political orthodoxy of the Chinese state and the cultural orthodoxy of Chinese society (Fung, 1998; Hamilton & Zheng, 1992). It has powerfully informed the structure and balance of power within the Chinese family and society, clearly dictating one's role and relationships to others within this structure. Central to Confucian philosophy are the concepts of benevolence, kindheartedness, humaneness, magnanimity, and sympathy, which form the building blocks of society and human relations within. Five relationships were clearly outlined by Confucius, in which he also emphasized the notions of centrality and equilibrium – that one should know one's position in the universe and keep one's relationship with all others in harmony and equilibrium. This is similar to Taoist concepts of balance, seen in yin and yang, and qi.

Of these five Confucian relationships, three are within the family, the most important of which is between father and son. In the family context, interdependence is valued more highly than independence (Hamilton & Zheng, 1992; Keith et al., 1994). Individual actions

are discouraged and personal considerations are subordinated to family considerations. Family and kinship ties are emphasized and it is the responsibility of family (particularly sons) to take care of the elderly. This notion of filial piety, to respect and care for the elderly, is a Confucian value deeply rooted in traditional Chinese society. Parental roles and sacrifices in bringing up and nurturing children are reiterated to the children who are expected to provide for their parents when they are unable to take care of themselves or otherwise in need of help (Fry et al., 1997). The family system will affect major decision-making, particularly in relation to health and illness, and care-giving.

Chinese Culture and Physical Activity and Exercise

Studies have shown that elderly Chinese people living in Asia continue to have a strong belief in traditional Chinese medicine since they are more likely to view well-being as a condition of harmony with nature (Chow, 1996). In particular, older women act as repositories of traditional health beliefs and also act as gatekeepers of health care for their families (Hopper, 1993). Chinese women have repeatedly referred to energy balance in relation to health and the importance of diet in maintaining this balance and good functioning (Chan, 1995; Chau, Lee, Tseng, & Downes, 1990; Hoeman, Ku, & Ohl, 1996). In a study examining health beliefs and early detection of breast cancer among Chinese women living in the United States (Hoeman et al., 1996), the notion of self-care with diet, herbal remedies, and exercise, were strongly advocated by these women. However, more than one-third of the women believed that such preventative health behaviours should be deferred until at least middle age (greater than 40 years old). These women indicated that if too much thought was directed toward prevention and health, one would tempt fate and become ill. Therefore,

prevention was considered unnecessary when young (and presumed healthy), and action should be taken only if one was sick, thereby indicating a more fatalistic attitude toward prevention. Other cues for preventative action included external motivators such as spousal involvement (e.g., their husband wanted them to do a screening test), and health messages from the mass media (Hoeman et al., 1996).

Participation in moderate exercise is seen as another means to promote self-care and health (Hoeman et al, 1996; Ikels, 1997). In particular, Ikels (1997) found that elderly Chinese recognize the value of moderate exercise as a preventative health measure. In her study looking at care patterns of older people in Guangzhou, China, she found that a majority of elderly Chinese participated in morning exercise routines or aerobics in the parks. In particular, Tai Chi and other forms of martial arts were seen to help strengthen and restore qi, and to maintain its balance within the body. In contrast, in a study looking at physical activity in Chinese, Malays, and Indians in Singapore (Hughes et al., 1990), 95% of women (aged 18+ years) were found to have low levels of participation in physical activity, across all ethnic groups. However, this study did not indicate what socio-cultural factors might influence participation rates or the meaning of activity to these women.

A study by Eyler et al. (1998) elucidated how Asian women living in the United States viewed physical activity. Chinese and Filipino women identified women of their ethnicity to be “culturally” or “by nature” physically active due to gender roles of care-giving duties, housekeeping, and community responsibilities: “just being a Chinese woman you should have enough physical activity in the day” (Eyler et al., 1998, p.644). These women found that daily chores and errands were the main sources of daily physical activity as well as giving them a sense of purpose and accomplishment. While recognizing that many North

Americans may get their activity through exercise such as jogging and aerobics, these Chinese and Filipino women did not see the value in doing purely exercise if they were not also accomplishing another useful task at the same time (Eyler et al., 1998). While this study is able to articulate some meaning to physical activity and exercise by these groups of women, it has not explored how cultural values have shaped beliefs and attitudes towards physical activity and exercise.

Summary

Chinese beliefs about health and health practices have been in existence for centuries. The principle of abiding by the laws of nature and letting nature take its course is reflected in Taoist beliefs. In addition, the universe is seen to rest in a state of dynamic equilibrium between yin and yang, and of the vital energy force of qi, which brings peace and harmony in all aspects of life. Buddhist beliefs in the cyclic nature of life and karma may reflect issues of control and fate, particularly with regard to health and health behaviours. Confucian ideals concerning the family and filial piety point to the importance and interdependence of family in all aspects of life. These philosophies of Taoism, Buddhism, and Confucianism co-exist in harmony in Chinese society.

Women are seen to be the repositories of traditional health beliefs and practices. One does not want to tempt fate when one is young and healthy, thus, preventative health behaviours are considered to be most relevant in middle and old age. Exercise in moderation is seen as a means of maintaining the flow of qi, although discrepancies exist in the types of exercise and activity that are valued. Prevalence of activity of Chinese women or women of

ethnic minorities vary in different countries, but do not shed light on the meanings of physical activity and exercise to these women in a socio-cultural context.

Purpose of the Study and Research Questions

While it is clear from the literature that physical activity and exercise are a means to good health, the reasons why ethnic minority women are the least active group in North America is less clear. Questions are raised about the measurement tools used in regards to prevalence of activity. While one qualitative study was able to shed light on types of activity that Chinese women valued (Eyler et al., 1998), further understanding about the meaning of physical activity and exercise to these women, and how culture shapes their values, beliefs, and attitudes toward physical activity and exercise is needed.

Concepts of health and illness are shaped by culture (Corin, 1994; Dressler & Oths, 1995; Helman, 1990; Masi et al., 1993). Traditional Chinese health beliefs are vastly different from the Western biomedical model of health, particularly those beliefs stemming from Taoist, Buddhist, and Confucian traditions. For Chinese Canadians, the process of acculturating to Canadian life adds still another layer to the underlying cultural and philosophical complexity. Therefore, values, beliefs, and attitudes among Chinese Canadian women toward physical activity and exercise, are likely to be variable and consequently, difficult to predict.

This study takes a naturalistic approach, using both a cultural model and a symbolic interactionism framework to identify values, beliefs, and attitudes towards physical activity and exercise of immigrant women of Chinese ethnicity (aged 50 – 70 years) and to understand how Chinese culture shapes these values, beliefs and attitudes.

The study has explored the following research questions:

1. How does this group define physical activity and exercise?
2. (a) What meaning does physical activity and exercise have to this group?
(b) How has culture shaped this meaning?
3. Can physical activity and exercise be interpreted as a cultural object to this group?
4. (a) Is there a perceived relationship between physical activity/exercise and health?
(b) If so, what is the form of this relationship?
(c) How has culture informed this relationship?
5. (a) Can physical health be separated from mental/emotional/spiritual health in this group?
(b) How has culture shaped the meanings of health?
6. (a) What types of activities does this group participate in?
(b) What meaning do these activities have?
(c) How has culture shaped this meaning?

Theoretical Basis of the Study

The theoretical underpinnings for this study are rooted in symbolic interactionism within a cultural model, informed by both anthropology and sociology.

Cultural Model: The Cultural Diamond

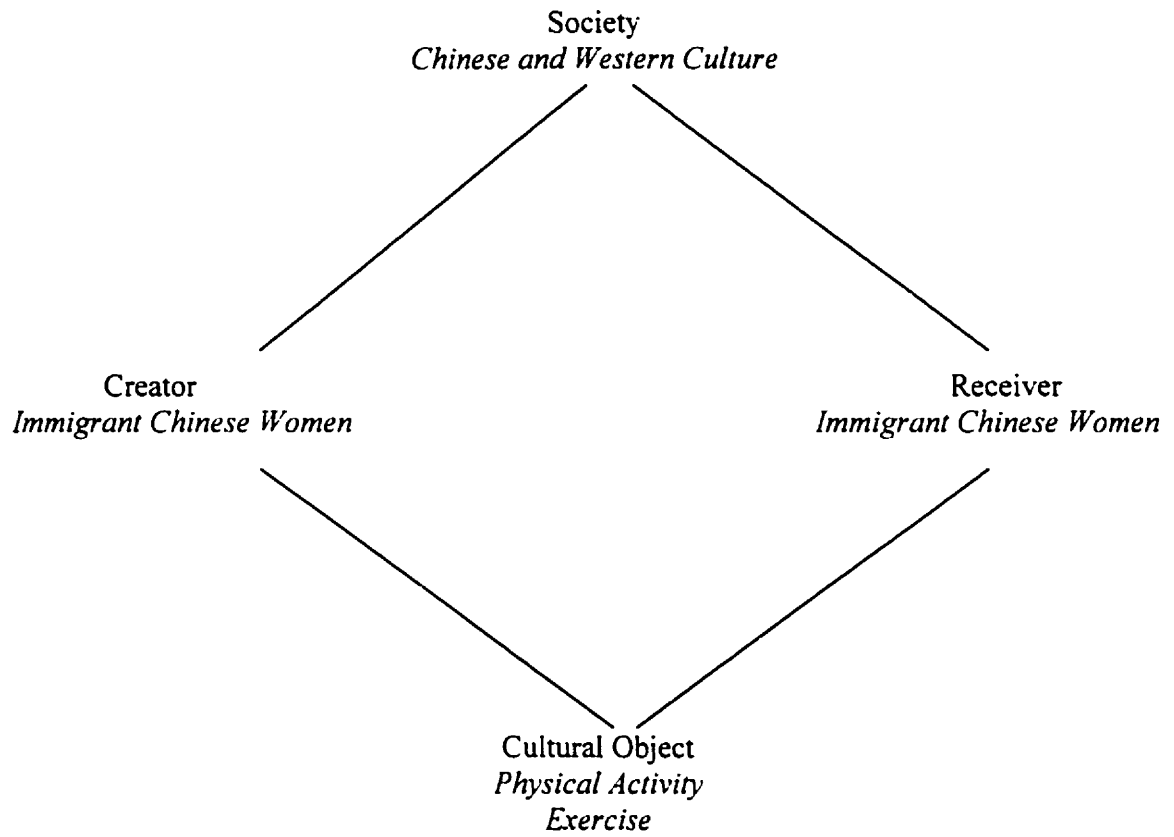
Culture may be looked upon not only in terms of discrete traits or behaviours, but also from a perspective that emphasizes information processing and systems of meaning. Thus, culture has come to be viewed as a system of symbols or abstract elements that are learned

and socially patterned. In turn, these symbols can be manipulated and altered, and underlie all forms of behaviour (Dressler & Oths, 1995).

Culture comprises a system of meanings with four fundamental properties: constitutive, representational, directive, and evocative. Culture is constitutive in that it defines for us what our roles are (e.g., what it is or what it is not, to be a mother, a sister, a wife). Culture is representational, giving us a set of relationships (i.e., what goes with what) by which we are all acculturated. Culture is directive, defining the normative expectations for behaviour and social interaction. Culture is evocative, in that sets of emotions are organized in such a way as to be consistent with the directive functions of meaning (Dressler & Oths, 1995). The shared knowledge of meanings directs our actions and expectations. Cultural influences permeate all of human thought and behaviour, often at a subconscious level. In viewing culture as a system of meanings and information processing, cultural phenomena and their relation to social life may be examined via a "cultural diamond" framework (Griswold, 1994).

A cultural diamond offers a bigger picture of culture in society. The four points of the diamond consist of the creator and receiver, the cultural object and the social world (Griswold, 1994) (see Figure 1). All points of the diamond need to be understood in order to give meaning to a cultural object. A cultural object is a smaller part of an inter-related larger system of culture (within the cultural diamond). It is a socially meaningful expression of shared significance, which is audible, visible, tangible or can be articulated. The cultural object may be simple or complex. Complex cultural objects have many meanings, some of which may be ambiguous (Griswold, 1994). It is only when the objects become public, when they enter human discourse that they enter culture and become cultural objects.

Figure 1. The Cultural Diamond



In the context of the cultural diamond, the purpose of the study is to investigate whether physical activity and exercise are cultural objects for this group of immigrant Chinese women. These women may be both creators and receivers of the objects, objects that are created through interactions within the larger social world. It is assumed that the social world may consist of their country of origin (with a predominant Chinese culture) as well as their adopted country (i.e., Canada).

Symbolic Interactionism

Cultural objects are collective representations of the social experience itself. These objects are projected by people bound to other people and represent their experiences (Griswold, 1994). Humans are shaped by their social interactions, which generate culture. Once created, culture and cultural objects are perpetuated and transmitted through their repeated expression and through the socialization of new group members.

Social interactions with others and with self are key components of symbolic interactionism. Blumer (1969) clearly outlines three main constructs of symbolic interactionism: the meaning, the source of meaning, and the interpretation of meaning. Humans act toward things on the basis of meanings that things have for them (i.e., the “thing” must have meaning in order for them to act). The source of meaning is the key point that differentiates symbolic interactionism from other social theories. Blumer (1969) states that the meaning of things is derived from or arises out of social interaction with others, that is, others’ actions define the thing for the person. The source of the meaning emerges from interactions with others. The meaning needs to be interpreted by the individual. The process

of determining its meaning is based on how they interpret others' meanings toward the object. It is internalized (i.e., interpreted by self) and action is then decided upon.

Blumer (1969) bases his theory of symbolic interactionism on five root meanings. First, human society exists in action and human interaction. Second, this social interaction is a process that shapes human conduct instead of merely a means or a setting for the expression of human conduct. The key to symbolic interactionism is the mutual role taking and self-interaction to interpret meaning before deciding how to act. Third, objects are a product of social interaction. The meaning of the object is fundamentally defined for him by others with whom he interacts. Common objects will emerge and will have common meaning for a given set of people and be seen in the same manner. Therefore, in order to understand the actions of people, their world of objects needs to be identified. Fourth, recognition of self, becoming an object to oneself, and interacting with self, also directs action. In symbolic interactionism, the human is seen as socially engaging with him/herself and not necessarily acting as a response to other factors (e.g., to emotions, attitudes, etc.). Fifth, humans are set in the context of the social world and the interpretation of that world and the self within it. It is the social process in group life that creates and upholds the rules, not the rules that create and uphold group life. It is humans that will decide what is important, what the rules are, as a social process of group life.

Using Blumer's key ideas of symbolic interactionism in this study, the "thing" to have meaning would be physical activity and exercise, which may be understood to be a "cultural object". Physical activity and exercise must have meaning in order for this group to act. If physical activity and exercise have meaning and are cultural objects, then their meaning as cultural objects are made through social interaction with others (e.g., the

information may be socially transmitted via family, friends, teachers, etc.). Physical activity and exercise must also be interpreted, through self and on what s/he judges the meaning to be for others, to then engage in physical activity or exercise him/herself.

Chapter 3

Methodological Principles and Study Design

In this chapter, I will discuss the methodological principles upon which this study is based. Included in these principles is the need for reflexivity on my part as researcher. In particular, my role as researcher in data collection and analysis will be highlighted. In this chapter, I will also describe the design of the study, including details of participant selection, recruitment, and characteristics, and methods of data collection. The process of data analysis will be described, as well as steps taken to ensure verification of data and ethical considerations.

Methodological Principles

A naturalistic inquiry, as outlined by Lincoln and Guba (1985), has been used to identify and to understand cultural values, beliefs, and attitudes towards physical activity and exercise of this group of immigrant Chinese women. Naturalistic inquiry allows for a deeper and richer understanding of these Chinese women, one that is rooted in their experiences and perspectives and interconnected with their beliefs and values about their own health and personal behaviour. "Human health is intricately tied to the dreams, hopes, attitudes, beliefs and understandings of individuals. All of those characteristics form a part of what we call culture... The link between the kinds of data we now need on human health and the kind only available through qualitative methods and constructivist [naturalistic] philosophies is highly synergistic" (Lincoln, 1992, p.388).

Lincoln (1992) stresses the importance of examining the fit between what is being studied and how it is being studied. Methodology (i.e., how can we find out what is to be known) strongly interacts with epistemology (i.e., what is the relationship between the researcher and participant), and in turn, epistemology is in part determined by ontology (i.e., what is the form and nature of reality). By looking at these women's cultural values, beliefs, and attitudes within a naturalistic framework, it is recognized that multiple realities exist, which are socially and experientially based, and dependent on the context of the individual. The use of symbolic interactionism and a cultural diamond as the theoretical basis for this study is congruent with a naturalistic paradigm. Symbolic interactionism views the world of reality as it exists in human experience and interaction, a world that is dynamic, one that does not lend itself to be examined with a uni-dimensional or static approach. "The foundations of interactionism are steeped in a direct naturalistic observation of the empirical world" (Plummer, 1996, p.230).

Reflexivity and Positionality in Research

In any research, reflexivity on the part of the researcher is a necessary prerequisite for rigorous practice. The standards of critical analysis that are applied to participants also need to be applied to the researchers of the inquiry (Swartz, 1997) and should be an ongoing component throughout the research process (England, 1994; Kirsch, 1999). Reflexivity also demands that researchers understand how they are located within the research process, that is, their own positionality and presentation. A researcher's positionality affects how he/she views the world, and ultimately, the process of the research itself (i.e., how the research question is framed, the choice of methodology and theory, the choice of interview questions,

how data are interpreted). Positionality is shaped by the researcher's unique mix of characteristics, such as race, gender, class, and nationality, as well as their location in time and space (Mullings, 1999).

As researcher and interviewer, I was very aware of my own positionality in the research process and have attempted to be reflexive throughout the study. I am a female student researcher of Chinese ethnicity; however, I would consider my culture to be "Western" or "Canadian". My positionality has been greatly affected by my place of birth and upbringing (a small Northern Ontario town), ethnicity (being one of two Chinese families in this town), gender (being the fourth daughter in a Chinese family), education (being educated in Western society as a health care professional) and age (being of an age where I am able to appreciate my ethnic heritage and want to further explore Chinese culture). I do not speak, read, or write Cantonese, Mandarin, or any Chinese dialect. My knowledge of Chinese traditions and culture stems primarily from the literature, along with some lived experience and anecdotal evidence of being raised within a Chinese family in Northern Ontario. These characteristics have shaped my perceptions of the world and the assumptions and bias that I bring into the study, which I have attempted to articulate earlier in the background section of this thesis.

My role in data collection.

The role I played throughout the research process is evident not only in how the research question was framed and subsequent choice of methodology, but also needs to be acknowledged in the collection and analysis of data. In this study, personal interviews were the prime method of data collection. From a symbolic interactionism perspective, the

interview is viewed as a social event based on mutual participant observation and interaction. The researcher is visible and an integral part of the research setting, and becomes a facilitator in the inquiry process. In fact, according to Hammersley and Atkinson (1995), to some participants, it does not matter how much they know about the research, they are often more concerned with what kind of person the researcher is, rather than with the research itself. The “social characteristics of the interviewer and a respondent, such as age, race, and sex are significant during the brief encounter; different pairings have different meanings and evoke different cultural norms and stereotypes that influence the opinions and feelings expressed by respondents” (Herod. 1993, p. 308). Thus, the researcher’s appearance and demeanour are important factors in shaping relationships with people, setting the tone for the interview, and ultimately, the type of information gathered. As such, some information acquired in these interviews is interpersonal and time and context dependent.

There are multiple meanings attributed to the researcher’s body, regardless of the way he/she chooses to represent it (Mullings, 1999). Thus, initially, researchers may be considered by their informants to be an “insider” or an “outsider”, based on their physical attributes. This status as insider-outsider may be continually re-negotiated through interactions between those involved throughout the interview process. Positionality and presentation are not static, as researchers and participants do not occupy fixed positions. Being afforded insider status has many advantages. Insiders may have an easier time gaining access to populations constituted by similar people. They are seen to be able to use their knowledge of the group to gain more intimate insights into the opinions of the group. An insider’s knowledge and positionality may create an environment of trust, and insiders may be more sensitive in framing questions to respect group culture. They may be seen to be

cognizant and more accepting of the complexity and internal variation of the group being studied, and better able to understand subtleties of language use (Mullings, 1999; Zavella, 1996).

This notion of representativeness bears significance for my study. In this study, I was both researcher and interviewer. Since the interviewer is the prime instrument of data collection, my positionality became magnified. I was concerned about being perceived as an insider in the interview process, based on my physical appearance, which may have given the participants a false sense of bonding due to the similar ethnic backgrounds and gender. However, because of my peripheral knowledge of Chinese culture and connectedness to this group, I would deem myself as an outsider. I was concerned that participants may have had some expectations of me, based on my external attributes, and that I would have an innate understanding of the cultural values, and nuances in communicating with them. My concerns were exemplified in the words of Grace, who spoke about the use of herbal remedies for health promotion, particularly in large families. She said, “We Chinese, also believe, I think your mother would do the same, have a good soup, at least once a week, would be important...especially for a big family.” I was very aware of my role in the interview process and attempted to be explicit about my positionality with the participants.

Interviewer-participant matching.

Because of my concern about the role I played in the interview process, I inquired about this concept of ethnic and gender matching at the end of each interview. All participants indicated that ethnic matching was not considered when agreeing to participate in this study. In fact, the first face-to-face meeting with most of these women was at the time

of the interview, where many women appeared surprised to see and learn that I was also of Chinese ethnicity. They appeared pleased to know that I was taking an interest in Chinese culture and appeared to accept my admission of my Canadian culture. Many women discussed the dualities of cultures, primarily in relation to their children, most of whom were born in Canada.

Much has been written in the literature regarding women interviewing women, acknowledging that the gender of the interviewer and interviewee may shape the research process (Finch, 1984; Herod, 1993; Phoenix, 1995). In this study, many women indicated that they would be more comfortable being interviewed by a woman, particularly regarding sensitive topics. However, most women did not feel that the topic of physical activity and exercise was sensitive and stated that they would have been comfortable speaking with either a male or female. However, the impact of ethnicity and gender on the research process cannot be easily predicted. The confluence of race, social class, gender, and age, makes it extremely difficult to determine what aspects of the interviewer that are having an impact on the interviewee or on the power dynamics between them (Phoenix, 1995). However, these characteristics need to be accounted for in the interpretation and analysis of the context of the interview.

Many women commented that they would have preferred speaking Chinese in the interview rather than English, as Chinese was their first language. Many felt that they would have been better able to articulate their feelings and opinions. However, all of the women stated that they were able to adequately convey their thoughts in English in the interview, and some even expressed a preference for speaking English. If I had concerns about these

women's use of language and their meaning, I asked the women to re-phrase or further elucidate their thoughts and meanings.

My role in data analysis.

