

Square Dance Constraints and Motivations for the Elderly in Chongqing, China

by
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A Master's Thesis Presented to

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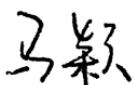
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THESIS EXAMINATION COMMITTEE SIGNATURE PAGE

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ABSTRACT

China's population is aging, and square dancing may be effective in solving age-related problems; enriching free time and promoting a healthier life style. Square dancing is China's fastest-growing leisure activity. It is a sociable, undemanding activity, suited to the elderly. But physical decline can limit the elderly's participation. Limited knowledge of what motivates (or hinders) the elderly from participating, and of how they negotiate constraints, hinders the development of square dancing. This research aimed to investigate the motives, constraints and negotiation factors of square dancers over 60 years old in downtown Chongqing, China. It measures 90 senior square dance participants in 2016 in Chongqing, China from nine square dance groups by conducting questionnaires. The questionnaire was designed based on the literatures relating to leisure motivations, constraints and negotiation strategies. And the data was analyzed by using SPSS, including correlation analysis, MANOVA analysis and regression analysis. The research gained a better understanding of square dance participation, and added further academic value in measuring it. The findings also suggest ways for square dance organizers to maximize positive (and minimize negative) impacts.

Keywords: square dance, elderly, motivation, constraint, negotiation, square dance participation

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Chapter 1: Introduction

1.1. Statement of the Problem

An aging population is posing more and more challenges to society due to declining birth rates and increasing life expectancy, as documented by scholars over the past 25 years (Wu, 1999; Zheng, 2000; Wang, 2014; Liu, 2015). The population of people over 60 years old increased from 76.64 million to 13 billion between the years 1982 and 1999 in China (Wu, 1999). According to the fifth population census conducted in China at the end of 2000, people aged 65 and over composed 7.0% of the total population (Wu, 1999, p. 34); this indicates that China has entered into a period of population aging. According to the National Bureau of Statistics of China (NBSC, 2015), the population reached 136.782 billion in 2014, including 13.755 billion over the age of 65. Zhang (2014) indicated that by the year 2025 approximately 28 billion people in China will be over 60, which will account for 30% of the whole population. In Chongqing (a directly controlled municipality in China), the aging population reached 3.247 billion in 2013, having increased by almost 1 million each year since 2011 (NBSC).

With the increasing population of elderly people come more age-related problems such as degenerative illness, the fear of death (of self and family members), a sense of loneliness, etc. These age-related problems may hinder a satisfactory aging progression that sustains a high quality of life well into old age. In particular, the decline of physical functions may prevent the elderly from participating socially (Odawara, 2006). In later stages of life, the elderly may lose their spouse or friends, which can lead to crisis and despair (Odawara, 2006).

Fortunately, with advances in medical science some physical illness (such as cardiopathy, diabetes, hypertension, etc.) can be prevented; but there are still many other age-related problems (such as diagnosed depression), which may trouble people as they get older. With a growing elderly population, it is becoming essential to consider what factors can prevent illness and promote well-being (Wang, 2008).

Furthermore, this group of elderly people has more free time at their disposal than other groups (Odawara, 2006). Wang (2003) found that males over 65 years of age averaged 60.8 hours of free time per week and that females averaged 58.6 hours. According to Liu (2014), free time accounted for 41% of seniors' time in the 1990's, while in 2010 their free time increased to 50%. However, according to MacNeil & Anderson (1999) "many of the elderly fail to adjust to community living, and one of the most important factors associated with the failure to adapt was their inability to use free time in a personally satisfying manner" (MacNeil & Anderson, 1999, p. 125). Therefore, using their free time more effectively and efficiently becomes very important to their quality of life (Wang, 2008).

According to the World Health Organization (2002), some of the factors which influence health and aging can be controlled by individuals as they choose to adopt healthier lifestyles. Leisure activity is an effective way to enrich free time, live a healthier life style, and solve age-related problems (Kwon, 2001). Leisure activity has proven to have a positive impact on the elderly (Ragheb & Griffith, 1982; Sneegas, 1986; Guinn, 1990). The administration of these leisure activities is regarded as the second most important segment of senior care after medicine (Directorate-General of Budget, Accounting, and Statistics, Executive Yuan, R.O.C, 2000). Leisure activity can help the elderly to be more active in their later years, to be more

satisfied with life, and can enhance their ability to cope with problems (Kwon, 2001). When the elderly engage in more leisure activities, they can significantly lower their risk of chronic disease while at the same time improving their physical health, mental health, and quality of life (Blackburn & Dulmas, 2007). Chiou (2004) stated that the elderly can participate in a limited number of activities due to the decline in their physical condition. Developing appropriate leisure activities for elderly people is necessary to an enhanced and satisfactory life in old age. Square dancing is one such leisure activity that is suitable for the elderly and can enrich their free time.

Firstly, square dancing is regarded as the fastest-growing leisure activity (Li, 2013; Liu, 2014). Chongqing Municipal Government support for the development of square dance activities is essential to citizens' health. Square dancing is a low-cost activity that many people can take part in. The local government of Chongqing is actively planning to turn square dancing into a national fitness activity (Li, 2013). For example, the Chongqing Cultural Council held a square dance exhibition in 2013, which attracted 35,000 citizens (including 1,000 elderly people) (Li, 2103).

Meanwhile, the local government had invested a lot in accelerating this development, including the establishment of more squares. Local government support has encouraged a rapid growth in square dancing. According to Liu (2014), square dancing attracts approximately 8 billion participants, a number that will grow at a rate of 10% per year in China. In Chongqing, 23% of citizens participated in leisure activities and 9% of those tried square dancing (Li, 2013). According to Li (2013), 34% of the elderly who participated in square dancing in Chongqing spent, on average, about 4 hours per week square dancing. This

shows that participation in square dancing enriches (and accounts for a large segment of) their free time (Li, 2013). Square dancing can be seen as the second most popular leisure activity (behind Mahjong) among the elderly in Chongqing, China (Li, 2103).

Secondly, square dancing can be regarded as a more social, less demanding and easily accessible activity more suited to the elderly (Ying, 2013; Zheng, 2013). Due to the decline in their physical ability, a less intense activity is also healthier and better suited to the elderly.

Moreover, square dancing as a group activity can bring many benefits to participants—especially the elderly. Specifically, by recreating continuities with the world and creating interpersonal relationships that promote their quality of life, square dancing can provide the elderly with a chance to spend meaningful time with others (Rand, 2004; Ying, 2013). Square dancing also benefits physical health, including improving the functioning of the lungs and digestive system, promoting the absorption of nutrients, improving blood circulation and metabolism, enhancing immunity, and exerting a positive effect in the treatment of Alzheimer's disease (Hailong, 2009; Cromie, 2002).

A larger aging population is associated with an increase in problems connected with aging. Therefore, in order to reap the benefits of square dancing, more and more of the aging population are participating in the dance. There is an increased demand for square dancing services, and challenges arise because of the growing number of elderly participants.

The problem of providing better services to retain and attract participants remains. Organizers of many square dance groups, including the Xiaoying Liu (personal communication, December 01, 2015) and Zhong Wang (personal communication, December 04, 2015), acknowledged their desire to serve the aging population. However, they admitted

they did not understand the elderly's motives for participating in groups, the constraints that may hinder their participation, and the negotiation strategies they may use to overcome these constraints. Therefore, the organizers believed that an understanding of the motives, constraints, and negotiation strategies of the elderly was important in spurring the development of square dance activities. With this knowledge, the organizers will be able to improve square dance activities, and thereby increase participation. As a result, the elderly can reap the benefits and improve their quality of life.

The study of leisure motivation and its constraints has received considerable attention over the past 25 years (Godbey, Crawford, & Shen, 2010). Motivation and constraints are competing factors that affect participation in leisure activities (Shu, 2009). According to Wang (2008), the difference between individuals who are willing to try new activities and those who are not, is a positive motivation that can result in more positive participation. On the other hand, if individuals are isolated, lonely, bored, and unhappy with their new-found activities, their experience of participating can be very negative.

Recently, more scholars are coming to the conclusion that constraints can be overcome through negotiation (Hubbard& Mannell, 2001; Loucks-Atkinson and Mannell, 2007; Scott, 2005). However, although constraint negotiation has received more attention in recent years, limited attention has been given to the motives and constraints of the elderly. Most of the related studies focused on ethnic minorities (Shinew, Floyd, and Parry, 2004), immigrants (Stodolska & Alexandris, 2004), and women (Henderson, Bedini, Hecht, & Schuler, 1995).

The elderly, who compose the majority of square dance participants, differ from the social mainstream in physiology, cognitive function, and social relations (Yang, 2006).

Therefore, it is necessary to study the elderly in square dance activities separately.

Furthermore, there has been very little research that focuses on square dance motivation and constraints. It appears that most square dance studies focus on identifying the benefits of square dancing, including the improvement of physical and mental health, disseminating ethnic culture, establishing a harmonious society, etc. (Hailong, 2009; Ying, 2013).

Several studies focus on deficiencies in the growth of square dancing, such as lack of regulations and noise nuisance (Li, 2013; Liu, 2014). These problems may reduce participation in square dancing and restrict the development of square dance activity.

Therefore, it is necessary to identify the motives for participating in square dancing—as well as constraints and the negotiation strategies used to overcome them. As a result, square dance managers will be able to enhance square dance activities in order to retain newcomers and nurture them to become dedicated participants.

1.2. Research Purpose and Objectives

This research aimed to investigate the motives, constraints and negotiation factors of people over 60 who engaged in square dance activities in Chongqing, China. To achieve the research purpose, the objectives of the research were set as follows:

1. To identify the motivation that underlies participation in square dancing;
2. To understand the types of constraints that square dance participants have to overcome, to engage in square dancing activities;
3. To identify negotiation strategies used by the elderly to overcome the constraints to square dance participation;
4. To identify factors that influence their efforts to negotiate those constraints;

5. To recommend strategies that will enhance square dance provision for the Chinese elderly in urban environments.

1.3. Significance of the Study

As an aging country, China faces a series of age-related problems. Square dancing, as the fastest-growing leisure activity among China's elderly, is the simplest and most effective way to help the elderly achieve healthy aging. By looking for statistically significant differences (or correlations) in motives, constraints, and negotiating strategies among elderly square dance participants, we may gain a better understanding of square dancing in Chongqing. This will contribute to enhancing motivation, reducing constraints, improving square dancing activities, increasing participation, and achieving healthy aging. This research, building upon previous studies, could also make both theoretical and practical contributions to the academic community, as well as other professions in leisure services.

1.4. Components of the Study

The final thesis comprises five chapters. The first is an introduction—including a statement of the problems, the study's purpose, research questions, and reflection on the significance of the study. Next is a literature review, which focuses on background to aging and the aging population, square dancing, motivation, constraints, and negotiation. Chapter 3 describes the research methods adopted in this study, and Chapter 4 presents the study's findings and the answers to each research question. Chapter 5 summarizes the content presented in this study and offers recommendations for future research.

Chapter 2: Literature Review

This research aimed to investigate the motivation, constraint and negotiation factors of people over 60 who engaged in square dance activities in Chongqing, China. The relevant literature is reviewed in this chapter. The literature review is divided into five sections: (1) aging and aging population (2) square dance (3) motivation (4) constraints and (5) constraint negotiation.

2.1. Aging and Aging Population

Aging has been defined as "the maturation and senescence of biological systems" (Albert, 2004, p.25). "Maturation generally refers to age related changes that occur during early periods of life. Senescence, on the other hand, refers to physiological deterioration in organ systems that occur as one grows old" (Albert, 2004, p.25). However, Freysinger and Kelly (2004) added that the aging process is not merely a biological event, but a dynamic and progressive process that also has sociological and psychological components.