The context of the production of interview data is intrinsic to understanding the data itself (Fielding, 1993). Therefore, analysis of the interview situation as the site where specific accounts are produced is imperative in the interpretation of meaning. As the researcher and interviewer, I was very aware of my positionality throughout the interview process. I explained my interest in the topic to the participants as well as my ethnic background and knowledge of Chinese culture. Verbal data was collected during the interviews, but this information was also supplemented by my observations concerning the participants' reactions, body language, non-verbal cues, and the interviewing environment, and interactions between myself and the participant. These were documented in field notes and in transcripts (as appropriate), which I completed after each interview and considered throughout this analysis phase.

As well, recognizing how my personal and professional experiences have shaped how I perceived physical activity and exercise, and to be explicit about my assumptions, allowed for greater neutrality in analyzing the data.

Study Design

Participant Selection

The purpose of this study was to identify and to understand cultural values, beliefs, and attitudes of immigrant Chinese women toward physical activity and exercise. Therefore,

it was important to recruit women via a purposeful sample of Chinese women, who would be able to discuss their lived experiences concerning this topic. A purposeful sample allows for the selection of information-rich cases for in-depth study (Patton, 1987). Sampling in this manner is consistent with a naturalistic inquiry, looking at small groups of a population, but in greater depth and understanding.

Eligibility criteria for this study included:

1. Women of Chinese ethnicity who immigrated to Canada from mainland China, Taiwan or Hong Kong. I recognized that the country of origin of these women could result in different experiences for each of the participants and culture could not be seen as a monolithic entity. However, as noted by Fung (1998), Chinese culture has remained intact over 3,500 years and that the Chinese have exceptionally strong ethnic bonding, regardless of where they are in the world; hence it was assumed that the main tenets of Chinese culture would be similar for these women. A Chinese population was targeted as the Chinese represent a significant portion of the demographic diversity in Canada (Statistics Canada, 1996) and in the city of Toronto (Laghi, 1999). They are a well-established group in Canada with strong traditions and culture.
2. Women between the ages of 50 – 70 years. A senior group was targeted as seniors have been estimated to be the fastest growing population with potential need for health care (Glass, deLeon, Marottoloi, & Berkman, 1999; Masi & Disman, 1994; Patterson & Feightner, 1997). This study focused on women, as gender could influence perceptions towards physical activity and exercise.
3. Women with no acute functional limitations. Values, beliefs, and attitudes toward physical activity and exercise could be altered by physical limitations, disease or

illness. Hence, this study focused on women who were relatively healthy, and looked at physical activity and exercise as components of lifestyle health promotion and wellness, rather than exercise in the therapeutic sense. Women who lived at home and were independent in their activities of daily living were considered eligible for this study. Functional limitations were self-identified by the women and were assessed through verbal discussion with the participants prior to the interview.

4. English-speaking Chinese immigrant women. Knowledge and use of the English language could suggest a certain level of education that could impact the types of responses given. As well, knowledge of the English language could suggest that some form of acculturation has occurred, which could have influenced expressed values, beliefs, and attitudes of these women toward physical activity, exercise, and health. To assess levels of acculturation, the Marin Short Acculturation Scale (1987) was adapted for use in this study. (Refer to data collection for more details).

Participant Recruitment

Initial recruitment of participants occurred via community centres and organizations serving the Chinese population in the Greater Toronto Area. Co-ordinators of senior programs at three community centres were contacted, to discuss the purpose of the study and possible recruitment of participants. These community centres were located in areas with large Chinese populations; some programs were offered exclusively for Chinese seniors. In addition, five Chinese organizations in the Greater Toronto Area were contacted and information was given verbally to activity co-ordinators regarding the study and inclusion criteria for participants. Information letters were provided to the co-ordinators for

distribution to potential participants who met the eligibility criteria (see Appendix A). If a woman expressed interest in participating in the study, the co-ordinator received permission from the woman to give her name and telephone number to the researcher. The researcher then contacted these women individually via telephone to further discuss details of the study, and made appointments with the women at a time and place of their convenience. To enhance the likelihood of participation, the researcher spoke directly to one group, with the permission of the group co-ordinator, prior to their regular meeting time, to discuss the purpose of the study and eligibility criteria.

Five women were recruited through these various Chinese organizations and community centres. However, one woman proved to be ineligible for participation as she was born and raised in Macao, prior to immigrating to Canada. Four women were interviewed; three interviews took place at their respective community centres, and the fourth interview, in the participant's home.

In qualitative research, data collection and analysis occur simultaneously (Miles & Huberman, 1994; Strauss & Corbin, 1990) and continued selection of participants in a purposeful sample is related to the findings that emerge in the course of the study. Upon initial analysis of the first four interviews, these women had expressed overwhelmingly positive responses to exercise in particular. The participation of these women in various groups at the community centres or through the Chinese organizations (particularly in exercise classes) suggested that their attitudes and beliefs toward exercise were already positively constructed. The recruitment strategy then shifted away from organized groups to employ a snowball technique. Participants were asked if they had any friends or acquaintances who might be interested in volunteering for the study and who were not

involved in the same groups. Snowball techniques were also employed via professional colleagues for any acquaintances known to them who might be interested in participating in this study. Professional colleagues were given the same information verbally regarding the study as program co-ordinators, and were also given information letters to distribute to potential participants. Eleven participants were recruited in this manner; however, one participant proved to be ineligible due to her chronic physical ailments. Of these ten women who were interviewed, four met informally with friends for regular social or physical activities. However, none participated formally with Chinese organizations or at community centres.

Participant Characteristics

Participants were added until saturation of themes occurred, that is, no new ideas or themes emerged from additional interviews (Patton, 1987). It was found that this saturation of themes occurred upon the completion of the fourteenth interview. Therefore, fourteen women constituted the study group in this research. All fourteen participants were ethnic Chinese women between the ages of 50 – 70 years ($M = 57.9$ years, $SD = 5.59$), with no acute physical limitations (see Table 1). All women spoke conversational English as a second (or third) language. The time of immigration varied greatly. The earliest date of immigration was 1950, the most recent immigration was in 1996. The majority of women immigrated in the 1960's and 1970's. Socioeconomic opportunity and political instability were cited most often as reasons to immigrate to Canada. Other reasons included educational opportunities and family reunification.

Ten women were born in China, and four women were born in Hong Kong. All women born in China (except for two) lived in Hong Kong for varying lengths of time prior to their immigration to Canada; this was the normal route for immigration from China. Two women born in China fled with their families to Taiwan at the beginning of Communist rule, prior to their subsequent immigration to Canada.

All women had a minimum high school education achieved in their country of origin, except for one woman who arrived in Canada at the age of 12, thereby receiving her education in Canada. Four women were educated at a post-secondary level in Canada. Occupations included professional and clerical jobs, as well as those in the service or blue-collar industries. Three women worked as health care professionals. Five women were retired, six women worked full time, two worked part-time, and one was not working due to a repetitive strain injury (this injury did not limit her abilities to do activities of daily living within the house).

All women were married with the exception of one who was widowed. All participants resided in the Greater Toronto Area with their spouse or family. One participant was living temporarily in the Toronto area to help care for her grandchild. Seven women have lived in the Greater Toronto Area since the time of their immigration. The other seven women moved to the Greater Toronto Area after first living in smaller cities or towns, primarily in Ontario or Quebec. All women had a household income of greater than \$15,000, with greater than half of the women having a household income of greater than \$40,000.

All of the women were physically active with their household chores; some also engaged in child care duties and gardening. All of these women, with the exception of one, participated in leisure-time physical activity and exercise (see Table 2).

Table 1 provides characteristics of these women. Table 2 provides an overview of the types of leisure-time physical activity and exercise in which these women currently participate. Pseudonyms have been used throughout the presentation of this thesis to ensure confidentiality of participants.

Table 1: Participant Characteristics

| Name | Age | Country of Birth | Year of Immigration (Age at time of immigration) | Education Level | Employment Status | Occupation |
|-------|-----|------------------|-----------------------------------------------------|------------------|-------------------------|--------------------------|
| Julie | 50 | China | 1994 (44) | Secondary School | Sick leave | Sales |
| Helen | 50 | China | 1974 (24) | Secondary School | Part time | Clerical |
| Liz | 51 | China | 1992 (43) | College | Full time | Factory work |
| Wendy | 52 | Hong Kong | 1966 (18) | University | Full time | Clerical/Teaching |
| Tina | 55 | China | 1965 (20) | College | Full time | Clerical |
| Grace | 56 | China | 1996 (52) | University | Retired | Health Care Professional |
| Jane | 57 | Hong Kong | 1962 (19) | University | Full time | Educational Consultant |
| Rose | 60 | China | 1966 (26) | College | Part time/ Volunteer | Accounting |
| Lynn | 61 | China | 1974 (35) | College | Retired | Clerical |
| Joyce | 62 | China | 1950 (12) | Secondary School | Full time | Clerical |
| Amy | 62 | China | 1974 (36) | Secondary School | Retired | Sales |
| Alice | 64 | Hong Kong | 1960 (24) | University | Full time | Health Care Professional |
| Susan | 67 | China | 1958 (25) | University | Retired | Health Care Professional |

Table 2: Participant Involvement in Leisure-Time Physical Activity

| Name | Employment Status | Walking (leisure time) | Home Exercise program | Swimming | Tennis/ Badminton | Tai Chi (in groups or at home) | Stationary bike/ treadmill/ weights | Dancing (line or ballroom) | Aerobics (at home or in classes) |
|--------|-------------------|------------------------|-----------------------|----------|-------------------|--------------------------------|-------------------------------------|----------------------------|----------------------------------|
| Grace | Retired | x | x | x | | x | | x | |
| Amy | Retired | x | | | | | | | x |
| Lynn | Retired | x | x | | x | | | | |
| Claire | Retired | x | x | | | x | | | x |
| Susan | Retired | x | | | | x | | | x |
| Rose | Part time | x | | | x | | | x | |
| Helen | Part time | x | | x | x | | x | | x |
| Liz | Full time | x | | | | x | | | |
| Wendy | Full time | x | | | | | x | | |
| Jane | Full time | x | x | | | | | | |
| Joyce | Full time | x | | | | | | | x |
| Tina | Full time | x | x | | | | | | |
| Alice | Full time | | | | | | | | |
| Julie | Sick leave | x | x | | | | | | |

Data Collection

There were three methods of data collection in this study. The primary method consisted of semi-structured interviews with each of the participants (see Appendix B). Information gathered in interviews was supplemented with the administration of the Marin Short Acculturation Scale (see Appendix C), and a demographic information form (see Appendix D).

Semi-structured interviews.

Interviews have long been used for data collection in qualitative research, with a strong claim to being the most widely used method (Fielding, 1993). Fourteen face-to-face interviews were conducted using a semi-structured interview guide with open-ended questions. This format allowed participants to tell in their own words, their lived experiences, offering greater understanding of phenomena through the eyes of these women. Data collection took place over a six-month period. Interviews lasted just over an hour in length (on average), with the longest interview being just under 2 hours, and the shortest interview, approximately 45 minutes. All interviews were conducted in English, audiotaped with the permission of the participant, and transcribed verbatim by the researcher.

A semi-structured interview guide with open-ended questions was used with each of the participants. The interview guide was developed and piloted with three Chinese women prior to use in this study. Revisions were made to the interview guide based on the information gathered in the pilot interviews and feedback given by these women regarding the focus of the study as well as for the clarity, relevance, and flow of the interview questions. Pre-testing the questions with Chinese women helped to determine whether the

instrument was sufficiently generative and comprehensive in relation to the research questions of the study, and whether it facilitated open and detailed responses. The questions in the interview guide focused on the topics of health, physical activity and exercise, and Chinese culture. Participants were asked their thoughts on health, what being healthy meant to them, and what they did to maintain good health. Also, they were asked about their perspectives on physical activity and exercise, and how these activities related to health. In addition, they were asked how Chinese culture might have influenced their thoughts on health, physical activity, and exercise. Open-ended questions allowed participants to express opinions in their own words and to raise issues and ideas not considered by the researcher.

While the interplay between data collection and interpretation guided purposeful sampling for this study, the simultaneity of the two also allowed for the exploration of ideas not initially intended (Miles & Huberman, 1994). For example, when discussing their beliefs about health and actions they took to maintain health, the concept of diet and its relation to health was consistently mentioned as a prime factor to health by all of these women. While physical activity and exercise were the focus of this study, the importance of diet to these women was not anticipated but could not be ignored. Therefore, this topic was explored further in subsequent interviews. Again, this highlights the value of using open-ended questions in qualitative interviews, which allowed participants to express ideas and issues important to them that may not have been considered by the researcher.

Acculturation Scale.

Interactions of individuals within society have great bearing on the individuals' thoughts and actions. Thus, it was recognized that these women's adopted country may have

influenced their values, beliefs, and attitudes expressed during the interview. An acculturation scale was administered at the end of the interview to be used as an adjunct to the information gained through the in-depth interview.

Acculturation is a complex process. There exists great variation in how it is defined, and subsequently, how it is then measured. In relation to this study, acculturation has been viewed as representing a spectrum of orientations, from one focused more toward culture of origin (traditionalism), to a more equal one (biculturalism) to one focused more toward Canadian culture (assimilation) (Anderson et al., 1993). The Marin Short Acculturation Scale was adapted for use with the Chinese population. This scale focuses on language use, media, and ethnic social relations. It was originally designed for a Hispanic population in the United States, and found to be reliable for the twelve items of the scale (Cronbach's alpha coefficient .92). As well, it was found to be valid in relation to five different dimensions: generation (correlation .65, $p < .001$), length of residency in the United States (correlation .70, $p < .001$); the subject's own evaluation of their acculturation level (correlation .76, $p < .001$); age of arrival in the United States (correlation -.69, $p < .001$); and valid for its ability to discriminate between ethnic groups (Hispanics vs. non-Hispanic whites, t-test significantly different) and gender (t-test no significant difference). This scale has also been used in studies with Chinese Canadian populations (Bowman, 1996). While the focus of this study was not to assess levels of acculturation or the process of acculturation, the potential duality of cultures needed to be acknowledged and accounted for.

The average participant score on the acculturation scale was 31.02 out of a maximum 60 points ($SD = 10.47$). This places the average participant in a category of moderate acculturation or biculturation, meaning that these women spend time in environments of both

cultures, and converse and follow media in both languages. Women who immigrated most recently to Canada and at an older age tended to have the lowest acculturation scores; those who have lived in Canada the longest (and hence, had immigrated at a younger age), had the highest acculturation scores. It should be noted that four women were ambivalent regarding the last question of the scale. Therefore, their ratings did not include this question and were scored out of a total of 55. This question related to their preference of friends for their children and grandchildren, in which they indicated no preference.

Table 3 provides a description of the study group with respect to their time of immigration and acculturation scores. This information provides the reader with a further portrayal of the group of women studied in this research.

Table 3: Participant Scores on Acculturation Scale

| Name | Age at time of Immigration (Year of Immigration) | Score on Acculturation Scale (maximum 60) |
|--------|-----------------------------------------------------|----------------------------------------------|
| Joyce | 12 (1950) | 41 |
| Wendy | 18 (1966) | 42 |
| Tina | 20 (1965) | 31 |
| Susan | 25 (1958) | 31 |
| Claire | 32 (1969) | 26 |
| Lynn | 35 (1974) | 31 |
| Amy | 36 (1974) | 17 |
| Liz | 43 (1992) | 18 |
| Julie | 44 (1994) | 21 |
| Grace | 52 (1996) | 23 |

| Name | Age at time of immigration (Year of Immigration) | Score on Acculturation Scale (maximum 55) |
|-------|-----------------------------------------------------|----------------------------------------------|
| Jane | 19 (1962) | 49 |
| Helen | 24 (1974) | 29 |
| Alice | 24 (1960) | 35 |
| Rose | 26 (1966) | 24 |

Demographic Information Sheet.

A demographic information sheet for each participant was completed by the researcher. At the end of each interview, the researcher asked the participant information regarding place of birth, immigration, education, marital status, employment status, and socioeconomic status. While much of this information was revealed during the interview, this structured set of questions provided clarification and demographic details not yet known, allowing for more detailed descriptions of the participant group. This information also contributes to the context for understanding the lives of these women. Variations within cultural groups are often greater than between different groups, due to differences in factors such as socioeconomic status and education. Therefore, gathering such information could help to shed further light and understanding of variances between participants. Characteristics of the participants have been reported in Table 1.

Data Analysis

Data analysis was done through an inductive process, and utilized a grounded theory approach to data analysis as outlined by Strauss and Corbin (1990). Grounded theory method requires a concept-indicator model of analysis, which in turn employs the method of constant comparison. Strauss (1987) states that this grounded theory approach is useful for any qualitative research, despite tradition or theoretical approach.

Initial data analysis consisted of descriptive or open coding. To ensure verification of data and consistency of coding, the researcher and a thesis committee member hand-coded four interviews and compared descriptions and codes. Initial codes were based on the wordings in the interview passages and described as such, in order to capture the meanings

accurately. Once consistency was assured between the two, the remaining interviews were read and hand-coded by the researcher. A code scheme was established and revised, as interview transcripts were read and re-read by the researcher. Hand-codings and code scheme were then inputted into the computer software program, NUDIST*4 (Lonkila, 1995) which was used to help store and manage the text-based data throughout the analysis phase.

Following initial descriptive coding, axial coding was done around one concept item at a time, looking at relationships with and between concepts to then form categories. Guidelines were devised to describe each category for inclusion of future data. These criteria for categories were enclosed within analytic memos to explain properties of categories and interpretations. This process occurred systematically to identify core categories or themes.

All categories were examined for possible interrelationships, to determine if certain categories could be subsumed by broader, higher-level categories. For example, notions of health – physical, mental, social – were thematically categorized according to meanings of health. By examining the categories systemically as a whole, missing or incomplete categories were identified and further explored, through questions in succeeding interviews. This new direction for probing was guided by the comments (both implicit and explicit) made by previous participants.

The next stage focused on cross-case thematic analysis. Common themes were identified from all data collected from these women. Overall categories were examined on a broad level, rather than in terms of individual responses. This analysis provided a more global picture of how these women viewed physical activity and exercise under the rubric of health and aging, and allowed for examination of their perspectives through a cultural lens.

As previously stated, data analysis is a continuous process concurrent with data collection. While the analysis has been described here in sequential order, the process of analysis is not linear. Analysis continually shifts between different levels of coding, as a set of data was collected and examined, the new data were incorporated into the original data set, thereby affecting the data to be collected in the future.

Verification of data

Qualitative research embraces many types of methodologies. As a result, there is lack of consensus about the rules to which qualitative research should conform. Qualitative research cannot be judged on positivist standards of rigour, as the philosophical positions of the paradigms differ (Lincoln, 1992; Sandelowski, 1986). Debate exists as to whether rigour can truly be applied to any research method without bias even by its own tests of trustworthiness (Sandelowski, 1986). However, many researchers have suggested evaluative criteria to ensure trustworthiness of data in qualitative research (Lincoln & Guba, 1985; Sandelowski, 1986; Yonge & Stewin, 1988). This study has employed trustworthiness techniques as outlined by Lincoln and Guba (1985): credibility, transferability, dependability, and confirmability.

Credibility.

Credibility is seen to be the “truth value” and is analogous to internal validity in the traditional research paradigm. It refers to confidence in the truth of the finding of a particular inquiry for the participants, based on the context of the inquiry. The truth-value of a qualitative investigation generally resides in the discovery of human phenomena or experiences as they are lived and perceived by participants (i.e., participant-oriented), rather

than in the verification of preconceptions of those experiences (i.e., researcher-defined) (Lincoln & Guba, 1985). A qualitative study is credible when it is faithful to the descriptions or interpretations of a human experience. This implies that the people having that experience would immediately recognize it from those descriptions or interpretations as their own. A study is also credible when other people can recognize the experience when confronted with it after having only read about it in a study (Lincoln & Guba, 1985; Sandelowski, 1986).

To ensure credibility in this study, techniques of persistent observation, triangulation, member checking, and peer debriefing have been used. The purpose of persistent observation is to identify those characteristics and elements in the situation that are most relevant to the issue and focusing on them in detail. This provides depth to the data gathered. For example, it was noted very early on in the initial interviews with these women that health and its increasing value was related to their perceptions of aging. Therefore, further probing in this area was done to obtain further detail and understanding of these women's perceptions of this relationship.

Denzin (1978) has suggested four different modes of triangulation: the use of multiple and different sources, methods, investigators and theories. In this study, triangulation could only be partially applied. Triangulation of sources is the most common method of triangulation, referring to multiple sources (i.e., multiple copies of one type of source such as interview participants) or different sources of the same information. In this study, fourteen women have been interviewed using a semi-structured interview guide. As well, information gained from the acculturation scale helped to illuminate and re-confirm comments made by participants in the interview in regards to their self-identified level of acculturation.

Information collected in the demographic information sheet could also be re-confirmed with information shared during the interview.

While triangulation methods give credibility to data, the technique of member checking gives credibility to the analysis of the data. Member checking gives participants the opportunity to review their comments, in the form of a summary of their transcript (which will incorporate interpretations of the researcher) or a copy of their transcript (or parts thereof), thereby allowing the participant to confirm or verify what they have said and their meaning. In this study, member checking was done at a more immediate, informal level. During the interview process, the interviewer verbally summarized comments made by the participants, to ensure their meanings and for verification. For example, one participant discussed at length the concept of balance of hot and cold. The interviewer summarized/reconstructed her understanding of the participant's words. This provided opportunity for the participant to confirm or clarify her words, to ensure that the interviewer's interpretation and meaning was consistent.

Peer debriefing is another method of credibility. With this technique, other researchers familiar with the content and methodological areas of a study review the information gathered to help verify the data. As noted previously, peer debriefing was done in detail on four of the interviews with a thesis committee member, and partially with the entire thesis committee, throughout the study.

Transferability.

Transferability refers to fittingness or applicability of the study, that is, the extent to which the analysis of this inquiry may be applicable in other contexts or with other

participants. A study meets the criterion of fittingness when its findings can “fit” into contexts outside the study situation and when its audience views its findings as meaningful and applicable in terms of their own experiences. In addition, the analysis of the study, whether in the form of description, explanation, or theory, need to fit the data from which they are derived (Sandelowski, 1986). The analysis in this study has been grounded in the life experiences of these women and reflect their typical and atypical elements. For example, while all women were consistent with their discussion regarding the importance of diet to health, the researcher sought dissenting opinions regarding this topic (of which there was none). As well, within the topic of diet, the interviewer sought varying opinions regarding beliefs about Chinese herbal remedies and soups and for atypical cases on this topic. The research process and characteristics of participants have been given to provide sufficient detail of the setting and context of the study, to allow for transferability. The use of an acculturation scale and demographic information form give additional detailed information about the participants. Lincoln & Guba (1985) state that “it is not the naturalist's task to provide an index of transferability; it is his or her responsibility to provide the data base that makes transferability judgments possible on the part of potential appliers” (p. 316). However, “[g]eneralizability is itself something of an illusion since every research situation is ultimately about a particular researcher in interaction with a particular subject [sic] in a particular context” (Sandelowski, 1986, p.31).