Different terms have evolved to capture the psychological, physical, cognitive, and emotional facets of aging (Hill, 2005). The term, "normal aging" emerged after "pathological aging" to acknowledge that aging does not directly cause organ damage. Instead, aging is associated with a greater likelihood of disease causing organ damage (Busse, Maddox, and Buckley (1985). Specifically, "the concept of normal aging was used initially to connote natural developmental processes in later life as distinct from pathological processes which are more likely to be attributable to disease rather than aging" (Busse et al., 1985, p.5-13). However, normal aging failed to identify how external factors contributed to the effects of aging on the elderly (Slagle, 2011). The term, "successful aging" emerged as a more positive

concept of normative aging.

Rowe and Kahn (1998) defined successful aging as, “low risk of disease and disease-related disability; high mental and physical functioning; and active engagement with life” (p. 38). Based on the findings from Rowe and Kahn, Slagle (2011) pointed out that not all aging is negative, and people can do something about the vicissitudes of growing old. Successful agers can actively engage in behaviors that help shift them away from the threshold of disease. Menec (2003) measured successful aging in terms of being able to carry on daily activities and found that the level of daily activity was positively related to “greater happiness, better function both physically and mentally, and reduced mortality” (p. 74). Further research has reinforced that aging can be delayed through lifestyle changes such as exercise and nutrition (MO, 2009). According to Mo, the simplest and most effective way to achieving successful aging is to improve health through exercise, adding life to years, not just more years to life.

2.1.1. Historical overview of China’s aging population.

Life expectancy has grown dramatically in recent decades, with advances in new technology, medicine, and nutrition. In China, average life expectancy at birth increased from 45 years in 1910 to 60 years in 1994, and life expectancy at birth is expected to increase to 83 years by 2050 (Wang, 2014). According to NBSC (2014), the aging population increased to 13.755 billion in 2013, and Wang (2014) shows that 1.2 million families (30.6%) include people aged 60 and over.

The growing percentage of those over 60 can also be seen in Chongqing, where (in 2013) the aged population reached more than 5 million. Zhang (2014) indicated that in Chongqing

6.25 million old people composed 18.61% of the whole population in 2013, as compared to 16.21% in 2010. This phenomenon of an increasing number of aging people requires paying more attention to improving the daily lives and activities of the elderly.

A direct challenge for the elderly is how to make these years more meaningful and satisfying. In China, there are now significant opportunities for the elderly to change their lifestyle and improve their quality of life by participating in leisure activities, which can not only be beneficial to their mental, physical and social health, but also enrich their free time (Rand, 2004; Ying, 2013; Hailong, 2009; Cromie, 2002). An increasing number of elderly people participate in leisure activities, especially square dancing. According to Li (2013), 34% of the elderly spend about 4 hours per week square dancing in Chongqing.

Meanwhile, according to Wang (2003), people over the age of 60 who live in urban areas are now the most economically privileged, because their main source of income is pensions—unlike the rural elderly, who depend on support from family members and on labor income. Consequently, the urban elderly have a more stable income than their rural counterparts. A stable income guarantees financial stability, which may create opportunities for the elderly to pursue both a material and spiritual life (Wang, 2003).

Clearly, the aging population in modern society is changing significantly. In the past, the elderly might have been content with the satisfaction of basic needs. Now, an increasing number can pursue higher levels in the hierarchy of needs, for example spiritual enjoyment (Maslow and Murphy, 1954). Leisure consumption accounts for 28% of total spending, making it the second largest component of consumption in China (Liu, 2014). These changes make leisure activities more significant, and leisure environments need to be retrofitted

accordingly to meet the leisure needs of the elderly (Liu, 2015). Therefore, it is necessary to identify motives, constraints, and constraint negotiation strategies to enable square dance organizers to improve square dance programs, for the benefit of participants.

2.2. Square Dance

Square dancing is one of the most popular leisure activities among the elderly in China (see Figure 1). According to Li (2013) and Liu (2014), square dancing attracts approximately 8 billion participants in China, and is regarded as the second most popular activity in leisure activities (behind Mahjong) among the elderly in Chongqing, China.



Figure 1. The picture of square dance activity in Chongqing, China

2.2.1. Concepts of Square Dance.

Square dancing is a kind of social dance, held in an open area. External leaders or organizations organize square dancing in these open areas, but people also join in these sessions spontaneously (Li, 2009). Cohen-Stratyner (2001) defined social dance as, “that which serves a social purpose. In the ethnographic model, social dance is generally seen as a

form of social organizer, reinforcing societal norms within the contexts of celebrations or mating rituals.” This research focuses on the study of spontaneous square dancing, which allows people to dance together in wide open spaces, enjoy physical and mental exercise, and participate in the establishment of harmonious community (Li, 2012).

All kinds of dances may be held in a square, but this does not mean that all such dances constitute square dancing (Li, 2009). Scholars’ definitions of square can be categorized into the following four types:

- Square dancing can be regarded as one kind of non-elite dance. Mou (2010) defined the square dance as an amateurish dance in which many people participate in public places for entertainment and fitness, rather than for awards and honor. Furthermore, the only requirement of the dancers is passion. There are no other professional requirements; so, the participants of square dancing are public and not professional dancers (Li, 2012).
- Square dancing is a kind of dance performance that reflects a trend involving grass-roots, popular, folk, entertainment, spontaneous and participatory styles (Mou, 2010). As a form of dance, it aimed at pleasing performers rather than the audience (Cohen-Stratyner, 2001). Square dancing is a sound-based dance that is often a variation of a performing version. One common form is, dancing in a semicircle from which a leader moves forward and is followed by the other performers.
- As a moderate-intensity, keep-fit activity, square dancing provides health benefits. Li (2013) confirmed that square dancing combines fitness with dance

based on a rich musical rhythm and attracts more members of the public to join in. It has been shown that this kind of square dancing can improve physical health; enhancing flexibility, coordination and balance, as well as improving mental health by reducing tension, chronic fatigue, and other stress-related conditions (Hanna, 1995).

- Liu and Hu (2012) define square dancing as a kind of cultural performance. This kind of square dancing refers to a form that is either traditional, or attached to traditional elements that are passed down from generation to generation. It is a dance within a community or group that serves one or more purposes related to traditional practice, cultural transmission, social acceptance, or connectedness (Jain & Brown, 2001). It is the crystallization of human wisdom and a symbol of traditional Chinese heritage, derived from daily life. It is also a direct way to represent folk culture by reenacting pre-existing traditions and serving to reinforce cultural norms (Berson, 2005).

2.2.2. Historical Overview of the Square Dance.

Square dancing is a traditional dance activity with a long history that can be traced back to the Tang dynasty (Liuand Hu, 2012).The key development period for current square dancing practices began in the 1990s, when more squares and parks were established. Commensurate with the economic growth in the late 20th century, people began to pursue recreational living, which enhanced living standards of the time. Square dancing has now been transformed with a fresh image as a kind of healthy and popular recreational activity (Li, 2012). In this new period for square dancing, the number of participants in China increased

to 87 million by 2014 (Ying, 2013). As to frequency, Ying (2013) identified that 54% of current square dance participants dance at least once per week and 26%, at least three times per week.

Civic organizations contributed to the development of square dancing by promoting square dance associations organized by volunteer dance enthusiasts found in every district in Chongqing, as well as in many other cities in China. Each association has at least 180 members, the youngest member being 55 years old (Li, 2013). These associations regularly organize various dance competitions and performances. In addition, the central governments of China and Chongqing local government have made plans to join forces with domestic civic organizations to promote square dancing as a recreational activity. After 2009, the central government launched a national fitness program and chose August 8th as National Fitness Day (Li, 2013). The Chongqing local government created a fitness program in collaboration with local square dance associations that included publishing free instructional dance videos, training more professional dance instructors, and establishing more squares and parks as dance arenas (Li, 2013).

However, there is a growth problem for the square dancers. The participation rate of males is noticeably poor—men account for only 8% of all dancers (Li, 2012). In addition, Li (2013) states that square dancing lost some of its existing participants when new participants tried the activity out. Therefore, the key to increased participation in square dancing is to focus on encouraging the existing participants to keep participating, as described by the director of the Chongqing square dance association (Li, 2013). According to Li (2013), there are three main constraints for the existing square dance participants: (a) lack of time due to

work commitments, (b) not enough family time, or (c) no suitable environment.

In conclusion, square dancing in China is now facing both opportunities and challenges in maintaining and increasing participation. According to previous studies (Kelly, Steinkamp & Kelly, 1986; Jackson, 2000), motivation, constraints, and constraint negotiation are related to leisure participation. However, there is no research about motivation, constraints, and negotiation strategies for elderly Chongqing square dancers. Improving participants' motivation and removing constraints to their joining in square dancing are two key issues to address.

2.3. Motivation

Motivation is the reason for behaviors (Kim & Trail, 2010). All actions initiated from motivation are called motivated behavior. This kind of motivated behavior arises from an intrinsic need, which triggers conscious action to fulfill it (Lai, 2003). Similar motivation can trigger different behaviors, while a different motivation can result in similar action. Understanding what motivates people to participate in leisure activities is important because it helps determine why people engage in leisure behavior in the way they do (Chen, 2005). Such knowledge is fundamental for explaining and predicting leisure behavior, and can also be applied in practical settings involving leisure service delivery (Chen, 2005).

Different scholars have come up with different motivation theories depending on their study subjects. One of the best-known theories of motivation is Abraham Maslow's Hierarchy of Needs (Maslow & Murphy, 1954). Maslow hypothesized that every person has five levels of needs. As each of those needs becomes substantially satisfied, the next need becomes dominant (Chen, 2005). Forty years ago, self-determination theory emerged and

presented three broad types of motivation: intrinsic, extrinsic, and amotivation (Deci & Ryan, 1985). Intrinsic motivation is participants' desire to experience, and to learn for its own sake. Extrinsic motivation occurs when individuals engage in an activity for reasons other than the activity itself. Amotivation refers to "non-motivated behaviors that occur when an individual perceives a lack of contingency between their behavior and outcomes, in which case they experience incompetence and lack of control" (Chen, 2005, p.38).

In order to better investigate leisure motivation, many scholars have developed different scales to measure and explain the characteristics of leisure motivation (Chen, 2005). They wish to construct a model based on the factors that affect participation motivation: especially the core reason for motivation.

One of the best-known scales is the Leisure Motivation Scale, developed by Beard and Ragheb (1983). This 48-item scale classified four categories of leisure motivation:

- Intellectual—such as learning, exploring, thinking, and imagining;
- Social, in which individuals engage for social reasons, including interpersonal relationships and to gain the esteem of others;
- Competence-mastery motivation, in which individuals seek to challenge and compete;
- Stimulus-avoidance motivation—an escape from the over-stimulation of life situations.

The Leisure Motivation Scale defined by Beard is thoroughly developed and widely recognized for its value in assessing motivation for leisure participation (Wang, 2007; Manning, 2011). Wang (2007) utilized the leisure motivation scale to measure leisure

motivations for the elderly in Nanjing, China. The factor structure and scale reliabilities approximated those reported in the original instrumentation; however, Wang's study utilized 32 motivation items (rather than the 48 regarded as optimal).

The relationship between constraints and motivation was identified, showing that leisure constraints undermined self-determined leisure motivation (intrinsic motivations and self-determined extrinsic motivations) (Alexandris, Tsorbatzoudis, & Grouios, 2002; Losier, Bourque, & Vallerand, 1993). Chen (2004) indicated that there was a negative correlation between leisure constraints and participation motivation, and that when leisure motivation was higher, constraint factors were lower. Alexandris, Tsorbatzoudis, & Grouios (2002) examined seven constraints as independent variables, and three motivation dimensions as dependent variables, through regression analysis. The results of this study showed that constraints made up 15% of variance in intrinsic motivation, but failed to predict extrinsic motivations.

There are also some studies which focus on the identification of the relationship between motivation and past experiences. Huang and Hsu (2009) examined how motivation and past experiences affect Chinese visitors who visit Hong Kong. The author suggests that previous experiences (e.g., income, level of education) may result in a stronger motivation to visit Hong Kong in the future. Past experiences could be a determinant regarding motivation to visit.