Dependability.

Dependability refers to the consistency of the study data, whether findings of this study may be repeated if the inquiry were replicated with the same (or similar) participants in

the same (or similar) context (Lincoln & Guba, 1985; Sandelowski, 1986). However, this notion of replication in qualitative research lies in tension with the axiom that emphasizes the uniqueness of human situations, which suggests findings may be time and context. Lincoln and Guba (1985) recommend an examination of the *process* of the inquiry to attest to the study's dependability and propose an audit or "decision trail" as the criterion of rigour related to the consistency of qualitative findings. Research work in this area with a similar group of women that follows a decision trail as outlined by the investigator of this study should uncover comparable findings. In addition, another researcher should arrive at the same or comparable conclusions given this investigator's data, perspective and situation (Sandelowski, 1986). In this study, all research procedures were recorded. Detailed records of data, field and observational notes, and memos are available for external audit for use of dependability and confirmability. As well, a journal has been kept to reflect the thoughts of the researcher throughout the process (Lincoln & Guba 1985; Raphael, Steinmetz, & Renwick, 1998).

Confirmability.

Confirmability or neutrality refers to the degree in which the findings of this study are determined by the participants and conditions of the study and not by the biases, motivations, interests, or perspectives of the researcher (Lincoln & Guba, 1985). Confirmability is achieved when credibility, transferability, and dependability have been established (Sandelowski, 1986). The findings should be meaningful to the participants and true to their lived experiences. The interactions of the researcher with participants shape the study and the interpretations of the data collected. As such, the researchers need to view themselves as

participants in their own study. The researcher's own values and assumptions need to be examined and considered throughout the research process (Miles & Huberman, 1994). As discussed previously in this chapter, in this study, I have attempted to be explicit about my assumptions regarding the study and reflexive about my role in the research process, particularly throughout the data collection and analysis phases.

Ethical Considerations

This study obtained ethical approval from the University of Toronto Human Subjects Review Committee in January 2000.

Written, informed consent was obtained from each participant prior to the interview (see Appendix E). The participants had the opportunity to read the consent form prior to the interview and ask any questions regarding consent of the study. As well, the researcher read aloud the consent form, to highlight each section.

There were no identified foreseeable risks to this study. To minimize any inconvenience to participants, interview times and places were scheduled at the participants' convenience.

Each participant was told that there were no benefits directly associated with this study and no form of monetary compensation was given to any of the respondents. However, participants may have gained the opportunity for self-reflection regarding their thoughts toward physical activity, exercise and health, as well as to reflect on their cultural values. Also, the participants may have felt that the information they provided may benefit future health programs involving Chinese women.

Participation in this study was voluntary. Participants were informed that they did not have to answer any questions they did not wish to answer. They were informed that they were free to withdraw from the study at any time. Each participant received a copy of the information letter and consent form for this study. Contact names and numbers (including the researcher and thesis supervisors and committee member) were given on the information letter provided to each participant. Participants were told that choosing not to participate or deciding to withdraw from the study would not jeopardize or alter their participation at the community centre or association/group in which they attended.

Confidentiality of participants was assured by removing any identifying information from all transcripts. Written or oral presentations of this study will not contain any participants' true names or associated groups. Pseudonyms have been used for all participants in the presentation of findings of this thesis. All participants were assigned a file code, and these codes were used to label audiotapes and printed documents pertaining to the interviews and field notes. All data was kept in a locked file cabinet, separate from the coding information. While transcripts and information given by participants were shared with the thesis committee, only the researcher had access to the matching code names and lists. Audiotapes were destroyed upon completion of this study.

Chapter 4

Results

Common themes have been drawn from the in-depth interviews and these results will be presented in two separate but interrelated chapters. In this chapter, I will explore the overarching theme of health as a cultural object. Examining the meaning of health to these women, how they define and perceive health provides a context for health as a cultural object. This base of understanding allows for further exploration of why health is so important to them at this time. Health, as perceived by these women, is best understood by examining cultural values, particularly related to aging and family.

Throughout the presentation of themes in these two results chapters, quotes are used as transcribed verbatim from the interview tapes. English is the second (or third) language for all of the women interviewed. Sentences have not been changed, to reflect the authenticity of responses. On occasion, a word or two has been included in [] to help clarify the sentence. Pseudonyms have been used throughout the thesis to provide anonymity for participants.

Health Is A Cultural Object

The focus of this study has been to explore values, beliefs, and attitudes towards physical activity and exercise of this group of immigrant Chinese women. As such, one of the research questions of this study was to determine if physical activity and exercise were cultural objects to these women. While physical activity and particularly exercise were deemed important components to maintain health, it was clear that their perceptions of physical activity and exercise were subsumed under the broader category of health. The

concept of health had shared significance to these women, both in its meaning and value. Hence, health is seen to be the cultural object, a socially meaningful expression of shared significance, which was audible, visible, tangible and which could be articulated by these women. This object will be explored within the larger social world in which the cultural object of health was created and received by this group of women. In this study, the cultural object of health has been influenced by both Chinese and Western cultures.

In order to understand health as a cultural object, how these women perceive and define health must first be explored. Health has taken on greater meaning to these women, particularly as they grow older. The value and importance of health will be examined in relation to aging. Culture has great influence on perceptions of aging and bears significance with this group of women providing further insight into the importance of health and health as a cultural object. The notion of “good luck” and “good genes” in relation to health is also described by these women, which is contrasted by their perceived control over and responsibility for aspects of their health.

How Health Is Defined By These Women

When asked “What does health mean to you?”, this group of women indicated that they perceived health to consist of many elements. All of these women most frequently made references to physical health and the body. They also discussed “being happy” and “not worrying” as components of health, in reference to mental and spiritual health. They also emphasized the importance of social relationships, which were encompassed within the realm of health. In taking a broader view toward health, these women were able to describe the relationships between these perceived components of health.

“The Body is Good”

The initial response of all of these women, when asked what being healthy means to them and how they would define health, revolved around physical notions of the body. All women spoke of health in terms of concrete aspects of physical health -- being able to move freely, carrying on with their daily routine. For example, Claire commented:

Body is good and other things is good. Because I can move...because my body is good...I can go anywhere, I can buy something. I can walk. I can go to the Centre, go anywhere, or go to the park or go to Dim Sum or see my kids or meet my friends, or do anything.

Physical health and being able to carry on with daily activities was also related to not feeling pain in the body. As Rose said:

You feel free, want to do anything. You don't feel pain, nothing wrong, that's healthy.

Some mentioned that health was the absence of disease, not having to go to the doctor, or not having specific problems with the body. As noted by Wendy:

Health, um, not having aches, no health means not having to go see a doctor. My concept of health from very young is if you don't have to go see a doctor, you are healthy.

This idea was reiterated by Alice:

Healthy means to me, absence of illness, okay, no illness. And when you see a doctor, no medication, can do daily activities, can do what I want to do.

These definitions of health tended to take a more biomedical focus and point to the more tangible aspects of the physical body.

“Be Happy”

All participants spoke about being “happy” – that having good health meant that one was happy, and had the opportunity to do the things they chose to do. Some women, like Grace, explicitly related mental health to happiness. She explained:

Healthy means. I think, physical healthy, healthy means you feel good, and also psychologically you feel happy. You can lead daily life, happy. I think happiness is most important, to feel comfortable.

Having a good attitude toward life results in positive mental health and happiness.

Wendy explained:

To me, mental health is, um, being able to wake up in the morning and say, it’s a beautiful day... Well, I always have a very positive outlook on life. I never take things too seriously and I don’t worry.

Tina concurred with the need to have a good attitude:

I think its [health] the attitude. If you have a pleasant attitude, I think it helps you.

Some women perceived mental health in terms of worrying. Worrying was seen to produce negative emotions that could result in poor mental health. Liz offered this explanation:

I’m very easy to get worried, that’s the problem, very easy to get worried, even a tiny things. I’m very easy to frighten for the future...I know that and I try to control it as best as I can. So be happy, joy to the world, just like that. If I can control it, I should be good in health, in spirit, and in mind, or I will become absent minded in the future.

This sense of worrying, particularly being burdened with things that one could not change, or had little control over, adds stress to one’s life and unnecessary unhappiness. Julie further expanded on this point:

[F]or the healthy spirit, so try to think, don’t think about the bad things. Try to forget those things, and remembering for the happier would be better, yeah...I’m always doing things like that and sometimes, I talk with my friends.

Sometimes they have some problems, but it can't be changed, even if you think of them for several years, it doesn't help. So I always tell them, you can't do anything with that. Trying not to think about that. You will feel more happier. Yeah, sometimes, I think I got the happier spirit, because I always forgot the bad things so quickly.... You can let those things, you can, you can't help. Maybe you already try to do things to solve the problem, but you still can't do it, so forget it. And then, maybe you can make the day more easier.

Further, many participants linked stress or worry to sleep patterns. Being able to sleep well indicates that the mind is free of worry and therefore, one is mentally sound as restful sleep is needed to refresh the spirit. Rose commented:

This I don't feel too much about mental health, because I sleep well. I sleep very well, when I go back, I sleep right away, so I don't think I have any problem...If you, if you think too much, especially before you go to sleep, you can't sleep, right? I think I control this quite well. I don't think anything, and I sleep.

For some women, their belief in God helped to reduce their worries. Wendy talked about her spirituality and strong religious beliefs that gave her peace of mind:

Well, I believe in God, and I believe He is, He is the giver of life and He is, He is, um, in control of my whole being, my everything. And I accept that, and therefore I have no worry whatsoever, um. It's not that I'm superhuman, or anything like that, but where there are things that troubles me, or affects me, in whatever way, I might, I might struggle with it for a little bit, but then I know I need to let go, and let God take over. So as far as spiritual life, I think if you have a strong belief in God and know that He is there for you all the time, and be able to trust Him, and, and you know, let Him take over your life, then you're okay.

Many women did not use the terms "mental health" or "mental illness" when describing their perceptions of health. This could be, in part, due to the fact that mental illness is considered "taboo" in Chinese society and hence, related issues and problems are not to be discussed openly (Fung, 1998). Perceptions of mental illness may be related to the misdeeds or even misplacement (i.e., *feng shui*) of ancestors, and its manifestations are then

seen in living relatives in forms of physical or mental illness. Hence, some women needed prompting to consider mental health when thinking about overall health.

Socializing brings happiness.

Socializing with family or friends, and not being lonely were also mentioned by most of the participants as related to their happiness. They viewed being in the company of others to be able to talk about different things, share ideas, and receive support as important to (mental) health. As Amy revealed:

One thing, if I don't join the exercise class and I always stay at home and I feel, you can say, sometimes I feel lonely. And you know, my children, they all grown up, they have their everyday, they go to work, and only myself in the house...so if I go to the class, I can sometimes talk to friends there, so makes you more happy. So we can feel social. It's better than stay home... Well after I joined the fitness, I meet many friends and I talk to them, and you have so much support, it make me happy.

Wendy explicitly made the links of socializing with health:

Makes you more healthier physically and mentally to associate and get together with friends. I think so, I think its very important.

Joyce added to this as she said:

If you go over to friends, you're socializing, you're happy. Exchange ideas, see what other people are doing in their lives.

In particular, these women felt that socializing with family helped to build and foster relationships within the family. For example, Julie spoke about renting a badminton court weekly in Hong Kong to play with her husband and daughter. She said:

Money is not so important, because it is not so expensive to hire the place, but the time is more, more hard to find out. So we try to find, because I think its just like find a treasure, if you can find the time to do the exercise. So we are feeling so good, because we can know each other more, within the playing time.

Liz also spoke about walking with her husband and daughter on a regular basis as a means of building such relationships. She said:

I enjoy it [walking]. That is the family gathering. They like to go together with me....I think we can join together, speak something, outside and to make a good relationship.

Family relationships are particularly relevant, as family is highly valued in Chinese society and bonds between parents and children are fastidiously cultivated, reinforcing the interdependence and centrality of the family unit (Fry et al., 1997; Keith et al., 1994). Positive interpersonal relationships lead to emotional harmony and balance in life, which in turn, leads to good health (Fung, 1998).

Body-Mind Relationship

These women discussed their concepts of health -- the body, being happy and socializing -- as interrelated and to be equally important. Grace commented:

I think of physical health as the basic one. When people think of healthy is the body is okay, physically okay. But I think mental health, psychological health, and especially spiritual health carries the same.

Good health was ensuring that all of these components were maintained. Liz explained:

Because you are healthy, happy, then your spirit will be good. And you are happy, you won't think the bad things, and then your mind is good. These two will get your health.

Some women made specific connections between mental and physical health. For example, Helen felt that having physical health then leads to emotional and mental health. She stated:

When you have the body health, you are confident, eventually your mind and spirit come to health too.

Conversely, Wendy made explicit links between mental health affecting physical health:

Mental health to me is like you're always worrying about something or you're not able to, I don't know. Um, if you're burdened with stuff, I don't know what it is, that will affect your sleep, your eating, and that's what I think will affect your physical health. So I can see that in people who is always worry about something, always think there is something wrong, you know.

Tina concurred with this connection between mental and physical health. She discussed a friend from China, who was sent to Canada by her family for an arranged marriage:

She's not happy then, I think she got depressed and she is sick.

The body-mind relationship articulated by these women represents a holistic view toward health. These women's perceptions of health are consistent with the 1946 World Health Organization's (WHO) definition of health as "concerned with the physical, mental and social well-being of individuals and not merely the absence of disease and infirmity" (Naidoo & Wills, 1994, p.4) as well as the more recent 1984 WHO definition, "[Health] is a positive concept emphasizing social and personal resources, as well as physical capacities" (Naidoo & Wills, 1994, p.21). Grace (who was a retired nurse) explicitly related her definition of health to these WHO definitions:

I don't quite remember the definition of health by WHO, which is, I agree absolutely, its mental, physical, and spiritual.

"Good Luck" and "Good Genes" vs. Control

While these women described health as holistic in nature, which has inter-related elements of the mind-body connections, some women also expressed health as a function of good luck and good genes, both of which were beyond their control. Joyce talked about "being lucky" because she has good health at her age (59 years), and Liz added:

And very lucky, for my family, the both of them [parents], and also my sister and brother are okay. So maybe there's lucky for me.

The notion of luck may be associated with good deeds and virtuosity of the individual and that of their ancestors, which is manifested in good health and longevity (Fung, 1998).

Many women related their own health status to that of their family's health and genetic predisposition. For example, Lynn discussed the health status of both her family and that of her husband, to make this point:

My husband, he is good, he do a lot of exercise. Because he think his family gene is bad. His mother passed away when he in university, second year, for stroke. Second stroke, pass away, his mother. His father, before we got married, heart attack. So he got two kind bad gene. Mother from high blood pressure, father from heart attack. So he so scared, just watch himself enough. So he do exercise, he do everyday... [but] I always got a good healthy. I got a good gene, and I got a exercise... Maybe from gene, my body already got a good gene. You never know. This hair, I never dye it. No grey hair... this gene so good, only this hair, see, yeah.

While they may not be able to control their family gene pool, it is evident in Lynn's comment that one may be able to have influence over health in other ways. Therefore, while notions of luck and fate are expressed by these women, at the same time, these sentiments are juxtaposed by a strong sense of control over elements of their health and subsequent responsibility for their health. For example, some women expressed their faith in God in helping with and enriching their health and their lives, but they also commented on the importance of doing what they can for their own health. As Lynn explained:

I'm pretty religious. I trust God. I know when you got a problem, you should pray. We should trust Him. We should got a faithful. But to do sometime your own... but your own, you should do something.

This sense of control over and responsibility for health is also highlighted in their stated actions. All of these women discussed diet and exercise related to health. They believed they have control over these specific health behaviours. Liz's discussion of her actions toward diet illuminated this issue of control for health:

It [diet] means to keeping myself, that is to take care of nutrition. Yeah, in the past, a few years, I won't, I won't care about that. When I buy the biscuits, the package of biscuits, I won't see the nutrition first. Right now, when I got to take a new pack, there is a new kind of biscuit for me. The first thing to do is to see the ingredients, then to see the nutrition. Searching how much the unsaturated fats, energy, protein, and cholesterol. Because I should keep fit in my ages.

Many women expressed their control over these aspects of health, and their sense of responsibility for not only their health, but also the health of their family. For example, in relation to diet, many women had the role of buying groceries and meal preparation. Therefore, their diets and what they considered to be healthy eating were shared with family members. Liz continued on her discussion of diet and her responsibility for the family's nutrition:

From that, start from that moment [husband's cholesterol problem], I know that the nutrition for he and for me is so important...I take care of the nutrition of the whole family. No fat, no fat, low salt, less cholesterol. That's just what I can do, because I want to live longer.

This sense of responsibility and control for their health as well as their families is further illustrated by Julie, as she said:

He always, he also want to doing the walking, because he needs it. Because I always mention him, oh, you must take, do some exercise. I'm always, so he bought the walking machine in the basement now.

The health of the mother was seen to be related directly to the health of the entire family. Therefore, all of these women accepted this role of gatekeeper of health for the entire family, a role they took very seriously. Lynn highlighted the importance of the role of the mother as she said:

Yeah, you know, women, especially mother, so important in that one family. Mother healthy, then this family will be happy. Will be, because I grow up in a healthy family. My mother, she never sickness, not never...If some mother sick, sick, whole family will be so miserable, because already don't talk too loud, don't, don't do that, because your mother is sick, or something.

As seen above, while these women may accept certain aspects of their health as out of their control, they also see an active role for themselves in maintaining their health and that of their family, and take control over and responsibility for their actions. Understanding how these women define and perceive health as holistic in nature and interrelated provides a contextual base for further insight about health as a cultural object. The value and importance of health to these women at this time in their lives will now be examined.

Health is valued

The questions “What does health mean to you?” or “What does being healthy mean to you?” revealed not only how these women defined and perceived health, but also how much they valued their health. Overwhelmingly, all of the women voiced health as very important to them. Women related having overall good health, as a vehicle to be able to participate in any activities they choose, and to be able to enjoy their life. Liz explained:

So if I didn't have the health, I can't see my future, good or not. I can't enjoy the world anymore because you can't go out with your poor body, right?

Susan added to this idea of good health and opportunity:

I'm healthy, so I can carry on with what I like to do....so maybe that's an advantage, to participate or to do what I want.

Therefore, need to maintain good health may be seen in terms of quality of life, where good health gives them the opportunity to do the activities they choose and to enjoy life. While some women expressed the desire to live a long life, it was more important to have good health throughout life. As Alice reported:

Because I want to be healthy, and I know that its, um, when a woman getting older, you have osteoporosis, and um, that might affect my quality of life. And I want to be healthy and to be well when I retire.

Jane discussed being less concerned with the number of years of life, and more concerned about the quality of those years; longevity was only desirable if one had good health to enjoy these years. Helen echoed this sentiment:

I just want to keep young and enjoy my life.

Health was compared to monetary value by some women, again highlighting the value of health with quality of life. For instance, Tina stated:

Healthy means to me a lot. It's better than money. And better than something else, you know... When you have a good health, you can do anything. But when you don't have a good health, but you have money, what can you do?

Julie reiterated this thought as she said:

I, the meaning is, even you, you are millionaire, but you don't have the healthy body, you always sick, or you ought to lie down on the bed, you don't have energy to spend the money, yeah. This is true. I say, you must keep yourself in the good, healthy way... So if you have got health, you can do a lots of things, you can do, you want to do. So I think healthy is the very important part of life.

Health Is Increasingly Important As They Age

Health as a cultural object has taken on similar meaning and significance to these women as they have aged. Growing older has proved to be an impetus for their considerations of health. This sentiment is exemplified in the words of Helen:

Now at this age [50], health is everything. Doesn't matter give you the whole world. When you don't have health, you don't enjoy life.

Liz echoed the importance of health as she raised thoughts of the future:

So this period for our ages [50+] is very important, is very important to get money. And then good saving for our future, to retire. So this period ages, is take care your health period.

All women reported having an increased awareness of and concern for their health as they age, prompting them to take action to promote health and wellness. They stated that

when they were younger, they were never concerned with their health or actively pursued health-related behaviours because they all felt that they had good health at that time. As

Amy stated:

When I was young, I seldom sick. And after, after I retire, about 3 years ago, then I find that my health is not as good as before. Maybe I'm just getting old, maybe I'm just sitting in the house, and I didn't move a lot. That's why my health is not as good as before.

Liz brought forth the idea of mortality, which has become more apparent to her as she has grown older. Her comments highlighted the need to take action for health with age:

Because when I'm younger, I'm not scared of death, scared of death. Yeah, now I'm older and older, to become a senior, so I face, I'm going to face that. In order to improve the scaring, I should strengthen myself first.

This value and attitude toward health as they age holds true for all of the women (except for Julie, who stated that she was concerned about her health when she was young because she felt sickly), regardless of place of birth, length of time in Canada, rural or urban upbringing, socioeconomic status or education.

Many women talked about activities they engaged in when they were younger, many of which would be considered health-promoting. However, these women reported that as they were not previously concerned with their health, their actions were not motivated by thoughts of maintaining their health or enhancing well-being. In their younger years, their actions related more to the enjoyment of the activity, rather than to health. For example, Alice explained that personal enjoyment and socializing with friends was the main impetus for swimming at the beach, rather than concerns about health and the benefits of exercise:

When I was little, I do enjoy swimming. In Hong Kong, you know, the beach is nice, you know, and I enjoy swimming, too. For a little while I do, but for a few years, I did very enjoy, and I did try to go to the beach whenever I can...with my friends. You know, when you're a teenager, young people, you go to the beach, kind of have fun, that kind of thing.

For some women, their current attitudes towards health were related to traumatic events in their lives. Some women spoke about the premature deaths of relatives or friends who died at ages similar to their current age, prompting them to consider their health. Grace talked about the death of her mother as one such life-changing experience:

Well, the death of my mother also influence my thinking, my [concern] for health, and my thinking. I will pay more attention to my health, because the death of my mother is the only life trauma, during all my life. I've been so lucky to have a very smooth life...It's a very, you can say, peaceful, no ups and downs, the only unfortunate thing is the death of my mother. She was so young, she died at the age of 59, in '85.

Lynn offered similar reflections on the passing of some friends as an impetus to consider health at this time:

Because my friend passed away. I got a friend, 10 years ago, 2, 3 friend, got a cancer. One is 48 years old...3 months, she passed away. So fast. Then another friend too. She passed away. All my good friend. So I say, oh, maybe I should watch my health.

As outlined above, health is a cultural object to these women. Health is seen as increasingly important as they age and is necessary to ensure a good quality of life when older (and in retirement). There is a sense of physical decline in health with age as well as the realization of one's own mortality, both of which prompt these women to maintain good health as they age.

Cultural values of aging and family.

The notion of aging related to health for these women is significant and appears to be strongly influenced by Chinese culture. Aging may be seen as a more positive experience in Chinese culture, which may be due, in part, to the relative importance of family in Chinese

society and the concept of filial piety, the sense of obligation children feel toward their elders (Fry, 1995; Fung, 1998; Hamilton & Zheng, 1992; Koyano, 1996).

As noted above, many women spoke about negative aspects of aging, particularly related to the physical body and mortality. However, at the same time, many of these women spoke about getting older in a more positive light. Within Chinese culture, old age (starting at age 55) is a time for older people to reap the rewards of their hard work and to pursue leisurely activities (Fry, 1995; Holmes & Holmes, 1995). For instance, Grace referred to her ability to participate in many leisure activities (e.g., line dancing, aerobics, Tai Chi) since retirement, which acted as a positive signal for aging. She reported:

Yeah. I should have done [the exercise], but no time. I can only do after retire, so I have my retirement now. My retired life better, like this, what I told you.

Liz also discussed many of the activities that she would like to pursue when she retires, as then she will have more time for herself, again indicating a more positive outlook to retirement (and hence, aging):

Maybe in the future, I will go to the Chinese cultural activity centre, to learn something. Something to, singing, I like the Chinese opera singing. Maybe I will enjoy it in the future. But not right in the moment.

In order to enjoy these leisurely pursuits, good health as a prerequisite is implied and highlights the need to these women to maintain their health at this time.

The concept of aging as a positive experience is also related to the importance of family. Family is considered the central unit in Chinese society, and is highly valued (Hamilton & Zheng, 1992; Keith et al., 1994). The value and strength of family is based on having multiple generations still living at the same time and preferably, in close proximity. With increasing age comes increasing respect and power within the family (Fung, 1998; Fry,

1995; Holmes & Holmes, 1995). Therefore, health is essential in extending the family line and for the aged, to enjoy their position in the family. Helen explained:

They [Chinese people] want to live long and healthy...that's what they want, to have 5 generations together...Five is very hard, five is very special.

Longevity, free from major illnesses, is a virtue given by Heaven for one's good deeds (Fung, 1998). Hence, evidence of multiple generations of a family still living is proof of the goodness, not only those alive, but of ancestors as well.

Many women commented on wanting to live longer, to enjoy their children and grandchildren, and to be present for significant milestones in their lives. Lynn highlighted the importance of family, which gives one a sense of stability and interdependence. She said:

For me, the family ties so important, Chinese people, so close, so close, always from generation to generation in the family. So long time ago, when my grandma and grandfather, I saw them. I know I have a grandma, grandfather. But my husband family, he never saw his grandparent. When he was born, his grandparents already passed away...So you can see so important the health, for two family. In his side, he never see his grandparents, my daughter never see her grandparents...So important for me to keep good health and keep my longer, longer, now change, many things for [grandchild]...But still for when myself, I should keeping healthy, then I want my grandson, granddaughter to see me, and then, that would be nice for generation to generation together.

Family bonds are actively cultivated and children are taught from an early age about the sacrifices of their parents to provide a better life for them (Fry et al., 1997). Liz discussed this point, indicating her desire to live longer and to reap the rewards of raising a child:

To see my girl's future. We are paying effort for her and I want to get happy from her, right?

In Chinese culture, another affirmative aspect of aging is the shifting of responsibilities from parents to children. Old age is a time to be cared for by others, in particular, one's children. This concept of filial piety, the duty of children to obey parents and to show respect and care for elders, is based on one of the five key relationships as

outlined by Confucius (Fry, 1995; Fung, 1998; Holmes & Holmes, 1995). Alice talked about this concept of filial piety as common to most Chinese people around the world:

Probably we all grow up the same. You know, you have to, maybe the philosophy, it's so common, so that you have to obey your parents. That was my time, okay...But still, parents tell you, you have to respect your parents...everyone did the same. You respect your parents. You don't talk back, to your parents, okay, so I guess, just the atmosphere is there. I think it's probably the culture. You respect your elders, you respect your parents.

Liz explained the filial notion of caring for older generations:

The rotation, something like that. You should take care of your mother, then your child should take care of you. This is by generation...because Chinese senior culture, I will pay you first, then I will get from you. I take care when you are children, I pay you too much money to get education, then when you grow up, you should repay me the money for retire, for the reward. You should pay me by return...The Chinese culture is like that. They should take the reward by return...They should enjoy the reward from their children.

While old age may be seen as a time of fewer responsibilities and to be cared for by others, another key principle is not to be a burden to others. Freedom from major illnesses saves the family from torment and anguish, and reduces any burden, financial, personal, or emotional (Fung, 1998). Liz emphasized the burden of illness, using the example of her in-laws:

And then my father-in-law died. He had poor health for one year. So I can see what it is a burden to my mother-in-law because she would take care of my father-in-law for a whole long year.

Therefore, maintaining good health and wellness as one ages is paramount as it relieves the family from such burden. Helen's discussion of her mother illustrated this point and her mother's subsequent sense of responsibility for health:

She [her mother] always say, she wants to take care of herself. If she got sick, you know, the kids would be worry a lot...In case she keep herself healthy, so that we don't worry. In case she cannot walk, you know, the children have to, she give too much work, you know, responsibility for the kid...And to keep herself as healthy as she can, so she started to exercise.

The women who spoke of filial piety emphasized that this was a strong belief and attitude prevalent when they were growing up and that of their ancestors. However, these women expressed that they held different expectations of their children. They felt this was partly due to living in Canada and changing attitudes at this time. For example, Alice stated:

Nowadays, there's more different. Now the new generation is more like the Western generation, more maybe democratic.

Helen discussed her own sense of filial duty toward her mother and the changing attitudes of the new generation:

Because Chinese, in the old days, how come why they have a lot of kids, because they think, when you have a lot of kids, children, when you getting old, the children look after you. That's what people think. But because when we come to North America, Canada or the United States, because we have a pension, and the kids seem a little bit spoiled now. People get, have a less kids, like a 2 kids or a 3 kids or a one kid in the family, so its different now. They think, the way they think is different. They don't think from our generation...[but] I still have that feeling, I take care of my mom.

These women recognized Canada as a different society from their countries of origin and as a result expressed changing expectations of their children; however, some women expressed an underlying desire that their children uphold their filial responsibilities. As Liz stated:

I should say, I need you to take care of me in the future. To be good girl, just something like that. But inside, I would not much hope on her body, otherwise its unfair for her.

While longevity may be valued in Chinese culture and has been expressed by many of these women, there were a few women who were less concerned with longevity, feeling that there is a time for everything, which is beyond their control. These comments were made most often by those with strong religious affiliations. For example, Wendy said:

No, no, I think, I don't think about age. Maybe because my grandmother lived to be 90-some years old, both of my grandmothers. And male side of my

family, they pass away early...So lifespan and age doesn't mean very much. Maybe also because we believe in God, there's a time, when it's our time, it's our time. So no, its never, never an issue with me...I guess it's the way we were brought up, in a Christian home, it was never a concern.

Helen echoed the same sentiment as she said:

I don't expect to have a long life at the time. When its time to go, its time to go. I believe in those things, you know.

Health has taken on increasing importance as these women age. While some negative aspects to aging have been voiced, growing old may also be seen in a more positive light, particularly through a Chinese cultural lens, where family may act as a buffer to aging, but also as a reason for their desire for a long life. Health, therefore, is increasingly valued, as good health is needed to enjoy this golden time of life, to be cared for and revered by others, and to extend the family lines. As such, these women express ways in which they can maintain their health, which will be presented in the following chapter.

Chapter 5

Results

While the previous chapter provided the context and insight for understanding health as a cultural object and the meaning and value of health to these women at this time, in this chapter, I will examine what these women do to maintain their health and enhance well-being. These women believe they have some control over aspects of their health, and subsequently take responsibility for actions towards health, particularly in relation to diet and exercise.

What these women do for their health highlights the interplay of Western and Chinese cultures. These women represent an interesting mix of cultures, as they all were born in mainland China, Hong Kong, or Taiwan and immigrated to Canada at various times in their lives. As noted previously, this group of women typically demonstrated a moderate level of acculturation. In particular, those women who immigrated to Canada when they were young (in their early 20's or younger), perceived their attitudes and beliefs to have been influenced by both cultures. For example, Joyce, who immigrated to Canada in 1950 at the age of 12, stated:

I'm almost like educated here. But I do know a lot of Chinese culture and a lot of Chinese customs. But I feel that, like I am more Westernized...I'm educated here, so I'm different.

Alice also highlighted the issue of acculturation and this notion of biculturation (i.e., to have two cultures):

No, okay, I guess I want to mention, you know, unfortunately, I'm not 100% Chinese. You know, I'm a Chinese that has been influenced by the Western culture. Okay, so that's it...I'm half and half, you now. But if you talk to my

daughters, they might look Chinese, but she is 100% Canadian. But for me, I am West and East. I embrace East and West.

It is acknowledged that there is no monolithic “Chinese” or “Western” culture, that cultural influences will vary according to the individual’s age, socioeconomic class, education, and other life experiences and circumstances. Alice reinforced this view as she articulated:

And I wanted to, to, um, mention too, that, I sort of a Hong Kong culture. It’s not exactly Chinese culture. But anyway, Chinese culture is so diversified, you know, it depends on what part of China you come from and Hong Kong, is very, somewhat Westernized a little bit, okay.

It is through a cultural lens, at the interface of Chinese and Western cultures, that such an understanding may be gained regarding what these women do for health.

What These Women Do For Health

The multi-faceted view in which these women define health is exemplified in the words of Grace, who discussed maxims of Chinese culture related to things to do to maintain one’s health:

I don’t know how old it is, but it is popular among those who are conscious for their health and well-being. It says here, people live in this world, its only pass by. We are travelers in this world. We don’t take all things so seriously. Of course, when you go to work, you have to take your work seriously. But not too serious of certain things. So this is how to keep you healthy. Wake up early. Eat only little more than half full, 70%. Lots of smile. Keep yourself busy. Sleep well. Have more exercise. Don’t worry too much. And keep you young... This is *yung go chi dong* – the way to keep you healthy and happy... One day, you walk 5000 steps. You don’t eat too much. Always happy at heart. Like people like you love yourself. Have 7 hours sleep. Have reasonable rest. Don’t always grumble. Help others. Love others like you love yourself. This is all things to give you psychologically, physically healthy and well-being.

When asked “What kinds of things do you do to stay healthy?”, some of these maxims were echoed by all of the women, incorporating elements of physical, mental, and social health and well-being. For example, Liz listed a multitude of actions she took to maintain health:

I’m doing now, just to keep fit myself, is the thing I doing now. Just to be think, be happy, don’t worry, don’t doing much. Just for, just good for mental...No smoking, no drinking, no like social activities, low, not much social activities at night, enough time to sleep, and then, try, you should go to see the family doctor once a year for medical check-up, and try to keep yourself fit, just drink a lot of water.

Susan added to this:

I eat well, sleep well, I do exercise. And I try to have my socialization. I maintain my studying, to keep my mind going.

In particular, diet and exercise were reported by all of the women as the two most important elements to maintain health and will be presented in detail throughout this chapter. As expressed by Helen:

Exercise is one thing [for good health]. Watch what you eat is most important. The food is most important.

Diet and its Relationship to Health

Although the primary focus of this study was on physical activity and exercise and their relationship to health, all of the women voiced the importance of diet to health when discussing what they do to maintain good health. In fact, diet was the first factor mentioned by most participants. As Joyce stated:

Other than eating well, I think that is the most important part of your health.

Lynn echoed this sentiment:

Because I think, I thought too many people don’t control themselves, then, like um, eat a lot of meat, or drink a lot of wine, or smoke. Won’t improve their health. So I think eating, so, so important to eat. My husband say exercise important, but I say eat so important.

As previously noted, diet was one factor that these women felt they could control for their own health and that of their family. These women had very clear ideas about what they perceived constituted a healthy diet, for example, diets that included less fat and cholesterol, less meat (particularly red meat), and more fruits and vegetables. Rose articulated this conscientiousness regarding fatty foods as she stated:

Not so much, um, like take off the oil all kinds of things. Don't eat so much skin, or something like that. And normally, I eat lots pork, pork have lots of fat. I take off the fat. But still just a little bit careful.

Wendy also described her eating habits, clearly distinguishing those foods that were healthy from those that were unhealthy:

I do try to eat healthy. I mean I love my greasy food, but I try. Um, I do try to get a lot of fruit everyday, so as far as nutrition, I know what I should be doing, I know what I shouldn't be doing, but its very difficult to not eat greasy food.

While these women express the types of diet that are conducive to good health, also important is the amount that one consumes. Many women repeated the maxim that it was not good to eat too much and to eat in moderation only. As Claire remarked:

And every noon, one bowl of rice. Not too much. I see some people, one bowl, two bowl, three bowls. I say, wahh, too much, not good. Only one bowl everyday... Eat so much, not good. Chinese people, before my teacher say, eat, not so much. You know, you have 10. Don't eat 10, eat 7 or 8. Too much is no good. So much in the stomach, stomach can't work. Make the health no good.

Joyce reiterated this point as she said:

It's just knowledge you know. The bad food, not to eat. But I eat everything, as long as you eat in moderation.

The Impetus for Diet

While these women voiced strong opinions now regarding diet and its relationship to health, this was not always the case. Growing older, with its related ailments and weight

gain, has been cited as an impetus for their concerns with health and subsequently its relationship with diet. The increasing value of health as they grow older has made these women receptive to health messages from health care professionals or from mass media (e.g., magazines, television, radio). Media, particularly English language media, have played a role in shaping their ideas about diet and its relationship to health.

Growing older.

As previously discussed, growing older has been a main impetus for these women to be concerned about their health. All women (except one) reported lack of concern with their health, and in turn, diet, until recently. As they grow older, these women stated that they have realized the importance of diet in relation to health, and valued diet for its beneficial elements. Many women have related growing older with the onset of physical decline, and therefore express the need to be careful about what they eat. For example, Liz explained:

It's very dangerous at 50. If you can't control yourself to keep fit [healthy], you get problem in health, because you can't digest all the things. Your organs began to run down, yeah. That's my feeling.

Most women also voiced concerns regarding weight gain, which many felt was related to age. Rose explained:

But the since. 10 – 15 years, oh, I gain so much weight. I'm so fat now. Gain so much weight. I don't know why, that I saw on the radio, people say the things, since about 40, after 40 – 45, easy to gain weight, get weight, have to watch yourself. People told me, all kinds of things happen because you get too much weight. Too heavy, then all kinds of problems will come....but before I didn't gain weight, but now, I gain weight.

Excessive weight gain was seen to have negative physical effects (e.g., related to the potential for certain diseases). For example, Tina expressed concern about these negative physical effects:

Yes, if you get fat, I read those magazines, if you get fat, you can get the diabetic, high blood pressure, causing problems. So that's why I have to control my weight.

Weight gain, or as several women stated "being fat", was also related to body image and self-esteem. Diet and exercise, individually or in combination, were seen as means to reduce weight and thus, improve body image, which influences both their physical and psychological health. As Amy remarked:

I think I was fat...you know women, they always think they are fat.

Receptiveness to health messages.

These women discussed the many health messages that they heard, primarily from health care professionals and the mass media, messages that they were receptive to at this time in their lives. In some instances, women actively sought out the messages, by asking health care professionals, or by watching specific television programs regarding health. Some women received advice from health care professionals during regular check-ups or if they had specific ailments (e.g., high blood pressure, high cholesterol). These women (and Chinese in general) expressed great deference to those in authority, particularly medical doctors and health care professionals, as these professionals are considered to possess the relevant knowledge and skills and are technically and morally able to make the most beneficial decisions on their behalf (Fung, 1998; Lai & Yue, 1990). Hence, these women complied with their health care professional's advice to change or modify their diet. All of these women went to Western-trained professionals. As Rose said:

I think about 5 or 6 years ago, I find I have high cholesterol. Doctor give me the sheet, say these things, don't eat. These things I just watch.

Julie added that she changed her dietary behaviours, and subsequently, affected her husband's diet, when her husband was diagnosed with high blood pressure. She reported:

Because just like this age now. I just try to take those fat from the meats, and I do all those parts for my husband too, because he, the doctor told him not to take so many fat meat, yep. For the healthy, you know... Because he's got something, is it like the blood pressure, I think high blood pressure.

The media also has a powerful influence in spreading health messages. Most participants talked about how Chinese and Western media (e.g. television, newspapers, magazines) emphasized both a healthy diet and participation in exercise to maintain good health. Of particular relevance to these women were gender-specific ailments, most notably osteoporosis. For example, Joyce discussed the messages she heard:

[f]rom reading English magazines. You know, all those Chinese people, getting more and more hunchback when they get older. Because I don't think they have enough calcium. And that too, I read in a magazine. And after that, I noticed when I was in Chinatown. I look at all the old people, a lot of them are like hunchback. Chinese culture, they just believe in their own herbal things.

Women internalized media messages regarding osteoporosis, specifically increasing calcium intake for its prevention. Helen reported:

All my life, I never drink milk or anything... I'm hearing it from the news, yeah. And a lot of the people in the same [fitness] group [say]. "Oh, I start drinking milk"... so I have to drink milk.

Some of the participants who have been in Canada for a long time felt that their diet was more Western (e.g., eating sandwiches for lunch, drinking milk, eating cheese) as their length of time in Canada has given them preference for a Western diet. Many felt that a Western diet provided more calcium in the form of dairy products and thus was related to preventing osteoporosis. Dairy products are not common in a Chinese diet. As Lynn said:

I eat healthy, I eat food healthy. I drink a lot of milk. In my country, not too many people drink a lot of milk.

Based on this media information, osteoporosis was not their only concern.

Participants aimed to prevent the onset of other diseases or illnesses, specifically high blood pressure and high cholesterol, which they related to cardiovascular disease. Lynn reported:

Yeah, because right now, you read the newspaper, you read the magazine, they say, oh, meat, red meat, cause for the cholesterol or for the high blood pressure... Because too many magazine or TV say meat cause your cholesterol, for your heart disease, should cut back the meat. So I just stopped. Cut back... Yeah, yeah, before 10 years ago, I got concerned. Before, I never. I always got a good healthy.

Most women reported that they received most information from English media sources. In fact, Alice commented that she preferred to receive information from English sources of media, as she found it more reliable than what was found in the Chinese media. She stated:

I don't listen to Chinese media. Because at home, my children grow up speaking English, so I think I find it more, more, um, I like the English media, more knowledgeable, and the terminology, that kind of thing... because I am, now, I came over in 1960. Okay, now 40 years here. I am Canadian, so its just, you know, you feel more comfortable. And I think it may be better quality, the information too.

However, her comments may be related to her level of acculturation (moderate) and to her education as a health care professional.

While aging may have associated negative connotations of weight gain and increase for potential ailments, these women focused on wellness rather than illness and respond to messages heard in the public domain regarding diet and health. As shown above, many of these women perceived diet as a means of preventing disease or illness (e.g., high blood pressure, high cholesterol, weight gain) or as a means of controlling or improving their condition.

Relationships between Culture and Diet

These women perceived some traditional Chinese foods to be non-conducive to a healthy diet. They reported that many Chinese foods were fried, and skin and fat were left on meat for consumption, which as noted previously, is contrary to what they relate to a healthy diet. This became apparent as Amy stated:

I think so, too because Chinese food, they are very oily. You know, people, they like to eat the fat. I don't know your family, but in our family, they all like to eat, like the chicken skin, the duck skin, and also the fat, they also eat it... You know, the Chinese, every festival, just like the Chinese New Year, we have nine different dishes. They are all fat.

However, from a historical perspective, these foods may be considered a delicacy in traditional Chinese society. For many who were raised in environments where meat was not readily available (due to economic or geographical issues), meat was seen as a luxury that only the wealthy could afford. It would be considered wasteful to discard any part of the animal. Further, Chinese celebrations and festivities include certain types of dishes that hold special significance, many of which include specific types of meat. As Liz commented:

If you have rich family, rich financial status, you should guide with your whole family, your children to go outside. Go outside to restaurant, then you can eat a whole lot of meat. If you have no money, just stay at home. But a chicken, that's very rich dishes, a chicken. Buy a chicken for the whole family. It's a good dishes for myself when I'm in childhood... The chicken, in Hong Kong, is very, very expensive to buy a chicken. Chicken is not usually main dishes, not like Canada... Only festival, in the festival or some occasion, birthday, and something like that. You can eat the whole chicken with the family... A whole chicken for a family is a leisure [treat], very special for occasion only.

Jane also talked about the parties she hosts, similar to parties given by her parents when she was growing up, which revolved around food and serving special dishes. Abundance of food was essential so that when guests left, the dinner table would look untouched. This was considered a sign of wealth.

While many women expressed disdain for some elements of a Chinese diet, particularly the abundance of meat and the eating of skin and fat, many women also expressed positive elements of a traditional Chinese diet that they considered to be healthy, for example, eating fresh cooked vegetables, and eating rice daily. As Joyce stated:

I eat meat and vegetable, just like all Chinese, cook rice every night...And I don't buy a lot of frozen or ready-made food. I think there are a lot of chemicals in them... Well, you read a lot about those ready-made foods, different chemicals causes cancer. Everything causes cancer.

Health-enhancing herbal remedies and soups.

Many women spoke of the value of making and eating Chinese herbal soups for preventative reasons and to enhance health and well-being. Some women strongly believed that soups and herbal remedies promoted wellness by cleansing the body. Considering their holistic orientation toward health and desire to maintain health, it is not surprising to learn that many women used these remedies. Traditional Chinese medicine aims to achieve and maintain balance of the body's systems, and the use of herbal soups and remedies may be one way to attain this balance. Joyce discussed the value of making and eating Chinese herbal soups:

I also eat a lot of *bo* – you know, like Chinese medicine that you boil soup with, you feel a lot of energy... There's so many ways.. You can eat it for blood circulation, for backaches, and for headaches... just every once and a while, to eat ginseng, its like cleansing, maybe every two to three months.

Grace expanded on the value of these herbal remedies and soups for health promotion:

I believe Chinese medicine is good for prophylaxis, for prophylaxis treatment, to strengthen your system, for systemic health... I always think Chinese medicine, with history, more than a thousand years, must have its value, especially for promoting the systems. making you more healthy.

Tina commented on the benefits she perceived to drinking these soups, which reinforced her belief in them:

After I got married, then my mother-in-law makes all sorts of herbal soups and ginseng, and those things, I feel very strong. When I work, I don't feel tired. So I think that can help.

This notion of balance in traditional Chinese medicine was explicitly reported by some of the participants, and practiced by many of the women. They discussed the concept of hot and cold foods related to ailments and the importance of maintaining the balance between the two. Helen used the example of childbirth to illustrate this notion of balance. After childbirth, heat and other essential elements are thought to be lost, resulting in an imbalance of the body and susceptibility to cold (Fung, 1998). Helen said:

Especially after you have a baby. when a person has a baby, the women, we eat a lot of ginger with the egg, and the sweet vinegar, for them together for 1 month, we eat them. I think those are very good for after, replace your energy after you have a baby. Get rid of those, you know, use the blood from your body, and especially after you have a baby, your body tends to be very weak, and all your pores, your head, they're open. So the wind, on the outside, cool air can go inside hurting your body. After eating ginger will get rid of those...especially the first month, first 30 days after you deliver the baby.