Some other studies have examined motivation in relation to leisure activity participation. Leisure motivation is a key element affecting participation in leisure activity (Alexandris et al., 2002; Kuo, 2007). Alexandris et al. evaluated the relationship between motivation and frequency of participation, by using multiple analyses of variance (MANOVA). Four participant groups were considered as independent variables: daily, weekly, monthly, or less

than monthly, and two motivational dimensions were considered as dependent variables: intrinsic motivation and extrinsic motivation. The results presented a higher intrinsic motivation, resulting in a higher frequency of participation. Furthermore, Kuo (2007) investigated scuba diving tourists and found that those who exhibited a high frequency of annual participation in this scuba diving group had higher motivation than the low frequency group.

In conclusion, based on Manfredo's suggestion (1996), different scales suitable for measuring motivation need to be used for different recreational activities. Motivation can be derived from many sources, such as family togetherness, achievement, and enjoyment of nature (Manfredo, 1996; Wang, 2007). Motivation is related to past experience, leisure participation, and constraints. (Huang & Hsu, 2009; Kao, 2002; Kuo, 2007; Wang, 2007). However, there is no research focused on establishing a motivation scale for square dancing amongst the elderly. An understanding of motivation amongst square dance participants may be found and measured through the use of a suitable scale, and it follows that suitable strategies may be created to retain existing participants and attract more participants.

2.4. Constraints

The systematic research of constraints can be traced back to the 1980s. Crawford & Godbey (1987) defined that constraints can limit or affect individuals' participation in a specific activity. Jackson (2000) defined leisure constraints as factors that individuals perceive or experience as limiting the formation of leisure preferences or precluding leisure participation and enjoyment. During the past three decades, a theory of constraints has developed, and the concept of leisure constraints has been developed to permit a better

understanding of individuals' leisure pursuits (Godbey, Crawford, & Shen, 2010)

Research on leisure constraints has been refined through the development of several conceptual models (Godbey, Crawford, & Shen, 2010; Jackson, 2000). Crawford and Godbey (1987) proposed a conceptual model that has been generally applied in empirical studies to explain relationships between preferences and participation (Wang, 2007; Godbey, Crawford, & Shen, 2010). In this model, Crawford and Godbey (1987) classified constraints into three types (intrapersonal, interpersonal, and structural). Specifically, "intrapersonal constraints refer to individual psychological states and attributes that interact closely with leisure preferences rather than intervening between preference and participation (e.g. stress, depression, perceived self-skills)" (Kim, Lee, Kim, & Kim, 2015, p.1065). Interpersonal constraints are formed in social interactions, such as where there is family support, and through recognition from friends. Structural constraints result from external elements, which include equipment, transportation cost, climate, and time spent at work (Jun et al., 2009; Kim & Trail, 2010).

Building upon this conceptual model, a hierarchical model of leisure constraints was conceptualized by Crawford, Jackson, and Godbey (1991), with the intent of integrating the original three discrete models. In the first phase, Crawford pointed out that intrapersonal constraints must first be overcome, followed by interpersonal and (lastly), structural constraints. The second phase of the model demonstrates how leisure activity participants with a desire for a higher level of specialization develop stronger involvement (Dominguez, 2003).

Based on the model, "participants previously negotiated a set of constraints in their

decision-making process for initial leisure participation (i.e., the first phase in the model). Even after their initial engagement, nevertheless, participants are continually affected by a set of constraints. Different from the first phase focusing on initiating leisure participation, the second phase of the model shows that participants are still constrained and need to constantly negotiate those constraints to progress toward a higher specialization level" (Dominguez, 2003, p.26). This hierarchical model was used to investigate relationships among, preferences for, constraints to, and participation in, leisure for the elderly in China (Wang, 2007).

A refinement was proposed to the classification categories used to identify and study leisure constraints. This study evaluated 29 item constraint items and stated that constraints were not sequential and hierarchical, but dynamic and integrated, and that negotiations may occur over and over within the model, as well as suggesting that a more complete understanding is needed of how people negotiate leisure constraints throughout the participation process (Wang, 2007).

The relationship between demographics and leisure constraints was investigated, showing that demographics appear to affect leisure constraints. Zhang (2012) identified seven dimensions of leisure constraint: (a) time, (b) facilities/services, (c) accessibility/financial, (d) lack of partners, (e) lack of knowledge, (f) individual psychology, and (g) lack of interest. Demographic information and perceived constraints were examined by using MANOVA. Results from this study indicate that demographic differences (e.g., level of education, age, marital status, income, and gender) demonstrate differences in perceived constraints. Specifically, younger individuals were perceived to have significantly more structural constraints than the elderly over 75 years. Those who are divorced and live alone may also

have higher leisure constraints. This study provides insight into how the elderly may experience higher levels of constraint related to level of education, age, marital status, income, and gender.

Furthermore, Dong and Chick (2012) conducted a series of studies on leisure constraints in China and found that many Chinese leisure participants were influenced by personal and situational factors, such as lack of time, or money, and a poor infrastructure system. In addition, according to Li (2013), there were similar reasons for a decrease in participation in square dancing, including not enough time due to work constraints, not enough time due to family constraints, and lack of a suitable environment, etc. Lastly, Liu (2014) identified four main reasons why square dance participants dropped out: (a) job responsibilities, (b) lack of free time, (c) family responsibilities, and (d) health/injury.

In conclusion, the constraints for leisure activity are significantly differentiated for various reasons. Participants from different demographics, and with different participation experiences, may experience different constraints in their leisure activity (Alexandris et al., 2002; Wang, 2007). There have been examinations of these differences through research of in leisure constraints in the case of ethnic minorities (Shinew, Floyd, & Parry, 2004; Stodolska, 1998); gender (Jackson & Rucks, 1995); immigrants (Juniu, 2000; Stodolska & Alexandris, 2004), and women (Henderson et al., 1995).