Lynn further explained the concept of hot and cold and possible ailments as a result of the imbalance:

Like my mother always say, oh that food, so, so cold. Its cold, not like you touch cold, like in Chinese always say hot and cold, you know. If you eat, like too many chip, too many fry, make you feel hot, no taste hot, means your body, like the hot, no temperature hot, like you will be um, feel, can't sleeping, can't you're breathing, bad temper, that is mean like that...Like, um, cold, cold like no temperature cold. Make you feel your stomach no good...So Chinese people use a lot of ginger, you know ginger,. It's the hot, belongs to hot, yeah. So if you like, got a what, like a rash, some people, one good thing for you, cook with lots of ginger and sesame oil and wine and chicken.

Conversely, some women expressed skepticism about the usefulness of Chinese remedies, questioning their benefit from a biomedical perspective. As Alice stated:

I don't believe in the herbs. I've been very westernized in this aspect...in terms of medical care.

Some women claimed very little knowledge about Chinese soups and herbs, as they did not grow up with a tradition of using them. Subsequently, they did not make herbal remedies or soups. For example, Rose commented:

I don't know those things [herbal soups], so I don't try those things.

Most women felt that both Chinese remedies and Western medicine had their usefulness and made a clear distinction of when and how each should be practiced. Chinese remedies were considered excellent for prevention and health promotion if used on a regular basis. These remedies were also thought to be helpful for chronic conditions, as the herbs are slow acting and lead to gradual improvement. Lynn highlighted the notion of hot and cold and the appropriate time for re-balance as she said:

It's [herbal soups] for prevent sickness. You already sick, its not, no its too hot. Too much for that sickness.

Tina echoed this issue of when to use herbal remedies as she stated:

The things for cure or for sickness. or the thing for daily thing is different.

Tina went on to talk about a previous experience with Chinese herbs that led to a negative outcome, which clearly delineated their time of usefulness:

My grandmother passed away when she was in her 30's, my grandmother, in China. Because when she was in the village, the medical was very bad. Hard to find a doctor and no hospitals, nothing. So my grandmother have a problem to pass the bowel movement, so nobody know what to do. So somebody ask the midwife to come to help her. So I don't know what they giving her to eat, then she passed away shortly. Since them, my father doesn't want us to see the herbalist at all. So when we were little, when we was, were sick or something, he sent us to go to the western doctor...so that's why my father never believed the herbalist.

Therefore, if one suffered from an acute illness, Western medicine was considered more appropriate as this type of medicine was fast-acting, and also if more invasive interventions were needed. Grace reiterated the situations in which each approach was appropriate in the following comment:

Some disease need scientific investigation and treatment. Some need surgical intervention. But for general health promotion, I think Chinese medicine would help...Chinese medicine can, in case of emergency that may not help, because it doesn't work that fast. It takes, the herb medicine takes time to take effect. Takes several of them, at least.

Helen added to this delineation as she explained:

To me, the Western doctor relieve, like when you have a high fever, you don't go to Chinese doctor. Those slowly heal. But when people cough a lot, like for one month. you know, stop, those go to herbal, Chinese doctor, slowly relieve your sickness. But for the Western doctor, high fever, those have to go to the Western doctor.

Physical Activity and Exercise

Along with diet, all of these women identified exercise as another essential component for good health and to enhance well-being. While the focus of this study was to explore both physical activity and exercise with this group of immigrant Chinese women, it became apparent that few women distinguished between the two terms. A few women were able to identify physical activity and exercise in terms similar to those noted in the definitions at the beginning of this thesis, where exercise was defined as a subset of physical activity. These women perceived physical activity to consist of daily activities, including activities such as housework and childcare. They differentiated this type of physical activity from exercise, which they viewed as more strenuous and with purpose, activities to be done in classes or at a gym or fitness centre. Susan reported:

Yes, they're different...physical activity, I would say is daily living. You moving around, you do your vacuuming, or whatever; daily living or your activity that you get involved. But exercise is you do it on purpose.

However, the majority of women did not differentiate between physical activity and exercise, and in fact, many women felt that they were the same. This became evident in the exchange below:

Wendy: Well, they say exercise is good for your healthy, yeah. I guess it would be, yes.

Interviewer: And physical activity?

Wendy: Well, for me, they are one and the same.

Most women did not consider their daily activities as physical activity, but once prompted, considered things like housework, gardening, going up and down the stairs as forms of physical activity. These women felt that these are activities that they must do as part of their daily routines, and as such, were not conscious of them as forms of physical activity, or their relation to health. Therefore, for many women, the links between these types of physical activity and health were not as clear as the links between exercise and health. As stated by Rose:

Just do the different activity, like house cleaning, need to clean the house, all kinds of things. Just my lifestyle, not just stay around here, move around to do something. I don't know if related to health or not and I'm not sure if I'm really healthy. just anything, I didn't try to do, find something. Just something come up, I just do it...I just tell you my lifestyle. I didn't know its make me healthy or not. I didn't know. But its just my lifestyle change.

Joyce added to this as she said:

Well, doing all the work at home, I think its enough activities all day to keep you going, especially summertime now, there's the garden, take care of all the grass to cut now, I just love doing those things...I don't really know if its really related to your health. its just things I must do.

Generally, most of the women perceived that one needed to do more strenuous activity, activity that was deliberate and conscious, to gain health benefits. Hence, exercise was perceived to produce greater health benefits than physical activity. Claire stated:

Sometime, every time you stay at home, you do your housework, little bit good for the healthy...Do the exercise good to move, housework move not so much. Move so much good for the healthy.

And echoed by Tina:

Because you do housework, you do this kind, not your whole body, just part of your body.

In contrast, there were a few women who felt that their household activities and gardening would give them a similar "work-out" as that in a gym. Some also felt that productive activities were more worthwhile and that it would be equally beneficial to their health to do their own routines at home, for example doing housework, going up/downstairs, walking to do their errands, rather than spend time and money out of the house. Rose explained:

Why don't I do something else? So I don't know if its right or not. I can do the housework, I can walking around, same thing as exercise. Why I need to spend 1 hour go to the club and do those kinds of things? I think it kind of waste time. I don't know if it's right or not.

Lynn added to this:

Yeah, my husband always said, do exercise, give your heart beating, give you sweating, for your cholesterol going, he always say that to me. Yeah, he always say, I say, I already do exercise. I do housework, I clean, I already sweat, I walk, to go anywhere...this is my exercise. Regular exercise everyday, but my husband say that not enough...He say, not enough, you should do exercise. Because he so worry, he got a bad gene. I say, okay, I got a good gene, so don't worry.

While these women indicated that they considered their physical activities in the home to be sources of exercise, they also took time in the day to engage in other forms of leisure-time

exercise (e.g., dancing, tennis). Many women were inclined to do so in a community or fitness centre, for added socialization and regular scheduling. However, some women felt that Chinese people do not join gyms or fitness clubs to exercise because it was a “waste of time and money”. As well, some women reported that they did not like the types of activities offered at gyms or did not want to use specialized equipment. Liz reported:

Not all for the culture, not for the Chinese I see these instruments. I think its not proper for the Chinese culture, these instruments...I, I not saying not good for Chinese. But Chinese not probably want to use that...Some of them is doing at home, or to the Centre, dancing. Not, won't spend too much money to buy the instrument to stay at home, do it yourself...Not want to raise money to do outside gymnastic centre...Yeah, in house, or outside, running, walking, no waste money, don't waste money.

Because the majority of women used the terms exercise and physical activity synonymously, discussion in interviews generally focused on leisure-time physical activity and exercise, as this was deemed as important by these women. Therefore, the focus of this section involves exercise (as a form of leisure-time physical activity).

Exercise and its Relationship to Health

All participants immediately identified a positive relationship between exercise and good health. They felt that it was important to keep active and to “keep moving”, and exercise was a means to achieve this goal. Rose remarked:

If you don't move, you get not healthy. Move around is good for you...I think people need to move around. You just sit there, its not right.

Many women made disparaging comments about “sitting around”, characterized as lazy and unhealthy. Claire illuminated this point:

Because I think about that exercise move, the body move, good for everything, good for the healthy, everything, good for the body, everything. That's why I do exercise....I see lady or man, sit down, don't want to move. I see people

that have the children, so fat, don't want to move. Not good for the healthy, sit down so much. I don't like that...not good for the healthy. I don't want to be like that. I move around.

Tina commented that while exercise is a good thing, exercise, like diet, should be in moderation only:

Physical activity. I think for moderation is good. but over exercise, I don't think its good. You hurt more or something.

Congruent with how these women perceived and defined health, the benefits of exercise fall into the realms of physical, social, and mental health, as well as prevention and health promotion. In particular, these women identified many concrete benefits to exercise related to the physical body—keeping the body fit and active, maintaining strength and flexibility, being able to carry out their everyday routines without feeling tired, having more energy, and relieving pain. For example, Amy highlighted the physical benefits to her:

If I don't join the class [aerobics] before, then I have always too tired, and not so much energy and my feet cramp. And after I join the class, it improve, so I am really happy...If you have exercise, our body keeps going better and better...Since I join the fitness class, I find that my health is improved a lot.

Joyce also remarked on her increased energy level as a result of exercise:

I used to go to the classes in the school, just run around for an hour in the gym. Its called Ladies Fitness, and I just loved it. At that time, I could do a lot of work, day and night. I just keep going, I'm not tired at all...[I have] lots more energy.

Consistent with their definitions of health, many women also mentioned socializing when exercising and its relation to happiness and mental health. Amy's comments revealed her enthusiasm for her fitness class and its many benefits:

But since I join it [exercise class], then maybe I talk to the people more often, and I find some friends to talk about it, and I feel the exercise, maybe help me a lot...I meet many friends and I talk to them, and you have so much support, it make me happy.

Claire also noted the importance of being with friends, and the ability to do so while exercising:

I go to the Centre, go to the Centre to do my exercise together. Sometime together, so happy you know. Talk to a friend, be with a friend together, so happy, feel so good.

Susan perceived socializing to be very important, especially for seniors. By interacting with others in exercise class gave her a sense of community and support. She said:

Nowadays, although I can't remember all their names, but very often you meet with them in the neighbourhood, in the grocery store or whatever, and we talk to each other, and things like that. I met several ladies from my building from the class too, and we became friends and sometimes we see each other and go downstairs to the exercise room and do exercise and talk, or whatever. Yes, its very nice. Especially when you are an isolated person, if you don't have much friends, or things like that, its very important.

As mentioned previously, the interpersonal relationships developed through socialization provide emotional harmony, conducive for good health (Fung, 1998).

Just as many women viewed Chinese herbal remedies and soups to be health-enhancing and a means of prevention, exercise was also considered beneficial in preventing certain ailments, most notably osteoporosis. For example, Alice reported:

I guess maybe my awareness, that I'm getting older now. My osteoporosis, I needed to do exercise. I'm aware of that now... It's good for me. I'm getting old, I know that I need to keep healthy.

Joyce added that her doctor validated the benefits of exercise to prevent osteoporosis:

Yeah, she [the doctor] says walk. That's the easiest exercise for you to do. You should do exercise. And getting older, you're afraid of developing osteoporosis, right? She asks me if I can do at least, not everyday, but at least 15 minutes, half-hour and do exercise.

Helen believed that her long-standing participation in exercise has kept her physically healthy, with no ailments. She remarked:

Because when I see some people, 50 years old, my age. [They complain] Oh, my bones hurting so much, you know, I'm not feeling well, you know...I look at them and think, oh my God, so many problems. So far, so good, I don't have those problems. They say, oh maybe because you always so active, you exercise a lot. So I believe in those exercise.

What These Women Do For Exercise

The majority of women in this study currently were engaged in some form of exercise and made conscious efforts to take time in their day to do exercise. Most common forms of exercise included the following activities: walking, general home exercise programs, aerobics, Tai Chi or Kung-fu (or a variation of these types of martial arts), racquet sports (e.g. tennis, squash), dancing, and swimming.

Some women participated in aerobics classes at a community/fitness centre while others followed aerobics videotapes at home alone or did general exercise routines at home. Of those women who participated in aerobics out of the home, there was a preference for doing classes for seniors or for women only, as they felt these classes would be more appropriate for their level. They reported that they would be less self-conscious about their abilities and their body type. Lynn remarked:

But I find out, oh, that class, from 15, 16 to 50, to our age, 60. They didn't put, like age, they didn't put that different. So it's a hard for me. I'm a sporty, I'm okay. But sometime, it's too much for me. Run and run, you know.

Many women also walked in their leisure time and always walked with a partner. Some women discussed their earlier lives in their countries of origin and recounted stories from their parents or grandparents, about having to walk long distances to go to school or visit relatives, and therefore, having a tradition of walking. For example, Amy reflected on her life and that of her grandparents in China:

We don't have the car for them to travel. They are always walking. Like my grandmother, or my mother-in-law, when they were young, if she want to see her grandpa, she had to walk about 5 hours to go there. So 5 hours there, and 5 hours back, that's at least 10 hours. Maybe once a week, or once a month, they have a lot of exercise for that one.

Lynn also talked about her earlier life as reinforcing attitudes toward walking:

Everyday, we should walk. We don't have a school bus at that time. We walk, like 20 minutes, half hour to school. And study, then come home for lunch, and go back again....Everyday, we walk there, walk home. We got good health, you know. Its good for us, walking.

Many women participated in Tai Chi or Kung Fu or forms of martial arts. These women considered Tai Chi, an ancient form of exercise, to be related to Chinese culture. Many women reported that they were unaware of Tai Chi when they were growing up and did not feel it was an activity prevalent at the time. Many women felt that Tai Chi has gained recent popularity in their countries of origin and in Canada. As Alice reported:

Yes, yes, this is new thing, this is the new thing. I think Tai Chi, um, that kind of thing, it was not common, never heard of that when I was growing up. And I think, its more, probably, maybe in the last 20 years or so, now I could be wrong, when I was visiting China, I do, in Shanghai, and I see the parks, a lot of the elderly to do the Tai Chi. But in Hong Kong, they don't. But mind you, lately in Hong Kong, after I left Hong Kong, after the 60's, people begin to be more aware, to walk, to walk in the morning...so the time has changed, we are health awareness, become more, you know, more common.

However, there were some women who mentioned observing Tai Chi groups in the parks at home when they were younger, but at that time, it was an activity they identified for older people only and hence, did not consider it an appropriate activity for them. These types of groups served as a model for them to participate in activities when they were older. For example, Liz stated:

There is a centre building and then in the middle there is a garden. Most of the people in the senior, gather together, gather in the morning and start to play...And then every morning, when I see outside the window, I see the senior do kung-fu...And that age, I'm not so old. I don't think its suitable for me...So

I know when I grow older, I should play like them. So I just doing this exercises.

Now that they are older, many of these women participate in Tai Chi and cite many benefits of this activity. Some perceived Tai Chi as a means to improve circulation and energy flow and discussed different forms and purposes of Tai Chi and Kung Fu. Chi (qi) is considered the essential energy source in the body and needs to flow properly to maintain balance of the systems and consequently, maintain and enhance health (Chan, 1990; Fung, 1998). Tai Chi exercises are done slowly and smoothly, gently encouraging the flow of qi without “shocking” the system. Susan explained:

Tai Chi is different. I do Tai Chi too. You do the movements so slow, sometimes you can't believe it helps, but I don't know, every time after you do it, you feel great. You feel stretched, you know, stretched there, and because the movements so slow, you feel the strength from inside. You know, although so slow, the movements so slow, you use strength to do the movements. So you have energy out too. So every time, after the exercise, after the Tai Chi, your body feels warm. The circulation must be moving. And you feel, you know, brighter, even that kind of thing.

The Impetus for Exercise

Similar to influences reported in relation to diet and health, growing older has been a major impetus on why they consider exercise to be important to their health at this time, and as such, respond accordingly to health messages regarding exercise and health.

Growing older.

The value they ascribe to health has increased with age, and hence, they are willing now to consider health behaviours that they can control and accept responsibility for. Wendy remarked:

[t]hat when you get to a certain age, you need to start moving, um, I don't know what they say. Like you need to exercise to balance out the food you eat, and because you're not as young as you once were, that you need the flexibility and stuff like that.

Amy also reflected on her age and previous inactivity, which she felt, resulted in poorer health:

Maybe I'm just getting old, maybe I'm just sitting in the house and didn't move a lot. That's why my health is not as good as before. And since I join the fitness class, I find that my health is improved a lot.

Some women linked growing older with increasing physical ailments. They noted that when they started to exercise, they received positive reinforcement (e.g., decreased aches and pains, increased energy, feeling better) that encouraged them to continue with their new regimes. This positive reinforcement augmented the value of exercise to them. For example, Tina explained how she became enlightened about the benefits of exercise when she reached middle age:

But now, after I get into the middle age, then I feel pains all over the place, all over the body, so I don't know what to do. So I went to swimming. I try to do the exercise. Now I can reduce my pain. So I feel better. So I think exercise is more important...[W]hen I get older and feel the pain, then I do the exercises, it really help me. So now, exercise it can help.

Amy also discussed her fatigue and physical ailments once she retired, and how the benefits of exercise encouraged her to continue with her fitness class:

And I find that I always feeling tired easily. And my feet, um, sometimes cramp. And when they cramp, it's really painful. So I joined the fitness. And after about, about 3 months, 4 months later, I think the cramps, they gone. I don't have any pain, so I'm very happy.

Aging was also related to a change in body shape and size. These changes acted as an impetus to start an exercise regime. Joyce talked about her self-esteem related to body image as a reason to participate in exercise:

I just get old. Your body is not as firm. So I look in the mirror and say, oh, I do not like this body. It's sagging. So I got this tape [aerobics videotape] from a friend. So I say lend it to me. And I put it on. And I really like that. And so I mean, I bought a copy and I decided to do it every second day. Then twice a week, I'm getting tired of it...So now I really like doing it, and I feel my clothes is not as tight, my body begin to feel a little firmer, and I don't think I go back to wearing when I was in my 30's, at my age. I try to keep, you know, keep my weight down.

Wendy also spoke about a changing body image that propelled her to exercise:

You know, I see myself spreading, and I don't like that. So that's another reason that would make me want to do the biking and I'm still not disciplined enough to do more, or determined enough to do more.

While these women have indicated that they valued exercise at this point in their lives and acknowledged its many benefits, they did not always regard exercise in this way. As noted previously, most women reported that when they were young, they were not concerned with their health. They did not realize the benefits of exercise in relation to health and therefore, did not value exercise. Most women stated that by choice, they were not very active when they were younger. Tina reflected on this point:

When I was young, I didn't realize that exercise was important, when I was in school, everyday we did the exercise. I didn't value that at that time...Because when you're young, you have no problems, nothing. So the school ask you to do exercise and you don't feel like it, because every certain time, you have to do that, because I thought I don't need to do it. But when I get older and I feel pain, then I do the exercises, it really help me. So now, exercise it can help.

Receptiveness to health messages.

As noted with diet, these women also indicated that they are receptive to health messages concerning exercise, particularly from health care professionals and the media. Claire's comments illustrated how messages from health care professionals were subsequently put into action:

Because you know, before I never feel that. I feel my legs, my shoulders, so tight, you know...sometimes my feet, my knees hurt too, sometimes my toes

hurt. Everything so hurt. I think I go see Doctor, and Doctor say, you have to do exercise. So everyday, every morning, I do exercise.

Liz reported hearing similar messages about the importance of exercise from her physiotherapist:

Gymnastic exercise is most important for health, to improve your health, especially for my frozen shoulder. My physiotherapist told me.

As mentioned previously, these women voiced great respect for health care professionals (particularly doctors) whom they view as experts and sources of reliable health information.

Wendy's comments demonstrated the power of the media in disseminating health messages as well as these women's receptiveness to hear and act upon these messages:

It's the media bombardment, you have to be active. You're getting older, you'll be stiffen up. And also, the osteoporosis, if you're not active, you will lose all your bone mass. So it's kind of scary when you hear them. That could be one reason I want to start exercising as well. I, I, its one of the reasons.

Relationships between Culture and Exercise

These women have reported that exercise has taken on greater value and importance as they age, and have discussed many influences on their perceptions of exercise. Many women commented that they grew up in an environment where exercise was not highly regarded, but felt that this was specific to the time and place of their upbringing. For example, some women expressed that when they were growing up, it was not common to see people doing exercise, as exercise was not a regular activity. Wendy referred to her early life in Hong Kong:

People, there is no people walking or jogging on the street. There's no one. I never heard of a gym 'til I came here.

In reflecting on activities in their countries of origin, it is interesting to note that many women immediately associated exercise with fitness clubs and gyms. Comments by Rose

illustrated how Western cultural influence has pervaded these women's associations of what constitutes exercise, especially considering their earlier comments that gyms and fitness centres did not exist when they were growing up:

In Taiwan, I don't think, now I think they do have, because I leave Taiwan more than 30 years. Everything change. That's what I heard. Taiwan to have a club, but at that time, Taiwan don't have those things. Here, I have friend who join club, but I never join the club for the exercise.

Tina spoke specifically about the lack of opportunities for activities, even if she had the desire to participate in exercise. Her references to certain activities again highlighted what was perceived to be legitimate exercise:

In China, we didn't pay much attention to the exercise or the physical activities, because most of the people, they concentrate on studies. But now in here, everybody wants to send their kids to swimming, to hockey, to play the soccer, and go to the gym. It's totally different, when I was young. In my town, I didn't have any those things...we send all our kids out to take lessons. But in my age, my family is not poor, so we didn't have anything to do. I mean we were not sent out to learn things. We just go to school, that's it. But at that time, not much activities. There's no piano lessons, no football lessons, no hockey lessons...nothing for the children. So we have nowhere to go.

Tina draws attention to activities that many of these women encourage their own children to attend or what is available for their children. They felt that now younger generations had more knowledge and awareness about health and exercise and as a result, had healthier behaviours (both in Canada and their countries of origin). Amy compares the older generation to the younger generation now:

I think in the older generation, they seldom exercise...they always sitting there and play mah-jong. Play mah-jong is one of the exercises for them. Now, today, the younger generation, like my children, they maybe, they learn from the school, they find that exercise is much, much better for them than before.

Alice was extremely aware of time and place of her upbringing and that of her own children now:

So time has changed, we are health awareness, become more, you know, more, common, become more common...but you see, my timing is very different from when you were growing up. Different from what my children are growing up now.

It should be noted that most of these women's children have been raised in a Western society where physical activity and exercise are encouraged and opportunities are abundant.

However, these women felt that societal expectations around education and gender roles may have limited the value and importance of exercise when they were younger. In particular, all of the women spoke of the significance of education when they were young, and generally, in Chinese culture. Education was highly valued as it was felt that a good education would lead to a better life, better career, more pay, and higher socioeconomic status. The value of education stems from the time of Confucius and the system of examinations that led to employment (and power) in the government, which were seen to be coveted positions (Brownell, 1995; Holmes & Holmes, 1995; Koyano, 1996). These women claimed that they had no time for leisure-time physical activities because most of their time, when not in school, was spent studying. The thoughts articulated by all of the women in regards to education were highlighted in the words of Tina:

Most Chinese people, they like their children have more education. Most of the people, if they don't have money, they still try to send their children to go to school...Because they Chinese believe, if you have more education, its easier to find a job, and do better job, than the labour, than do the labour job, right? And also, making easy money. You don't have to work that hard, that hard, I mean the labour...And also the people in Hong Kong, there's a lot of competition to go to school. If you can get into the better school, then you have a better future. And also every year, you have to write the exam. If you pass all the exam, then you can find a good job. Otherwise, you cannot. But in Hong Kong, there is so many people. So the competition is so hard. So the people they have to study more to achieve their goals.

Alice also expressed what she perceived to be family expectations of her and the value of education:

Well, I think generally speaking, more and more the Chinese people, you know, they value the study. Especially in my family, its very put a lot of emphasis in academic achievement. So my, um, in my family, I know that I am expected to do well in school. So I won't spend much time in other things, but I want to make sure that study come first.

While these women articulated the value of education for their own children, they also expressed a broader view toward life and health. Many women saw exercise as a means for their children to participate in endeavours outside of school, thus exposing their children to a wide range of physical and social activities. Helen was very vocal about this point:

I want the good, for my kids, let them know exercise is part of life, more important. Study hard is good, making money is good, but not the whole part of life. Exercise, come on and exercise, have your life.

Some participants also discussed societal expectations of women at the time of growing up. Although one would assume that these expectations would differ greatly depending on the place of upbringing and socioeconomic status, generally, these women expressed similar expectations. For example, many women felt that at the time of their upbringing, women were expected to be feminine and delicate, not athletic or muscular. Women and girls were also expected to stay at home and to be gentle and quiet, not active. Therefore, physical activity and exercise were not encouraged for females. Lynn discussed these gender differences:

Because long time, that, its already in mind, say, oh, women should be quiet, gentle, should be, like different from men, always that...Oh, lady, that lady, she should just sit, don't have attitude, don't talk too much, don't laugh too loud. I don't know. Maybe long time already, old tradition already in my mind, right? But we are different. I encourage my two girl to go out, when they are 3 year old, I just send them go to swimming classes, yeah. Then to swimming. I swimming too, but no, not every Chinese women swimming, you know.

Helen added to this by linking physical activity and exercise to potential problems with fertility; hence, physical activity and exercise not encouraged, especially once they had reached puberty:

In the old day, the girl not allowed to do a lot of stuff, right?... Yeah, especially when you start your period. My mom always so, oh, the girl when the girl start her period, don't even go out, don't even walk fast, you know... You know those old wives tales, they say, you know the woman, the girl that exercise too much, it would break her hymen, or you know. I think that's it.

Because of the importance of family, safeguarding one's ability to procreate is essential. Not bearing children is considered the most unfilial act (Fry et al., 1997; Kwong & Cai, 1992).

While the women expressed similar experiences and values regarding exercise in their earlier lives, there appears to be little consensus on how Chinese culture may have influenced them regarding their current thoughts about exercise. The value of exercise may be linked to the value of health, which is related to notions of aging and Chinese cultural values of family and longevity. Many of the participants felt that Chinese culture did not influence them to participate in exercise, particularly in light of growing up in an environment where exercise was not encouraged or valued. If anything, many women felt that they engaged in exercise, despite being Chinese. As Lynn stated:

Not, not too many Chinese women like exercise, but I'm, in my family, we, like my sister, my brother, we all play tennis, play table tennis. But not for everybody. Most Chinese, you know, most Chinese women, don't like to exercise. Always tired, too many housework, too many work, after work, feel tired, don't want to exercise.

Contrary to this, other women felt that Chinese people are very active by nature, and many participate in various forms of Kung-fu and Tai Chi. Susan commented that in particular, Chinese seniors generally lead active lifestyles, which may not be something that they are conscious of. For example, they may engage in Tai Chi with a group of friends, then

go for Dim Sum or grocery shop with their friends after their group session. They may walk to do their errands. However, if asked, they may not relate their activities to exercise because they view this as simply part of their daily routine. Susan said:

But they don't advertise it like the Canadian people, the Western people. They just, they will do it, the Chinese they will do the Tai Chi, or whatever, that kind of activity automatically. They never, um, I think, I'm talking about seniors, I would say, okay, the seniors I'm talking about. They, they just automatically thinking, doing Tai Chi, that kind of activity. Just show them and they will do it. Lots of them doing it, even at home. You can see them on their balconies, they are waving their hands, or whatever, that kind of thing. That's exercise to me... They will say, you know I'm just waving my hands and feet or whatever. They are never conscious about that.

As previously mentioned, some women felt that walking was a tradition of exercise, particularly for the elderly, and related this tradition to their upbringing in Asia. Rose reiterated this tradition and on the health of the elderly in China:

I think for the old Chinese culture, people don't go to exercise. I don't know if its true or not, for my thinking, they don't do it, but they are very healthy. Especially men in China, like they are 90, 80 years old. The reason is they don't have a car or something. They always walk to do something. They are very healthy. And then nobody is like North American people, get so fat. I think it's those, quite good exercise, walking, those kinds of things.

Barriers To and Facilitators of Exercise

Many barriers to exercise were reported by these women. Barriers at a personal level included lack of time. (particularly if they were working full time outside of the house), lack of energy (especially at the end of the day), lack of motivation and interest, safety issues, and their multiple roles. Wendy talked about her many roles that impeded her ability to go to the gym:

I work full time at that mall down there...and I teach at home,...and then I'm doing a lot of things for church...and there's a lot of other things that I do, so there isn't any time in the day for me to take advantage of a gym.

These personal barriers were particularly relevant to those women working full time. Alice's comment highlighted many of these personal barriers:

Because I am still working, I don't have that much time. By the time I get home, I'm just pooped, you know. So even if, if you're not interest in sports or athletics, and that kind of thing, you just don't want to do it. It's not your first love, why bother, you know. It's just an excuse not to do it.

Socio-environmental barriers include lack of resources (financial, physical space, transportation, social support), weather constraints and related fear of falling. Joyce explained:

But in the winter, nobody wants to go out with me and I'm afraid to go out alone. And also dark and too icy on the streets. I'm really much afraid of falls, because at my age, my bones might be brittle.

Amy added that another the limitation for seniors was financial resources and expressed a need for forward thinking to promote health:

You know, some of the seniors, they don't have money. Before, we have many, many students, and now, some of them, they don't come now...If the government, they support them. I think many people join them, their health is better, then the government doesn't have to pay more medical for them too.

Cultural-related concerns (e.g. lack of a tradition of exercise) did not appear to be an issue.

Facilitators of exercise included: the opportunity to socialize, having a partner to exercise with, having a schedule for exercise, and enjoyment of activity. For instance, Wendy said:

[t]hat [walking with friend] makes it a little more regular.

Susan found encouragement within a class environment, with an instructor who acted as a role model. This class proved to be very enjoyable, thereby encouraging on-going participation:

What I like there, I like the instructor, so interesting. You know, she's fifty...but she has this energy, and she can, you look at her, you feel, oh, I'm

younger too. That kind of feeling...She usually conducts a great class. For now, there's a lot of people there. I always feel great.

Of particular note, being able to socialize with friends and family during an activity or for exercise was cited by many of the women as an important motivating factor to engage in exercise. As Grace explained, the combination of enjoyment and socializing with others facilitated participation in activities:

Because I like dancing since I was young. I love it. When I was young, I go to lots of party, those things, ballroom dancing in those days. Line dancing is very interesting. And I have group of people who are so, they love line dancing so much that they go every day. It's a group interest.

While socializing was seen as a facilitator of exercise, knowledge of the many benefits of exercise for health, particularly in relation to physical health, provided further impetus for these women to participate in activity. Claire emphasized this point:

Now people, old people, young people, all people know that. Know that exercise is good for healthy. Because health is good, people think about health...take care of body.

This knowledge of the benefits of exercise, along with more time once they retired, combined with the value of health to these women at this time, prompted many of them to begin exercise programs and overcome many of these barriers. As noted previously, all of the women, but one, currently participated regularly in leisure-time physical activity and exercise. However, Alice, the one woman who currently did not exercise stated:

But maybe when I retire, I have more time on my hands, and then I will be more aware, that I need to keep myself healthy.

Again, this illustrates the power of the value of health to these women as stimulus to begin activities that they did not value or participate in when they were younger.

Summary of Results

The two results chapters have explored these women's orientations toward health, identifying health to be holistic in nature, with interrelated physical, mental, and social elements. Health is a cultural object to these women, and has taken on increasing importance as they age. The notion of aging may be viewed through a Chinese cultural lens related to values of family and longevity. Growing older acts as an impetus to value health and to take steps to control and be responsible for certain aspects of health. These women are now receptive to messages about health, particularly in regard to diet and exercise, which they have identified to be elements that they can control. Both diet and exercise have been influenced by Chinese and Western cultures. These results indicate the complexity and interconnectedness of health and culture, which will be explored further in the next chapter.

Chapter 6

Discussion and Conclusions

The results chapters have highlighted the complex relationship between culture and health. In this chapter, I will discuss the findings within the theoretical framework of symbolic interactionism and a cultural diamond, offering insights as to how this model has been further developed during the process of this study. As well, the findings of this study will be situated within the broader literature. Limitations of the study will be raised along with implications for practice and future research. In closing, a summary and conclusions of the study are provided.

This study has used a qualitative approach with the following purpose: to identify values, beliefs, and attitudes toward physical activity and exercise of immigrant Chinese women and to understand how Chinese culture has shaped these values, beliefs, and attitudes. Symbolic interactionism within a cultural diamond was put forth as a framework for this study, as a means to allow for more in-depth exploration of these cultural values, beliefs, and attitudes. This study was predicated on the belief that physical activity and exercise are beneficial for health, and hence, would be relevant to a healthy lifestyle. While the public health message in North America has been clear regarding the importance of physical activity and exercise to health, the reality contradicts this awareness. Prevalence of physical activity and exercise have leveled off in Canada, where only one-third of the population participate in the recommended guidelines for physical activity and exercise (CFALRI, 1998), and elderly minority women are the least active group (Kriska & Rexroad, 1998; Weist & Lyle, 1997). Considering the multicultural nature of Canada, using a cultural framework to explore values, beliefs, and attitudes toward physical activity and exercise of

diverse populations, may be one means to understand health behaviour, and thus has been the focus of this study, specifically for older immigrant Chinese women.

The findings of this study reveal that all of the participants value exercise and believe exercise to be related to good health. As a result, all of these women (except one) engage in forms of exercise. Exercise (as a subset of leisure-time physical activity) is the focus of this discussion, as few women differentiated between the terms physical activity and exercise. In fact, the majority of women used the two terms interchangeably throughout the interviews and did not consider activities of daily living (e.g., household chores, child care, gardening) to be physical activities (nor to be related to health). Generally, physical activity was defined as exercise, focusing on leisure-time activities that were deliberate and conscious (e.g., aerobics, Tai Chi).

The commitment to exercise that these women have shown is remarkable for several reasons. First, the literature indicates that, in North America, older ethnic minority women are the least likely to engage in physical activity, yet a vast majority of the women in this study are physically active and participate in exercise. Second, these women did not grow up with a "tradition of exercise". Involvement in exercise was not valued or encouraged when they were growing up. Despite being inactive (in leisure-time physical activities) in the past, these women do not indicate lack of self-confidence or self-efficacy in their ability to engage in exercise, barriers which have been cited in the literature for older women (Jones & Nies, 1996; Marcus & Forsyth, 1998; NLCPAWH, 1998). Third, while these women reported many other barriers to physical activity and exercise (e.g., no time or energy, multiple roles, need for partners), at the same time, the majority made conscious efforts to exercise routinely, even those who worked full time. These women demonstrate that these barriers

can be overcome, in part, due to their desire for good health. Fourth, as they age, these women have become more receptive to health messages they have received from health care professionals and from the media (both in English and in Chinese) concerning physical activity and exercise.

Understanding the value these women now put on exercise, as shown in their subsequent participation in activity, may be elucidated further by exploring the meaning of health to these women, especially as it relates to aging, viewed through a Chinese cultural lens. All of the women considered exercise as beneficial to health. It is this relationship to health that makes exercise valuable to them, as health has become increasingly significant to them as they have grown older. Health has taken on new meaning, which has resulted in a search for and receptiveness to health messages, particularly from health care professionals, and mass media. This openness to health messages is manifested in their actions toward health, and their desire to take control of and responsibility for their health at this time in their lives. Their actions, most notably in regard to diet and exercise, are subsumed under meanings of health, meanings that are intricately linked to aging and family in Chinese culture. These meanings of health may be further explored using the theoretical framework for this study, as described in the following section.

Understanding Health through a Cultural Lens

In this study, all of the women were born in countries with a dominant Chinese culture and immigrated to Canada at various points in their lives. Culture, as a system of learned values, beliefs, and practices, is not static. In Canada, all of these women are able to interact and have interacted with others outside of the Chinese community (due to their

ability to speak and literacy skills in English). Given this, meanings of health (and subsequently exercise) have been re-shaped, along with the sources of meanings of health, and how these women interpret these meanings. However, meanings cannot always be articulated explicitly, as culture is ubiquitous and often assumed.

The results of the study may be considered using the three main ideas of symbolic interactionism, as outlined by Blumer (1969). First, the meaning of health will be reviewed. Second, the source of this meaning requires consideration. Third, these women's interpretations of meanings of health will be explored, as these interpretations subsequently direct their actions toward health.

These tenets of symbolic interactionism fit within the cultural diamond, thus providing a framework to further understand meanings of health through a cultural lens. Health has been articulated by these women to have common meaning and significance, thus is a cultural object to these women. The cultural object of health is part of the larger inter-related system of culture; therefore understanding of the other points of the cultural diamond is needed. Specifically, the source of the meaning of the cultural object of health stems from interactions between the creators and receivers in society. In this study, the Chinese women represent both the creators and receivers, and the societies in which they have lived and interacted represent both Chinese and Western cultures. These women have interpreted the meanings of health within these societies, and the cultural influences may be seen in their actions toward health. Expansion of the cultural diamond follows in the discussion below.

The Meaning: Health as a Cultural Object.

According to Blumer (1969), humans act toward things that have meaning to them. Therefore, in order for these women to engage in exercise, it must have meaning to them. While exercise does have meaning to these women, as demonstrated in their high levels of participation, exercise has gained meaning and relevance because of its relationship to health. As such, the meaning of exercise is subsumed under the cultural object of health.

What meaning has health taken? Despite variations in levels of acculturation and time of immigration to Canada, all of these women articulate similar meanings and value to health. First, in its definition, these women clearly perceive health as holistic in nature, incorporating physical, mental and social elements. These elements of health are interrelated and connected, and are necessary to provide harmony in all aspects of life. Maintaining a balance of these elements results in good health and wellness, which is a prerequisite for quality of life. Imbalance of any of these elements will ultimately lead to disharmony of their connections, and to poor health. While these women reveal that there are aspects of health that they cannot control due to genetic predisposition or fate, they clearly articulate that they can control other aspects of their health through the adoption of certain health behaviours (e.g., diet and exercise), for which they take full responsibility. Exercise, subsumed under this meaning of health, functions as a method to provide a balance in and benefit to physical, mental, and social realms of health.

Second, health has also taken on value and importance as they grow older. The concept of aging is integral to health as a cultural object, again, because health had little meaning or shared significance to them when they were younger (when they perceived themselves to be healthy). Health is valued at this time because good health allows them to

do what they want in life. Health is a positive concept and is perceived as a resource essential for quality of life. The significance of good health to these women influences their health behaviours, further encouraging notions of control and responsibility for their health.

Meanings of health are culturally mediated but are also influenced by conditions such as socioeconomic status and education. However, the underlying value and importance of health at this time in their lives, particularly to ensure a pleasant retirement and good quality of life, was expressed by all of the women, regardless of socioeconomic status, education or occupation. Liz, who reported the lowest household income (\$15,000 - \$20,000), expressed the most concern about financial security, particularly for retirement. She framed health as a functional necessity and as a resource that would allow her and her husband to achieve adequate income for their future.

Sources of Meaning of Health

If health has taken on meaning, both in definition and in value as they age, what is the source of this meaning? As Blumer (1969) states, social interaction with others is the source of meaning, for example, through interactions with family, friends, teachers, co-workers, and society in general. In this study, interactions have occurred in both Chinese and Western societies. Meanings of health may be traced to traditional Chinese beliefs based on Taoist notions of the balance of yin and yang, and the concept of qi. Much of this knowledge is passed from generation to generation, in which women are the repositories of traditional health practices and gatekeepers of health for the family (Hopper, 1993). The interrelatedness of all aspects of health (physical, mental, emotional) allows for the flow of good and bad qi throughout the body, as well as a balance between yin and yang. For

example, many women discussed the need for happiness and to reduce one's worries as related to mental health. Happiness and worry are two of seven emotions that the Chinese have identified to have potency on health (Fung, 1998). An imbalance of energy or qi caused by excess of negative emotions weakens the body's immunity and makes the body more vulnerable to illness and disease. Therefore, these women attempt to avoid any emotional disharmony. Maintaining this balance of emotions thus results in good health, particularly mental health. Hence, this notion of balance is a prerequisite for peace and harmony in all aspects of life and to maintain wellness.

As well, the value of health to these women at this time is intricately linked to the concept of aging, which is best understood by examining Chinese cultural values and beliefs. While these women express some negativity about growing older (most notably with regard to physical decline and mortality), the overall sentiment toward aging is more positive. The source of meaning for aging as a positive experience may be linked to meanings concerning what makes for a "good old age" and Confucian ideals of family and filial piety. Chinese culture honours age, that is, elders are respected for their age and the wisdom associated with it (Fry, 1995; Holmes & Holmes, 1995). Old age may be seen as a blessing for a virtuous life (Fung, 1998). Retirement acts as a marker for many of these women: That they have reached old age and it is now time to pursue leisure activities and to reap the rewards of a lifetime of hard work. In order to enjoy this golden time, good health is essential, and therefore, highly valued.

The importance of family in Chinese culture is highlighted by all of these women. For many, it is a prime reason for their desire to live a long life, for example, to maintain family bonds and extend the family line. Strong family bonds also provide older persons

with a role and an identity within the family system. For example, some of the retired women now care for their grandchildren during the day, giving them an ongoing role in life. While many women take on the role of gatekeeper for family health, their strong sense of responsibility for their own health may also be rooted in their desire not to be a burden to their family in their old age, thereby encouraging them to take control of their health at this time in their lives.

These women represent a nexus of cultures, shifting between traditional Chinese values and beliefs which many uphold, but at the same time, voicing different beliefs for their own children. For example, while they accept filial responsibilities for their parents, many of these women express changing expectations of their own children. They recognize the differences in this society, the society in which their children have been raised, and of having fewer children to depend on than previous generations. While none of the women expected their children to care for them in old age, this did not preclude them from expressing their belief in the family system, and the desire for a tight knit, interdependent family unit, to be close to their children, both emotionally and geographically.

Hence, Chinese cultural values toward aging and family may be seen as a source of meaning for health, highlighting the value and importance of health to these women at this time. Other sources of meaning may be seen related to what these women do for their health. Because of their zeal for good health as they age, these women demonstrate an openness to receiving health messages. The media and health care professionals act as creators of such health messages, particularly related to concepts of diet and exercise. Due to their moderate level of acculturation, these women are able to receive messages from creators in both Chinese and Western cultures.

Interpretations of Meanings of Health

In order for these women to act, they must interpret the meaning of this cultural object of health and related meanings of aging. Interpretations may be done through internalizing the meanings to themselves and/or against the “generalized other” (which may constitute the dual cultures) to then decide upon their actions in response to such meanings. For example, with regard to exercise, all women (except one) engage in some form of exercise and all women participate in forms of physical activity (which they may not necessarily acknowledge as related to health). They consciously take time out of their day to do exercise because of the significance of their health to them. They have received (and have been open to) messages from health care professionals and the media, which they have interpreted, to decide that exercise would be a healthy behaviour to adopt. Their interpretation of health and, in turn, exercise, has been internalized, where they have considered the meaning of health to them at this time in their lives. They have also looked at the generalized other, for example, in this case, health care professionals, the media (both Chinese and Western), and friends/family, all of whom represent positive messages about exercise and its relationship to health.

Both the media and health care professionals may be seen, not only as creators of meanings for physical activity and exercise, but also influential in how these women internalize and interpret messages received. The concept of leisure-time physical activity is socially constructed. For example, these women talk about gyms and fitness centres when discussing forms of exercise and many participate in activities such as aerobics and line dancing, which are more Western-based. Both media and health care professionals have a role in perpetuating and validating particular forms of activities. Specifically, the lack of

acknowledgement by these women of other forms of physical activity (e.g., occupational and household physical activity) may point to the failure of the media and health care professionals to recognize and legitimize other forms of activity.

The openness that these women demonstrate toward health messages may also be seen in regards to diet, again, where the powerful influence of the media and health care professionals has been a source of meaning for their actions. For example, most have started drinking milk, not part of a traditional Chinese diet, for the prevention of osteoporosis. They also express concern about fat and cholesterol in foods, based on information they have heard from media sources and doctors. These women have internalized and interpreted the meanings of diet in relation to their health, meanings that have been influenced by messages in society, and have, in turn, affected their health actions. Concurrently, their use of Chinese herbal remedies and soups, for prevention and health promotion, suggests the ability of many of these women to respond to the duality of cultures by which they have been influenced. While some women are not able to explicitly articulate the source of meanings of these beliefs, their practice suggests adherence to them.

The interpretation of meanings of health by these women and their subsequent actions are specific to this time in their lives, as they grow older. For example, all of the women (except one) reported lack of consideration for their health until they reached middle age, citing that they did not need to consider diet and exercise when they were young because they were healthy at the time. Some women mentioned that they had good luck in their family and good genes, which made them feel their health was not a concern, particularly when they were young and healthy. Taoist notions of fate and letting nature takes its course,

and Buddhist beliefs in karma, sharply contrasts these women's sense of control over and responsibility for certain aspects of their health.

In summary, health has taken on shared significance in its meaning and importance to these women. Meanings of health have had multiple creators, and such meanings are received and interpreted by these immigrant Chinese women. Chinese cultural values of aging and family provide a source of meaning for health, and provide the context for health and its importance to these women at this time. Media and health care professionals also act as creators of health messages, particularly in regard to what these women should do for their health. These women interpret the meanings of health, and subsequent health messages from the multiple sources to formulate action. The societies in which these women have lived and interacted provide the setting for such action. The ability of these women to negotiate and internalize these cultural influences represents the shifting realities that exist. They demonstrate a blending of cultures, and it is at the interface of these cultures that informs their actions. The context for the interpretation of health to these women lies in their Chinese cultural values toward health, aging, and family. Once interpreted, their actions, particularly in regard to diet and exercise demonstrate stronger Western influences.