However, no attention has been paid to examining square dancing constraints among an aging population. Godbey (2010) mentioned that investigating constraints on leisure activity for potential participants is beneficial to developing suitable inclusion strategies. Paying attention to the results of these investigations is one way in which the development of more

effective strategies may remove or overcome these constraints and offer more opportunities for leisure activity participants.

2.5. Constraint Negotiation

In early studies of the 1980s, researchers regarded leisure constraints as barriers to recreation activities and recreation participation (Buchanan & Allen, 1985; Searle & Jackson, 1985). There has been a development, over the past two decades, in the concept of constraints. Researchers identified that encountering constraints can trigger negotiation strategies to overcome those constraints (Jackson, 2000; Hubbard & Mannell, 2001). Evidently, constraints are not immovable, but can be negotiated (Crawford& Godbey, 1991). In a meta-analysis regarding leisure constraints, a negotiation theory was identified by Jackson, Crawford, and Godbey (1993). This negotiation theory showed that “leisure participation is dependent not on the absence of constraints, but on negotiating one’s way through them. Such negotiations may modify rather than foreclose participation” (Jackson, et al., 1993, p. 4). In order to identify that “some people negotiate through their constraints of their leisure instead of react passively to their constraints by not participating” (Jackson & Rucks, 1995, p.102), Jackson conducted an exploratory study on junior high school and high school students with a divided negotiation strategy of two dimensions: cognitive (e.g., changing leisure aspirations, pushing themselves harder); and behavioral (e.g., changing the use of time or skills) (Jackson & Rucks, 1995).

Furthermore, Hubbard and Mannell (2001) classified negotiations into four types: (a) time management, (b) skill acquisition, (c) interpersonal coordination, and (d) financial management. Based on Hubbard and Mannell’s research, Stanis, Schneider, and Pereira (2010)

added two more negotiation strategies: cognitive negotiation strategy (influencing how the individual feels about their leisure activity participation), and issue management. These negotiation dimensions, identified by Hubbard (2001) and Stanis et al. (2010), provide useful information about how individuals may negotiate their constraints.

The relationships among motivation, constraint, negotiation, and participation were also tested based on the model identified by Hubbard and Mannell (2001). Hubbard and Mannell (2001) proposed four models to test relationships amongst constraints motivation and negotiation strategies, in which the constraint-effects-mitigation model had the strongest support. This model suggests that individuals are more likely to negotiate constraints when they meet more constraints that positively affect participation.

Based on Hubbard's study, Son (2008) developed another study on physical activity of adults aged 50–87 years. The result of this study indicated that motivation reduced the negative effects of constraints, facilitated increased participation, and had a positive influence on negotiation strategies. Son, Mowen, and Kerstetter concluded: "Motivation appears to play a vital role in the development and use of strategies to overcome constraints to participation" (Son et al, 2008, p. 210).

Motivation, constraints, and constraint negotiations have been studied in different groups (e.g., women) and in different settings (e.g., parks, wilderness area) (Henderson, 1995). However, there is limited research on motivation, constraints, and constraint negotiations in physical activities (Son, 2008). And there is no research on motivation, constraints, and constraint negotiations about square dancing in aging population groups. Most square dancing studies focus on identifying the benefits of square dancing and on deficiencies in the

development of square dancing (Hailong, 2009; Ying, 2013; Li, 2013; Liu, 2014). Therefore, based on previous research about leisure constraint theory, leisure motivation, and leisure negotiation (Beard & Ragheb, 1983; Kleiber, McGuire, Aybar-Damali, & Norman, 2008; Hubbard & Mannell, 2001; Stanis, Schneider & Pereira, 2010), the relationship amongst them for square dancing participation of the elderly are examined. Understanding whether negotiation strategies affect motivation, and whether negotiation reduces constraints on participation, is meaningful for the development of square dancing.

Chapter 3: Methodology

This research aimed to investigate the motivation, constraint and negotiation factors for people over 60 who engaged in square dance activities in Chongqing, China. To achieve the research purpose, the core objectives of the research were set as follows:

1. To identify the motivation that underlies participation in square dancing.
2. To understand the types of constraints that square dance participants have to overcome to engage in square dancing activities.
3. To identify negotiation strategies used by the elderly to overcome constraints to square dance participation.
4. To identify factors that influence their efforts to negotiate those constraints.
5. To recommend strategies that will enhance square dance provision for the Chinese elderly in urban environment.

This chapter describes the methodology utilized in this research. The method of research mainly followed a quantitative approach, by using survey questionnaires. The chapter first introduces the study area, next discusses the design for data collection, then the methods used to analyze the data, and lastly the limitations of the methodology.

3.1. Study Area

This study was conducted in Chongqing, which is located in the southwest of China. In Chongqing, the aging population reached 3.247 billion in 2013 and has increased by almost 1 million each year since 2011 (NBSC, 2014). Over 71% of the Chongqing region is mountainous, and due to its special geographical characteristics, the downtown area of Chongqing is divided into nine districts by mountains (Zhang, 2014). The elderly in each

district were rather isolated and lacked suitable leisure activities because of the high mountains (Zhang, 2014). Therefore, the local government of Chongqing had invested more than 40.52 billion RMB (USD 6.23 billion) into the establishment of parks and squares (Li, 2013). In 2015, the local government established 10 national parks and 33 squares in the nine districts for the residents' leisure activities. Since an increasing number of parks and squares has been established, the popularity and development of square dancing has shown an upward trend (Li, 2013). The number of square dance participants in Chongqing increased, reaching 2.12 million by 2012 (Ying, 2013).

Ying (2013) identified that 43% of existing square dance participants were over 60 years old. In order to further promote square dancing as a recreational activity, the local government in Chongqing had made a series of plans, including launching fitness programs, publishing free instructional dance videos, and training more professional dance instructors (Li, 2013). At the same time, civic organizations also contributed to the development of square dancing. Square dance associations organized by voluntary dance enthusiasts could be found in every district in Chongqing. Each square dance association had at least 180 members, in which the youngest member was 55 years old (Li, 2013) and regularly organized various dance competitions and dance performances.

In conclusion, the most important reason why I chose this research setting that square dancing in this city showed a complete development. The city has hosted a number of square dance events in recent years. The Chongqing Cultural Council held the region's first square dance exhibition in 2012, attracting 35,000 citizens (including 1,000 elderly people) (Li, 2013). In Chongqing, square dancing can be seen as the second most popular leisure activity

(behind Mahjong) among the elderly (Li, 2103).

However, there was a growth problem for the square dancers. Li (2013) mentioned that square dancing lost a certain number of existing participants when the new participants tried this activity out. The key to increased square dance participation was a focus on understanding their motivations, constraints, and constraint negotiations, to encourage the existing participants to keep participating—as described by the director from Chongqing square dance association (Li, 2013). Therefore, the results of the research could lead to a better understanding of participants' motivations, constraints, and negotiations with respect to square dance participation, and help the square dance organizers to plan better (as well as attract and retain participants).

3.2. Data Collection

A research philosophy is a belief about the way in which data about a phenomenon should be gathered, analyzed and used. A positivist approach was utilized in this research to observe and describe the reality from an objective viewpoint (Leedy, 2005). Quantitative research uses positivism as its epistemological underpinning. The method of this research is mainly quantitative, using a survey questionnaire to assess the square dancers' motivation, constraint, and negotiation, using designed questions. Questionnaire surveys are used most often when the research involves a large sample size (Fredline et al., 2003). Other than the capability of involving a large sample, a questionnaire is also simple to administer and easy to analyze (Veal, 2006).

But there are also disadvantages when employing such an approach. Because questionnaires provide limited options, important information may not be included in the

final results. Also, respondents who choose to participate are more likely to hold either really positive or really negative attitudes towards square dancing compared to those who hold neutral attitudes (Veal, 2006). Although there are concerns in conducting a questionnaire, this is considered the most suitable method given the time, cost, and targeted sample group of the research.

3.2.1 Questionnaire Design.

The survey instrument in this research consisted of four sections by modifying constructs presented by Hubbard and Mannell (2001), Stanis et al. (2010), and Wang (2007). The final instrument can be found in Appendix A and includes the following variables: 24 questions related to motivation (Wang, 2007); 17 questions related to leisure constraints (Wang, 2007); 15 negotiation strategy questions (Hubbard & Mannell, 2001; Stanis et al., 2010); and respondent demographic information (Lawton and Daniels, 2009).

The first three sections are motivation, constraint and negotiation questionnaires. Those items on the questionnaire are evaluated through the use of a 5-point Likert scale: “1” represents the lowest score and “5” the highest (Vagias, 2006). The last section is about the participants’ demographic information. The demographic questions are adapted from Lawton and Daniels (2009), including the participants’ age, gender, marital status, education level, income, and the frequency of their square dance participation. Details regarding each of the constructs in this study follow below:

1. Motivation Questionnaire

In order to identify different types of motivation, a suitable scale was necessary. Twenty-six items from Wang’s (2007) study based on the leisure motivation scale identified

by Beard and Ragheb (1983) were modified to address the square dance participants' motivation.

To develop a reference for general motivation in leisure participation studies, Beard and Ragheb (1983) developed a leisure motivation scale with 48 items, and classified motivation into four categories: an intellectual motive, social motive, competence motive, and avoidance motive. Wang (2007) utilized the leisure motivation scale identified by Beard, to measure the participants' motivation for leisure activity. There were 32 motivation items in Wang's study, which were classified into four sub-dimensions: intellectual motive, social motive, competence motive and avoidance motive.

This research followed the study from Wang (2007) and utilized 24 motivation items rather than the 32 motivation items regarded as optimal. 8 items such as "to socialize with business associates" were omitted because those items were not suitable for the elderly. Those 24 items were classified into four dimensions: (a) intellectual motive, (b) social motive, (c) competence motive, and (d) avoidance motive, as shown in Table 1.

Table 1. Motivation dimensions and corresponding items

Dimensions	Items
Intellectual motive	Part 1: 1–6
Social motive	Part 1: 7–12
Competence motive	Part 1: 13–17
Avoidance motive	Part 1: 18–24

2. Constraint Questionnaire

Square dance constraint was operationalized using Wang's (2007) leisure constraint

scale, which was modified based on Crawford & Godbey's (1991) hierarchical model of leisure constraints in this research. According to Crawford & Godbey (1991), the hierarchical model of leisure constraints was established, and it showed three levels of leisure constraints: intrapersonal constraint, interpersonal constraint, and structural constraint.

Based on the hierarchical model of leisure constraints from Crawford & Godbey (1991), Wang (2007) designed a questionnaire to measure leisure activity constraints in China. This study modified the constraint scale from Wang (2007) and focused on investigating square dancing constraints for the elderly in Chongqing. The constraints questionnaires in this research contained 17 constraint items (Table 2). The 17 constraint items were divided into three dimensions: intrapersonal constraint, interpersonal constraint, and structural constraint. The subjects were asked to evaluate the reasons that prevent them from participating, and to fill out the constraint questionnaire.

Table 2. Constraint dimensions and corresponding items

Dimensions	Items
Intrapersonal constraint	Part 2: 1–5
Interpersonal constraint	Part 2: 6–12
Structural constraint	Part 2: 13–17

3. Negotiation Questionnaire

To measure constraint negotiation strategies, the constraint negotiation scale presented by Hubbard and Mannell (2001) and Stanis et al. (2010) was modified by making the questions more relevant to square dancing (Table 3). Negotiation strategies included: time management, skill acquisition, interpersonal coordination, financial resources, cognitive

negotiation, and issue management. The entire instrument can be found in Appendix A.

Table 3. Negotiation dimensions and corresponding items

Dimensions	Items
Time management	Part 3: 1–3
Skill acquisition	Part 3: 4–5
Interpersonal coordination	Part 3: 6–8
Financial management	Part 3: 9
Cognitive negotiation	Part 3: 10–12
Issue management	Part 2: 13–15

3.2.2 Sampling Frame.

Convenience sampling method was applied to select a sample of 104 subjects who were over 60 years old, were living in the urban area of Chongqing, and had participated in square dance for more than one month. It is extremely fast, easy, readily available, and cost effective. As for the disadvantage of this method, it may have possible bias in data gathering and have no generalized results. In this research, there was no effective way to target each group of elderly square dance participants equally, therefore this method was utilized.