Situating This Study in the Literature

The results of this study offer interesting points for consideration in light of the related literature. First, as noted previously, all of these women value exercise for its many health benefits. While they may not be well-versed in the literature about the benefits of physical activity and exercise, they have been receptive to messages from the media, from health care professionals or family/friends. As a result, almost all of the women currently

engage in some form of leisure-time physical activity, meeting the recommendations in Health Canada's Guidelines for Physical Activity for Older Adults (1999). While it was acknowledged that the results of this study cannot be generalized to all older immigrant Chinese women, it does suggest the need for closer examination of the prevalence of physical activity and exercise of older minority women in North America, particularly those of Chinese ethnicity. The participation in exercise of the women in this current study crossed all socioeconomic and education levels.

The definitions of physical activity and exercise, terms used interchangeably by women in this study, highlights the need to ensure consistency of meanings. As noted previously, this point is particularly relevant when these terms are used on measurement tools determining prevalence of physical activity and exercise. The terms physical activity and exercise were also misinterpreted by older women of Chinese, Filipino, Hispanic, and African-American ethnicity, in studies done by Eyler et al. (1998) and Tortolero et al. (1999) in the United States. Language may be considered a factor, as English was a second (or third) language for most of these women in these studies.

The studies by Tortolero et al. (1999) and Eyler et al. (1998) also found that leisure-time was not looked upon favourably by these older ethnic women. Some women expressed guilt if they spent time on themselves, and perceived little value of exercise. In contrast, most women in this study took the time to exercise, which they viewed to be important for their health, and expressed no guilt in participating in these activities. Some women expressed the need to do "productive activities" which few also considered beneficial for their health; however, all women consciously engaged in leisure-time physical activities. The revelation that all of these women purposely took time in their day to exercise points to

the value they now ascribe to exercise due to its relationship to health. Health is perceived to be significant as they age; therefore, these women are willing to take action toward it. As well, these women also indicate that retirement is the time to pursue leisurely activities; consequently, exercise has become (or will become) part of their regime.

A study in Singapore (Hughes et al., 1990) showed very low levels of physical activity among Chinese, Malay, and Indian women in all age groups. While many women in the Singapore study were of Chinese ethnicity, the values, beliefs and attitudes of these women were not explored in this setting. If these women held similar traditional Chinese values of health, aging, and family, the differences in prevalence may point to the strong societal influence of these immigrant Chinese women in Canada, a society with powerful media messages regarding physical activity and exercise. As previously noted, these messages may be perpetuating certain forms of physical activity to be legitimate. For example, to most of the women in this study, household activities, child care, or gardening activities were not considered to be physical activities, and were not related to health. As a result, they perceived it necessary to participate in leisure-time exercise. In contrast, studies by Eyer et al. (1998) and Sternfeld et al. (1995) found that most women felt their household activities were adequate physical activities. As such, they would not engage in recreational physical activities if they felt that they were sufficiently physically active in their daily routines.

The adoption of healthy behaviours (e.g., diet and exercise) by the women in this current study suggests a strong motivation to maintain and take control of their health practices. However, this concern for health and resulting sense of responsibility is a recent phenomenon as they age. Women in this study did not begin such behaviours until they

reached middle age, at which time they sought, and became more receptive to health messages, particularly for wellness and disease prevention. Their receptiveness to the health messages also encouraged their sense of control and responsibility for their health. As found with Hoeman et al. (1993), in a study regarding health beliefs and early detection of breast cancer in Chinese women (mean age 30.4 years) living in the United States, greater than one-third of the women indicated that preventative health behaviours were important, but not until one reached middle age. Based on these findings, Hoeman and colleagues (1993) suggested that these Chinese women perceived that when one is young, one is healthy; therefore, one does not want to tempt fate by thinking too much about health and prevention. In this study, one might suggest that these women displayed a similar attitude toward disease prevention at a younger age, although not explicitly stated by them. When younger, the women in this current study were less concerned with health, and hence, less likely to take control of health behaviours. However, these women have become more receptive to adopting health behaviours in their older years. Both in this study and the study by Hoeman et al. (1993), health care professionals were seen to have great influence regarding the adoption of health practices.

The women in this study do not use the “inevitability of decline” associated with aging as suggested by older adults in Scotland (Stead et al., 1997) as an excuse to justify inactivity. These Chinese women’s sense of control and responsibility for health may be associated with more positive concepts of aging. These women express retirement as a time to pursue leisurely activities and to enjoy life. In Chinese society, old age is considered a time of freedom and to reap the rewards of hard work throughout one’s life (Fry, 1995; Holmes & Holmes, 1995). This point is reflected in a study in China, where satisfaction of

older people with their lives was high, with reports of minimal change upon entering old age (Kwong & Cai, 1992). The women in this current study also commented on the importance of family as a reason for their desire for a long life, to extend the family lines, and to watch their grandchildren grow. Family has been cited to act as a buffering effect to aging (Benjamin, 1997; Hopper, 1993; Markides & Black, 1995), particularly in relation to filial responsibilities of children and continued engagement in family affairs.

Socializing with others has been found to be a key factor to increased participation rates in physical activity and exercise with older adults (Conn, 1999; Stead et al., 1997). In these studies, knowledge that exercise has many health benefits did not act as an impetus for these older people to engage in forms of leisure-time physical activity. They saw the primary benefit for exercise to be social. However, in this current study, while socializing during exercise was seen to be a great benefit, knowledge of other health benefits, particularly related to physical health, acted as the prime impetus for these women to start exercising. Again, this finding reflects the great value these Chinese women attribute to health at this stage in their life.

The women in this study cited many of the same barriers to physical activity and exercise as in the literature, in the personal and socio-environmental domains (e.g., lack of time and energy, gender roles, safety issues, lack of resources). In other studies, health risks have been expressed by some older people as a barrier to physical activity and exercise (Marcus & Forsyth, 1998; Stead et al., 1997). In this study, while some women spoke of the need to do exercise in moderation and expressed concern about falling outdoors while walking in bad weather, the only risk other mentioned was referred to as an “old wives tale”, that young girls who exercise too much are at risk of damaging their reproductive organs.

However, their high rates of participation in leisure-time physical activity highlights their motivation to overcome these barriers, to gain health benefits.

Limitations of the Study

The aim of this naturalistic research has been to do an in-depth study of a small group of immigrant Chinese women, using a cultural lens to help better understand the values, beliefs, and attitudes as expressed by these women. This study does not aim to imply that culture, in this case Western and Chinese culture, may be seen as monolithic blocks of different values. Rather, as was the case with this group of moderately acculturated immigrant Chinese women, it is at the interface of cultures, a blending of the two, where one may further understand expressed values, beliefs, and attitudes. However, a more heterogeneous group of immigrant Chinese women who were less acculturated or less active, may have provided further insights into the influences and the interplay of culture on meanings toward health, physical activity and exercise.

Throughout the study, these women's comments regarding health and aging have been intricately linked to understanding their values, beliefs, and attitudes toward physical activity and exercise. The aim of this study has not been to compare their values, beliefs, and attitudes with an imagined set of Western ideals. The goal of this study was to examine in-depth, using a cultural lens, the values, beliefs, and attitudes of this study group of immigrant Chinese women living in Canada. However, the responses of these women may reflect perceptions of other cultural groups.

Implications for Practice

The results of this study have implications for health care professionals, particularly those who are involved in primary prevention and lifestyle health promotion. Understanding the enormous benefit that physical activity and exercise has to all aspects of health acts as great impetus to encourage people to engage in some form of physical activity and exercise. However, interventions need to be tailored toward the needs of different groups. Greater understanding of the underlying cultural meanings of physical activity and exercise and their relationship to health, will help to ensure that strategies for increasing physical activity and exercise and subsequent programs and interventions, are relevant to the intended audience, particularly in such a diverse and multicultural nation. In particular, for physical therapists who are engaging in health promotion and prevention activities in their practice, a broader understanding of the socio-cultural context will allow them to gear their interventions appropriately.

This study demonstrates the role that health care professionals may play in influencing clients on the benefits of physical activity and exercise, as these Chinese women highly rated information given, particularly by doctors, about health behaviours. Highlighting this message, along with the social benefits of exercise will help to encourage women to participate in a variety of activities. However, health care professionals must be aware of the types of messages they are sending, ones that may perpetuate and legitimize only certain forms of physical activity and exercise. In this study, these women clearly did not hold the same value for occupational and household physical activities in the same way that they valued exercise. While the *Canada's Physical Activity Guide to Healthy Active Living* (1998) has made the move to frame physical activity as active living, other forms of

physical activity beyond those done in leisure-time also require acknowledgement. Health care professionals may take the lead in ensuring that these types of activities are appreciated and legitimized.

As well, understanding the meaning of aging to these women, as a time to enjoy life and participate in leisure activities may help to employ appropriate strategies for women in this age group. The findings of this study also highlight that these women are not only receptive to the health messages, but also take action and responsibility for health because of the importance of health to them at this time in their lives. However, these same strategies may not be as appropriate for younger women and requires consideration.

Differences in language are an obvious reminder of issues in cross-cultural practice and communication. While all of these women had conversational fluency in English, their use of the terms physical activity and exercise may be indicative of differences in meaning that may exist for other terms. Health care professionals need to be sensitive to the language and terminology used in cross-cultural communication, and request clarification to ensure meanings are understood. Cross-cultural practice also requires that health care professionals be aware of their own cultural values, beliefs, and attitudes and how this may affect interaction with others (Dyck, 1989; Lai & Yue, 1990; Masi, 1988; Masi et al., 1993; Wynn, 1994). As clearly demonstrated in this study, culture has great bearing on meanings of health, and subsequent actions toward health.

Implications for Future Research

This study highlights the complexities and inter-relatedness of culture and health and health behaviour. While the focus of this study was on physical activity and exercise, in-

depth understanding of these women's perceptions toward physical activity and exercise could not be elucidated without exploring their perceptions of the broader rubric of health and aging. This study was specific to older immigrant Chinese women; however, further research could be done with other ethnic groups to elicit meanings of exercise and physical activity in different cultural groups of women, which may act as a barrier to or a facilitator to engaging in activity. As well, a comparative study with Canadian women in the same age group may help to highlight the similarities and differences in meanings of physical activity and exercise. Such comparisons may illuminate the influence of culture on meanings of health and health behaviour.

Focusing on meanings of physical activity and exercise also highlights how women define the terms physical activity and exercise, which has been shown in this study to be inconsistent with their usage in the literature. Such understanding of terms could allow for further development of more relevant measurement tools specific for women with respect to physical activity and exercise. As previously noted in the literature, measurement tools of women's physical activity have been problematic, and have led to questionable accuracy of the measurements.

The current study has explored values, beliefs, and attitudes toward physical activity and exercise of immigrant Chinese women of moderate acculturation. Of interest would be to explore meanings with groups of women of lower and higher acculturation in Canada to elucidate further the influences of culture on health and health behaviour. Specific to this study, these women's openness to health messages appeared related to the importance of health to them at this time in their life. Accordingly, the influence of aging on health behaviour also requires further attention.

The results of this study revealed the significance of health to these women at this time and highlighted their sense of responsibility for their own health as well as the health of the family. However, unexplored in this study was the idea of the reciprocity of culture, that is, the role of their children (most of whom were Canadian born) in shaping these women's understandings of health, and in particular, physical activity and exercise. The process of cultural transmission is two-way, between younger and older generations, and may provide further understanding of health and health behaviours. These women perceived their children to be highly acculturated to Western society, as most of their children were born in Canada. While the notion of family in Chinese society has been suggested to act as a buffer to the negative impacts of aging (Chow, 1996; Fry et al., 1997; Holmes & Holmes, 1995; Kwong & Cai, 1992), of particular interest would be to further examine the effects of acculturation of the younger generations on older people's perceptions of health, aging, and family.

While the participants of this study were women only, the study did not use a gender perspective in examining the findings. Using a gender lens to explore the context of women's lives and their gender roles would be valuable to further understand these meanings ascribed to health and health behaviour and requires further consideration. One could also compare gender differences in meanings of and participation in physical activity and exercise, and types of activities within cultural groups.

This study explored perceptions toward physical activity and exercise of relatively healthy women. Of interest to health care professionals, in particular physical therapists, would be to explore values, beliefs, and attitudes toward the use of therapeutic exercise. This may add to the base of knowledge contributed by the current study, which shed light on these

women's perceptions of physical activity and exercise, and their relationship to health and aging. Values, beliefs, and attitudes toward physical activity and exercise may differ when seen in an illness context instead of in the context of health and well-being.

Summary and Conclusions

The use of a naturalistic inquiry has allowed for in-depth exploration of these women's values, beliefs, and attitudes toward physical activity and exercise, meanings that could be understood under the broader rubric of health. Symbolic interactionism and the cultural diamond have offered a lens in which to explore these women's perceptions and have provided a framework for understanding cultural meanings. This study has illuminated the complex processes of culture and its influence on health and health behaviour. These women have taken action toward health, most notably in the areas of diet and exercise, in which they feel they have some control. Diet and exercise have taken on importance to these women primarily because of their relationships to health, the benefits of both that they now recognize. The meanings and value of health are significant at this point in their lives, as they grow older, and is linked to Chinese cultural values of longevity and family. There is an expressed desire to enjoy one's older years, especially after retirement, to reap the rewards of one's hard work; thus, good health is a necessary component of quality of life to enjoy these years. Therefore, as they have grown older and subsequently more concerned for their health, they have become more receptive to health messages, particularly from health care professionals and the media (both Chinese and Western). These same messages may not have resonated with these women earlier in their lives. The value of health to these women is

significant enough to encourage action. These women have taken control of and responsibility for their health at this time in their lives.

Exploring underlying cultural meanings is essential to understanding values, beliefs and attitudes toward health and health behaviour. Doing so may help to direct appropriate interventions and strategies by health care professionals to promote and enhance health and well-being in diverse, multicultural populations in Canada.

References

- American Physical Therapy Association. (1997). Guide to Physical Therapist Practice. Physical Therapy, 77 (11), 1177 –1212.
- Anderson. J. (1986). Ethnicity and illness experience: Ideological structures and the health care delivery system. Social Science in Medicine, 22 (11), 1277-1283.
- Anderson. J., Moeschberger, M., Chen, M.S., Kunn, P., Wewers, M.D., & Guthrie, R. (1993). An acculturation scale for Southeast Asians. Social Psychiatry and Psychiatric Epidemiology, 28, 134-141.
- Baer, N. (1997). MDs seen as key players in move to encourage active living in Canada. Canadian Medical Association Journal, 156 (11), 1605-1608.
- Benjamin. B.J. (1997). Normal aging and the multicultural population. Seminars in Speech and Language, 18 (2), 127-133.
- Blumer. H. (1969). Symbolic Interactionism. Berkeley: University of California Press.
- Bowman. K. (1997). Chinese attitudes toward end-of-life decision making. Unpublished doctoral dissertation, University of Toronto, Toronto, Canada.
- Bouchard. C. (1999). Physical inactivity. Canadian Journal of Cardiology, 15 (Supp.G), 89G-92G.
- Bouchard, C., Shephard, R.J., & Stephens, T. (1993). Physical Activity, Fitness, and Health: Consensus Statement. Champaign, Illinois: Human Kinetics Publishers.
- Brownell. S. (1995). Training the body for China: Sports in the moral order of the People's Republic. Chicago: University of Chicago Press.

Burton, T.L. (1992). Issues in policy development for active living and sustainable living in Canada. In H.A. Quinney, L. Gauvin, & A.E.T. Wall (Eds.), Toward active living: Proceedings of the international conference on physical activity, fitness, and health (pp. 207-212). Champaign, Ill.: Human Kinetics Publishers.

Campbell, T., & Chang, B. (1981). Health care of the Chinese in America. In G. Henderson, & M. Primeaux (Eds.), Transcultural health care (pp.162-171). Menlo Park, Ca.: Addison-Wesley Publishing Co.

Canadian Fitness and Lifestyle Research Institute. (1995). 1995 Physical Activity Monitor. [On-line]. Available: <http://cflri.ca/cflri/pa/surveys/95survey/95survey.html>

Canadian Fitness and Lifestyle Research Institute. (1997). 1997 Physical Activity Monitor. [On-line]. Available: <http://cflri.ca/cflri/pa/surveys/97survey/97survey.html>

Canadian Fitness and Lifestyle Research Institute. (1998). 1998 Physical Activity Monitor. [On-line]. Available: <http://cflri.ca/cflri/pa/surveys/98survey/98survey.html>

Canadian Physiotherapy Association. (1998). You and the physiotherapist [Pamphlet]. Corpub: Author.

Canadian Public Health Association. (1997). Health impacts of social and economic conditions: Implications for public policy. Toronto: Author.

Chan, J.Y.K. (1995). Dietary beliefs of Chinese patients. Nursing Standard, 9 (27), 30-34.

Chau, P., Lee, H., Tseng, R., & Downes, N.J. (1990). Dietary habits, health beliefs, and food practices of elderly Chinese women. Journal of the American Dietetic Association, 90 (4), 579-580.

Cheptator-Thomson, J.R. (1995). Multicultural considerations in physical activity: An introduction. Quest, 47(1), 1-6.

Chow, N. (1996). Population aging in Asian Chinese. In V. Minichiello, N. Chappell, H. Kendig, & A. Walker (Eds.), Sociology of aging: International perspectives (pp.453-458). Melbourne: International Sociological Association, Research Committee on Aging.

Chow, N. (1992). Hong Kong: Community care for elderly people. In D.R. Phillips (Ed.), Ageing in East and South-east Asia (pp.65-76). London: E. Arnold.

Clark, D.O. (1995). Racial and educational differences in physical activity among older adults. The Gerontologist, 35 (4), 472-480.

Congress, E., & Johns, M.V. (1993). Cultural diversity and practice with older people. In I.A. Gutheid (Ed.), Work with older people: Challenges and opportunities (pp.65-84). New York: Forham University Press.

Conn, V.S. (1998). Older women's beliefs about physical activity. Public Health Nursing, 19(5), 370-378.

Corin, E. (1994). The social and cultural matrix of health and disease. In R.G. Evans, M.L. Barer, & T.R. Marmor (Eds.), Why are some people healthy and others not? The determinants of health of populations New York: Aldine de Gruyter.

Creswell, J.W. (1998). Qualitative inquiry and research design: Choosing among five traditions. Thousand Oaks, Ca.: Sage Publications.

Creswell, J.W. (1994). Research design: Qualitative and quantitative approaches. Thousand Oaks, Ca.: Sage Publications.

Denzin, N.K. (1978). Sociological methods: A sourcebook (2nd ed.). New York: McGraw-Hill.

Denzin, N.K. (1992). The interpretive heritage. In Symbolic interactionism and cultural studies: The politics of interpretation (pp.22-45). Oxford: Blackwell.

Denzin, N.K., & Lincoln, Y.S. (1994). Handbook of qualitative research. Thousand Oaks: Sage.

DeSensi, J.T. (1995). Understanding multiculturalism and valuing diversity: A theoretical perspective. Quest, 47(1), 34-43.

Dressler, W.W., & Oths, K.S. (1995). Cultural determinants of health behavior. In D.S. Gochman (Ed.). Handbook of health behavior research I: Personal and social determinants (pp.359-377). New York: Plenum Press.

Dyck, I. (1989). The immigrant client: Issues in developing culturally sensitive practice. Canadian Journal of Occupational Therapy, 56 (5), 248-255.

Elder, N.C., & Miller, W.L. (1995). Reading and evaluating qualitative research studies. The Journal of Family Practice, 41 (3), 279-285.

Elfert, H., Anderson, J.M., & Lai, M. (1991). Parents' perceptions of children with chronic illness: A study of immigrant Chinese families. Journal of Pediatric Nursing, 6 (2), 114-120.

Elward, K., & Larson, E.B. (1992). Benefits of exercise for older adults. Health Promotion and Disease Prevention, 8 (1), 35-50.

England, K.V.L. (1994). Getting personal: Reflexivity, positionality, and feminist research. Professional Geographer, 46 (1), 80-89.

Eyler, A.A., Baker, E., Cromer, L., King, A.C., et al. (1998). Physical activity and minority women: A qualitative study. Health Education and Behavior, 25 (5), 640-652.

Eyler, A.A., Brownson, R.C., King, A.C., Brown, D., Donatelli, R.J., & Heath, G. (1997). Physical activity and women in the United States: An overview of health benefits, prevalence, and intervention opportunities. Women and Health, 26 (3), 27-49.

Fielding, N. (1993). Qualitative interviewing. In N. Gilbert (Ed.), Researching social life (pp.137-153). London: Sage.

Finch, J. (1984). "Its great to have someone to talk to": The ethics and politics of interviewing women. In C. Bell, & H. Roberts (Eds.), Social researching, politics, problems, practice (pp.70-87). London: Routledge & Kegan Paul.

Ford, E.S., Merritt, R.K., Health, G.W., Powell, K.E., Washburn, R.A., Kriska, A., & Haile, G. (1991). Physical activity in lower and higher socioeconomic status populations. American Journal of Epidemiology, 133 (12), 1246-1255.

Fry, C.L. (1995). Age, aging, and culture. In R.H. Binstock, & L.K. George (Eds.), Handbook of aging and the social sciences (4th ed., pp. 118-136). Toronto: Academic Press.

Fry, C.L., Dickerson-Putman, J., Draper, P., Ikels, C., Keith, J., Glascock, A.P., & Harpending, H.C. (1997). Culture and the meaning of a good old age. In J. Sokolovsky (Ed.), Cultural context of aging (pp.99-124). Westport, Conn.: Bergin & Garvey.

Fung, K.K. (1998). Understanding Chinese cultures: A handbook for health care and rehabilitation professionals. Toronto: Yee Hong Centre for Geriatric Care.

Gill, D.L., Williams, K., Williams, L., Butki, B.C., & Kim, B.J. (1997). Physical activity and psychological well-being in older women. Women's Health Issues, 7 (1), 3-9.

Glass, T.A., de Leon, C.M., Marottoli, R.A., & Berkman, L.F. (1999). Population based study of social and productive activities as predictors of survival among elderly Americans. British Medical Journal, 319, 478-483.

Griswold, W. (1994). Culture and societies in a changing world. Thousand Oaks, Ca.: Pine Forge Press.

Gumperz, J.J. (1992). Interviewing in intercultural situations. In P. Drew, & J. Heritage (Eds.), Talk at work: Interactional settings (pp.302-327). Cambridge: Cambridge University Press.

Hamilton, G.G., & Zheng, W. (1992). From the soil: Foundations of Chinese society. Berkley: University of California Press.

Hammersley, M., & Atkinson, P. (1995). Ethnography: Principles in practice (2nd ed). London: Routledge.

Health Canada, & Canadian Society for Exercise Physiology. (1998). Handbook for Canada's physical activity guide to healthy active living. Ottawa: Health Canada.

Health Canada, Active Living Coalition for Older Adults, & Canadian Society for Exercise Physiology. (1999). Canada's physical activity guide to healthy active living. [Brochure]. Ottawa: Health Canada.

Helman, C. (1990). Cultural factors in health and illness. In B.R. McAvoy, & L.J. Donaldson (Eds.), Health care for Asians (pp.17-27). Oxford: Oxford University Press.

Herod, A. (1993). Gender issues in the use of interviewing as a research method. Professional Geographer, 45(3), 305-317.

Hine, C., Fenton, S., O'Hughes, A., & Velleman, G. (1995). Coronary heart disease and physical activity in South Asian women: Local context and challenges. Health Education Journal, 54, 431-443.

Hoeman, S.P., Ku, Y.L., & Ohl, D.R. (1996). Health beliefs and early detection among Chinese women. Western Journal of Nursing Research, 18 (5), 518-533.

Holmes, E.R., & Holmes, L.D. (1995). Other cultures, elder years. Thousand Oaks, Ca.: Sage.

Hopper, S.V. (1993). The influence of ethnicity on the health of older women. Clinics in Geriatric Medicine, 9 (1), 231-259.

Howze, E.H. (1997). No sweat: How research can increase women's physical activity. Journal of Women's Health, 6 (6), p.623-625.

Hughes, K., Yeo, P.P., Lun, K.C., Thai, A.C., Wang, K.W., & Cheah, J.S. (1990). Physical activity in Chinese, Malays, and Indians in Singapore. Annals of the Academy of Medicine, Singapore, 19 (3), 326-329.

Ikels, C. (1980). The coming of age in Chinese society. In C.L. Fry (Ed.), Aging in culture and society: Comparative viewpoints and strategies (pp.80-100). New York: Praeger.

Ikels, C. (1997). Long term care and the disabled elderly in China. In J. Sokolovsky (Ed.), Cultural context of aging (Chapter 24). Westport, Conn.: Bergin & Garvey.

Jarvis, K.L., Friedman, R.H., Heeren, T., & Cullinane, P.M. (1997). Older women and physical activity: Using the telephone to walk. Women's Health Issues, 7 (1), 24-29.

Jones, M., & Nies, M.A. (1996). The relationship of perceived benefits of and barriers to reported exercise of older African American women. Public Health Nursing, 13 (2), 151-158.

- Kaplan, G.A., Seeman, T.E., Cohen, R.D., Knudsen, & L.P., Guralnik, J. (1987). Mortality among the elderly in the Alameda County study: Behavioural and demographic risk factors. American Journal of Public Health, 77, 307-312.
- Keith, J., Fry, C.L., Glascock, A.P., Ikels, C., Dickerson-Putnam, J., Harpending, H.C., & Draper, P. (1994). Aging experience. Thousand Oaks: Sage.
- Kirsch, G.E. (1999). Ethical dilemmas in feminist research: The politics of location, interpretation, and publication. Albany, N.Y.: State University of New York Press.
- Koyano, W. (1996). Cultural differences in the aging experience. In V. Minichiello, N. Chappell, H. Kendig, & A. Walker (Eds.), Sociology of Aging: International Perspectives (pp.451-452). Melbourne: International Sociological Association, Research Committee on Aging.
- Krefting, L.H., & Krefting, D.V. (1991). Cultural influences on performance. In C. Christiansen, & C. Baum (Eds.), Occupational Therapy: Overcoming human performance deficits (pp.100-122). Thorofare, N.J.: Slack Inc.
- Kriska, A.M., & Rexroad, A.R. (1998). The role of physical activity in minority populations. Women's Health Issues, 8 (2), 98-103.
- Kuckelman Cobb, A., & Nelson Hagemaster, J. (1987). Ten criteria for evaluating qualitative research proposals. Journal of Nursing Education, 26 (4), 138-143.
- Kushi, L.H., Fee, R.M., Folsom, A.R., Munk, P.J., Anderson, K.E., & Sellers, T.A. (1997). Physical activity and mortality in post-menopausal women. Journal of the American Medical Association, 277 (16), 1287-1292.
- Kvale, S. (1996). InterViews: An introduction to qualitative research interviewing. Thousand Oaks, Ca.: Sage.

Kwong, P., & Cai, G. (1992). Ageing in China: Trends, problems, and strategies. In D.R. Phillips (Ed.), Ageing in East and South East Asia. (pp.105-127) London: E. Arnold.

Laghi, B. (1999, November 13). Not good enough for Canada. The Globe and Mail. pp. A19-A20.

Lai, M., & Yue, K.K. (1990). The Chinese. In N. Waxler-Morrison, J. Anderson, & E. Richardson (Eds.), Cross-cultural caring: A handbook for health professionals in Western Canada (pp.68-90). Vancouver: UBC Press.

Lalonde, M. (1974). A new perspective on the health of Canadians. Ottawa: Government of Canada.

Lincoln, Y. (1992). Sympathetic connections between qualitative methods and health research. Qualitative Health Research, 2 (4), 375-391.

Lincoln, Y., & Guba, E. (1985). Naturalistic inquiry. Newbury Park: Sage Publications.

Lonkila, M. (1995). Grounded theory as an emerging paradigm for computer-assisted qualitative data analysis. In U. Kelle (Ed.) Computer-aided qualitative data analysis: Theory, methods and practice (pp.41-51). Thousand Oaks: Sage.

Lubben, J.E., P.G. Weiler, & Chi, I. (1989). Gender and ethnic differences in the health practices of the elderly poor. Journal of Clinical Epidemiology, 42 (8), 725-733.

Marcus, B.H., & Forsyth, L.H. (1998). Tailoring interventions to promote physically active lifestyles in women. Women's Health Issues, 11, 104-111.

Marin, G., Sabogal, F., Marin, B.V., et al. (1987). Development of a short acculturation scale for Hispanics. Hispanic Journal of Behavioral Science, 9, 183-205.

Markides, K.S., & Black, S.A. (1995). Race, ethnicity and aging. In R.H. Binstock & L.K. George (Eds.), Handbook of aging and the social sciences (4th ed., pp. 153-170). Toronto: Academic Press.

Masi, R. (1988). Multiculturalism, medicine and health: Part I: Multicultural health care. Canadian Family Physician, 34, 2173-2177.

Masi, R., & Disman, M. (1994). Health care and seniors: Ethnic, racial, and cultural dimensions. Canadian Family Physician, 40, 498-504.

Masi, R., Mensah, L., & McLeod, K.A. (1993). Health and culture: Programs, services and care (Vol.II). Oakville: Mosaic Press.

Masse, L.C., Ainsworth, B.E., Tortolero, S., Levin, S., Fulton, J.E., Henderson, K.A., & Mayo, K. (1998). Measuring physical activity in midlife, older, and minority women: Issues from an expert panel. Journal of Women's Health, 7 (1), 57-67.

Matocha, L.K. (1998). Chinese-Americans. In L.D. Purnell, & B.J. Paulanka (Eds.), Transcultural health care: A culturally competent approach (pp.163-188). Philadelphia: F.A. Davis Co.

Mauthner, N., & Doucet, A. (1998). Reflections on a voice-centred relational method. In J. Ribbens & R. Edwards (Eds.), Feminist dilemmas in qualitative research (pp. 119-145). Thousand Oaks, Ca.: Sage.

Mayo, K. (1992). Physical activity practices among American Black working women. Qualitative Health Research, 2 (3), 318-333.

Mazzeo, R.S., Cavanagh, P., Evens, W.J., Fiatarone, M., Hagerg, J., McAuley, E., & Startzell, J. (1998). Exercise and physical activity for older adults. Medicine and Science in Sports and Exercise, 6, 992-1008.

McTiernan, A., Stanford, J.L., Daling, J.R., & Voigt, L.F. (1998). Prevalence and correlates of recreational physical activity in women aged 50-64 years. Menopause, 5 (2), 95-101.

Metropolitan Toronto District Health Council Health Promotion Strategic Planning Committee. (1996). Toward a healthier tomorrow: A strategy for promoting health in Metropolitan Toronto. Toronto: Author.

Miles, M.B., & Huberman, A.M. (1994). Qualitative data analysis: An expanded source book. Thousand Oaks, Ca.: Sage.

Min, P.G. (1995). Asian Americans: Contemporary trends and issues. Thousand Oaks, Ca.: Sage.

Mullings, B. (1999). Insider or outsider, both or neither: Some dilemmas of interviewing in a cross-cultural setting. Geoforum, 30, 337-350.

Mustard, J.F. & Frank, J. (1991). The determinants of health (CIAR Publication No.5). Toronto: Canadian Institute for Advanced Research.

Naidoo, J., & Wills, J. (1994). Health promotion: Foundations for practice. London: Bailliere Tindall.

National Leadership Conference on Physical Activity and Women's Health: Executive Summary. (1998). Women's Health Issues, 8 (2), 69-97.

O'Brien, S.J., & Vertinsky, P.A. (1991). Unfit survivors: Exercise as a resource for aging women. The Gerontologist, 31 (3), 347-357.

O'Neill, K., & Reid, G. (1991). Perceived barriers to physical activity to older adults. Canadian Journal of Public Health, 82, 392-396.

Pamphilon, B. (1999). The zoom model: A dynamic framework for the analysis of life histories. Qualitative Inquiry, 5 (3), 393-410.

Parry, K. (1994). Culture and personal meanings. PT Magazine, October, 39-45.

Patterson, C., & Feightner, J. (1997). Promoting the health of senior citizens. Canadian Medical Association Journal, 15 (8), 1107-1113.

Patton, M. (1987). How to use qualitative methods in evaluation. Newbury Park: Sage Publications.

Phillips, D.R. (1992) Modernization and the decline of family support for elderly people. In Aging in East and South East Asia. London: E. Arnold.

Phoenix, A. (1994). Practicing feminist research: The intersection of gender and 'race' in the research process. In M. Maynard, & J. Purvis (Eds.), Researching women's lives from a feminist perspective (pp.49-71). London: Taylor & Francis Ltd.

Pinto, B.M., Marcus, B.H., & Clark, M.M. (1996). Promoting physical activity in women: The new challenges. American Journal of Preventive Medicine, 12 (5), 395-400.

Plummer, K. (1996). Symbolic interactionism in the Twentieth Century: The rise of the empirical social theory. In B.S. Turner (Ed.), The Blackwell Companion to social theory (pp.223-251). Oxford: Blackwell.

Raphael, D. (1999). From increasing poverty to societal disintegration: Economic inequality and the future health of Canada. Paper presented at the University of Toronto School of Continuing Studies, Lecture Series: Philosophy and Contemporary Thought, Toronto, Ontario.

Raphael, D., Steinmetz, B., & Renwick, R. (1998). How to carry out a community quality of life project: A manual. Toronto: Authors.

- Reid, B. (1991). Developing and documenting a qualitative methodology. Journal of Advanced Nursing, 16, 544-551.
- Romans, M.C. (1997). Physical activity and exercise among women. Women's Health Issues, 7 (1), 1-2.
- Sandelowski, M. (1986). The problem of rigor in qualitative research. Advances in Nursing Science, 8 (3), 27-37.
- Scharff, D.P., Homan, S., Kreuter, M., & Brennan, L. (1999). Factors associated with physical activity in women across the life span: Implications for program development. Women and Health, 29 (2), 115-134.
- Smith, S. (1996). Ethnographic inquiry in physiotherapy research: The role of self in qualitative research. Physiotherapy, 82 (6), 349-352.
- Statistics Canada. (1996). Top 10 places of birth for total immigrants, immigrants arriving before 1961 and recent immigrants, for provinces and territories, 1996 census – 20% sample data. [On-line]. Available: www.statcan.ca/english/census96/nov4/table7.htm
- Stead, M., Wimbush, E., Eadie, D., & Teer, P. (1997). A qualitative study of older people's perceptions of ageing and exercise: The implications for health promotion. Health Education Journal, 56 (19), 3-16.
- Stephens, T., & Caspersen, C.J. (1992). The demography of physical activity. In H.A. Quinney, L. Gauvin, & A.E.T. Wall (Eds.), Toward active living: Proceedings of the international conference on physical activity, fitness, and health (pp.204-213). Champaign, Ill.: Human Kinetics Publishers.
- Sternfeld, B., Ainsworth, B.C., & Quesanberry, C.P. (1999). Physical activity patterns in a diverse population of women. Preventive Medicine, 28, 313-323.

Stone, S. (1991). Qualitative research methods for physiotherapists. Physiotherapy, 77 (7), 449-452.

Strauss, A.L. (1987). Qualitative analysis for social scientists. Cambridge: Cambridge University Press.

Strauss, A.L., & Corbin, J. (1990). Basics of qualitative research: Grounded theory procedures and techniques. Newbury Park, Ca.: Sage.

Swartz, D. (1997). Introducing Pierre Bourdieu. In Culture and power: The sociology of Pierre Bourdieu (pp.1-14). Chicago: The University of Chicago Press.

Toohy, K., & Taylor, T. (1998, September). Women, Sport and ethnicity: Perceptions, challenges and best practices. Paper present at the University of Toronto. Toronto, Canada.

Tortolero, S.R., Masse, L.C., Fulton, J.E., Torres, I., & Kohl, H.W. (1999). Assessing physical activity among minority women: Focus group results. Women's Health Issues, 9 (3), 135-142.

Ujimoto, K.V. (1995). Aging in a multicultural society: Public policy considerations. In S.E. Nanoo, & S. Ramcharan (Eds.), Canadian Diversity: 2000 and beyond (pp.52-69). Mississauga: Canadian Educators Press.

U.S. Department of Health and Human Services. (1996). Physical activity and health: A report of the Surgeon General. Atlanta, Ga.: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, The President's Council on Physical Fitness and Sports.

Verbrugge, L., & Jette, A. (1994). The disablement process. Social Science in Medicine, 38, 1-14.

Verhoef, M.J., & Love, E.J. (1992). Women's exercise participation: The relevance of social roles compared to non-role-related determinants. Canadian Journal of Public Health, 83 (5), 367-370.

Vertinsky, P. (1998). "Run, Jane, Run": Central tensions in the current debate about enhancing women's health through exercise. Women and Health, 27 (4), 81-111.

Warren, R. (1994). Wealth and health. Toronto: Premier's Council on Health, Well-being and Social Justice.

Weller, I., & Corey, P.N. (1998). The impact of excluding non-leisure energy expenditure on the relation between physical activity and mortality in women. Epidemiology, 9, 632-635.

Wiest, J., & Lyle, R.M. (1997). Physical activity and exercise: A first step to health promotion and disease prevention in women of all ages. Women's Health Issues, 7 (1), 10-16.

Wynn, K.E. (1994). Cultural diversity and the classroom. PT Magazine, October, 59-65.

Yonge, O., & Stewin, L. (1988). Reliability and validity: Misnomers for qualitative research. Canadian Journal of Nursing Research, 20 (2), 61-67.

Yoshida, K., Allison, K.R., & Osborn, R.W. (1988). Social factors influencing perceived barriers to physical exercise among women. Canadian Journal of Public Health, 79, 104-108.

Yu, E.S.H. (1991). The health risks of Asian Americans [Editorial]. American Journal of Public Health. 81 (11), 1391-1392.

Zavella, P. (1996). Feminist insider dilemmas: Constructing ethnic identity with Chicana informants. In D.L. Wolf (Ed.) Feminist dilemmas in fieldwork. Boulder, Co.: Westview Press Inc.

Appendices

Appendix A: Information Letter to Potential Participants

**CULTURAL VALUES, BELIEFS AND ATTITUDES OF IMMIGRANT CHINESE
WOMEN TOWARDS PHYSICAL ACTIVITY AND EXERCISE:
A QUALITATIVE INQUIRY**

January 2000

Dear Participant

My name is Carol Fancott and I am a Physical Therapist. Currently, I am also a graduate student at the University of Toronto, Graduate Department of Rehabilitation Science.

The purpose of my study is to find out what you think about physical activity and exercise and how your culture has shaped these meanings. I am focusing on Chinese culture, specifically healthy Chinese women (age 55 – 70 years), who speak English, and who have immigrated to Canada from Hong Kong, mainland China, or Taiwan.

Canada is made up of people from all over the world. It is hoped the results of this study will help our understanding of how culture influences our thoughts about physical activity and exercise. It is important for us to be able to offer health programs that reflect our many cultures.

I would like you to participate in this research project. I would like to interview you about your thoughts on physical activity and exercise and explore with you how your culture has shaped these thoughts. The interview will take approximately one hour and can be at a time and place of your convenience.

The interview will be audiotaped and transcribed. The interview will be strictly confidential. You do not have to answer any questions that you do not want to and you can stop participating in the study at any time without any negative effects. If you choose not to take part in this study, it will not jeopardize your participation at this centre/association.

While there are no immediate direct benefits to your participation in this study, the information that you provide may help shape future health initiatives in the area of physical activity and exercise. A summary of the results of this study will be available to you.

There are no known risks involved in this study. Your name will be kept completely confidential. Your name will NOT be recorded in the written notes or transcripts of the tapes and any identifying information about you will be removed. All notes and transcripts will be kept in a safe, locked cabinet.

Thank you for considering participation in this study. If you would like more information about this study, please contact me at (416) 536-8458.

Sincerely

Carol Fancott
Primary Investigator

Thesis committee: Dr. Dennis Raphael, Ph.D., Department of Public Health Sciences (tel. (416) 978-7567)
Dr. Rebecca Renwick, Ph.D., Graduate Department of Rehabilitation Science (tel. (416) 978-1818)
Dr. Karen Yoshida, Ph.D., Graduate Department of Rehabilitation Science (tel. (416) 978-6589)

Appendix B: Interview Guide

My study is about physical activity and exercise. In particular, I would like to know more about Chinese culture and how Chinese culture may have influenced you to think about physical activity and exercise.

For the questions that follow, probes may consist of the following:

- *Can you give me an example? I want to be sure that I understand what you are saying.*
- *How did you come to think this way?*
- *What has influenced you to do these things?*
- *How do you think your culture has influenced you to think/ behave this way?*
- *Can you say more about ... [topic]?*

1. Can you tell me a bit about yourself, where you are from, when you came to Canada?
2. What does being healthy mean to you? (or what does health mean to you?)
3. What kinds of things do you do to keep healthy?
4. Are there any things you would like to do to keep yourself healthy but don't? What would you like to do?
5.
 - (a) What are your thoughts on exercise?
 - (b) What does exercise mean to you?
 - (c) What do you think is the relationship between exercise and health?
6.
 - (a) What are your thoughts on physical activity?
 - (b) What does physical activity mean to you?
 - (c) What do you think is the relationship between physical activity and health?
7. What kinds of physical activity or exercise do you participate in?
8. Are there kinds of activities that you would like to participate in but don't have the opportunity to?
 - (a) What stops you?
 - (b) What would help?

Appendix C: Acculturation Scale
(Marin Short Acculturation Scale adapted for use with a Chinese population)

PART A: I will ask you a series of questions about the language you speak. For each question, please answer: (options will be written and shown to participants to aid their responses)

- i. Only Chinese (Cantonese/Mandarin/dialect of either)
- ii. Chinese better than English
- iii. Both equally
- iv. English better than Chinese
- v. Only English

1. In general, what languages do you read and speak?
2. What language did you speak as a child?
3. What language do you usually speak at home?
4. In which language do you usually speak?
5. What language do you usually speak with your friends?
6. In what language are the TV programmes you usually watch?
7. In what language are the radio programmes you usually listen to?
8. In general, in what language are the movies, TV, and radio programmes you prefer to watch and listen to?

PART B: For this section, I will ask you a series of questions about the people you usually associate with. For each question, please answer: (options will be written and shown to participants to aid their responses)

- i. All Chinese
- ii. More Chinese than English
- iii. About half and half
- iv. More English than Chinese
- v. All English

1. Your close friends are ...?
2. You prefer going to social gathers/parties with people who are...?
3. The persons you visit or who visit you are ...?
4. If you could chose your children`s or grandchildren`s friends, you would want them to be...?

Appendix D: Demographic Information Form

Age: _____

What country were you born in? _____

What year did you immigrate to Canada? _____

From where? _____

What is the highest level of education that you have? _____

From what country? _____

What is your marital status?

- (a) Never married
- (b) Married
- (c) Divorced
- (d) Separated
- (e) Widowed
- (f) Living together
- (g) Other

Are you working now?

- Yes
- No

If yes, are you working

- Full time
- Part time

If yes, what is your occupation? _____

If no, are you

- (a) Retired
 - Since when? _____
 - Previous occupation? _____
- (b) Unemployed
 - Since when? _____
 - Previous occupation? _____
- (c) Never employed
- (d) Permanently disabled

Demographic Information Form (cont'd)

Please look at this card and tell me the number of the income group that includes total household income, that is your income and all members of your family that you live with. This total income is for this past year, 1999, before taxes. This figure should include salaries, wages, pensions, interest, dividends, and all other income.

1. Less than \$2,000
2. \$2,000 - \$4,999
3. \$5,000 - \$9,999
4. \$10,000 - \$14,999
5. \$15,000 - \$19,999
6. \$20,000 - \$24,999
7. \$25,000 - \$29,999
8. \$30,000 - \$34,999
9. \$35,000 - \$39,999
10. \$40,000 - \$44,999
11. \$45,000 - \$49,999
12. \$50,000 and over
13. Don't know

Appendix E: Informed Consent Form

**CULTURAL ATTITUDES, VALUES AND BELIEFS OF IMMIGRANT CHINESE
WOMEN TOWARDS PHYSICAL ACTIVITY AND EXERCISE:
A QUALITATIVE INQUIRY**

I have been invited to participate in a study about Chinese cultural attitudes, beliefs and values towards physical activity and exercise.

I understand that I will be asked to participate in an interview to talk about my attitudes, beliefs and values towards physical activity and exercise and how my culture has shaped these meanings.

I understand that the interview will be audiotaped by the researcher to assist with the analysis of the information and written notes may be taken during the interview. The tapes will be erased within 5 years of completion of the study.

I understand that I may be asked to review comments that I made in the interview at a later date, to ensure that the researcher has understood what I have said.

I am aware that my participation in this study will not result in any anticipated risks or immediate benefits.

I understand that my answers and participation in this study will be kept secret and my name and identifying information will not be used in transcripts or on any resulting publications. I will be identified by number or code only.

I understand that my participation is voluntary and that I may withdraw from the study at any time. I also do not have to answer any questions that I do not wish to answer.

I understand that if I choose not to participate in this study, it will not affect my involvement with the centre/association.

I agree to participate in this project. I will receive a copy of the information letter and consent form.

I would like a summary of research results: YES
(please check one)

NO

Name: _____ (please print)

Signature: _____

Date: _____