Nine square dance groups from the following nine districts were randomly selected for the survey: Yuzhong, Shapingba, Jiangbei, Yubei, Nan'an, Jiulongpo, Ba'nan, Dadukou, and Beibei. In order to identify the nine square dance groups, Chongqing square dance associations were approached. These associations may be found in every district in Chongqing, where they regularly organize various dance competitions and dance performances. Square dancing associations hold monthly meetings at the end of every month

in which most of the organizers from different square dance groups are present. I took the opportunity to introduce the study to different square dance organizers during the meeting of June 2016 and identified the nine square dance groups from the nine districts of Chongqing.

In order to determine the most appropriate setting and time for the distribution of the questionnaire, I worked closely with the organizers of each square dance group. After that, questionnaires were distributed during the period of August 10th to September 15st, 2016. Before distributing the questionnaire, I asked the square dance participants for their voluntary participation, explained the purpose of the study, explained the data collection process (Creswell, 2013), and provided a research consent form (Appendix B). Those subjects were asked to complete the questionnaire immediately and return it to me. This took approximately 15–20 minutes. I assisted subjects who had difficulty in reading or writing. The preliminary instrument was designed in English, translated to Chinese, and the instrument was then pre-tested with a small group in order to ensure proper use of language and a smooth process.

3.3. Date Analysis

I coded and screened the data. Missing values were deleted depending on the missing patterns. The final collection of data was analyzed via IBM SPSS version 22.0. Various statistical techniques (including descriptive analysis, correlation analysis, one-way MANOVA analysis, and regression analysis) were used to answer the research questions.

3.3.1. Descriptive Statistics.

Descriptive statistics was applied to analyze participants' basic information such as frequency of square dance participation and participants' characteristics in order to verify Objective 1–3. The mean value was used to indicate the sequence of square dance

participation motivation, constraint and negotiation factors.

3.3.2. Correlation Analysis.

Bivariate correlation analysis was conducted to determine the empirical relationship between two variables (Kanangire, 2016). Correlation analysis was conducted to assess the relationship between each dimension of motivations/constraints and each dimension of selected demographics in order to verify Objective 4 in this study. Positive coefficients indicated a direct relationship, indicating that as one variable increased, the other variable also increased. Negative correlation coefficients indicated an indirect relationship, indicating that as one variable increased, the other variable decreased.

3.3.3. MANOVA Analysis.

One-way multivariate analysis of variance (MANOVA) was applied in this study to further verify Objective 4. MANOVA was used to explore the case where more than two groups of subjects were being compared on several variables simultaneously (Tabachnick & Fidell, 2007). The advantage of using MANOVA to compare mean differences in several dependent variables between several independent variables was to protect the inflation of the Type I error rate and to incorporate the relationship between dependent variables into the analysis (Field, 2009). In this study, MANOVA was performed to investigate whether the means of the different selected demographic characteristics (gender, age, and income) of square dance participants varied as a function of the participation motivation factors and constraint factors.

3.3.4. Regression Analysis.

In this study, multiple linear regression analysis was applied to identify research

objectives. Multiple linear regression analysis was used to determine how a variety of factors may influence the dependent variable and attempt to model the relationship between one dependent variable and two or more independent variables (Miao, 2016). Multiple linear regression analysis was used to determine (a) whether the variables, square dance motivations, and constraints expressed significant effects on square dance negotiation strategies, and (b) to determine whether the variables, square dance motivations, constraints and negotiations expressed significant effects on square dance participation. Elkins(2005) proposed using regression analysis to identify the relationship between motivations, constraints, and negotiations, because this method could provide increased explanatory power, control for measurement error, and provide more indicators of appropriate fit than the ordinary least squares statistical method (Elkins, 2005).

3.4. Delimitation

1. The subjects were limited to the elderly, 60 years old and over, who were living in Chongqing, China.
2. Subjects were recruited from the urban areas of Chongqing.

3.5. Limitation

1. One limitation of this study lies in its inability to generalize the results. Because data were collected only from square dance participants in the Chongqing downtown area, findings and conclusions of the study may not be generalizable to square dance participants living in other cities or provinces. The lack of generalizability of the results may be the most significant limitation of the study. Further study in other contexts is encouraged.

2. This study collected cross-sectional data at one point in time. Results could be unique

to the specific year and may not accurately represent elderly square dance participants over time. A comparison of results in different eras should be further explored.

3. This study was limited to the factors of motivation, constraint, and constraint negotiation for square dance participation. In addition to these constructs and dimensions, influences from other factors such as social and cultural issues on square dance participation should be explored.

Chapter 4: Results

This research aimed to investigate the motivation, constraint, and negotiation factors of people over 60 who engaged in square dance activities in Chongqing, China. This chapter presents the results of the study and is organized by core research questions. Section 4.1 provides a basic description of the square dance sample group and descriptive statistics of measurement variables, including the frequency of square dance participation, motivations, constraints, and negotiation strategies. Section 4.2 presents the results of relationship tests, including the role of demographic factors on motivations and constraints, the role of motivations and constraints on negotiations, as well as the role of motivations, constraints, and negotiations on square dance participation.

4.1. Description of Sample

4.1.1. Socio-demographics.

A socio-demographic profile of the survey respondents is shown in Table 4. In total, 104 samples were collected and the response rate was 86.5%. Of the 104 surveys, 14 were deleted because they were not completed. This may be due to the fact that respondents underestimated the amount of time that it took to complete the survey. The number of effective samples for the data analysis was 90. All respondents were from nine square dance groups and completed the survey between August 10th and September 15th, 2016 in Chongqing, China.

As for socio-demographics, male participants composed 18.9% of the 90 survey respondents (n=17) and females, 81.9% (n=73). The sample participants were 60–81 years old (average, 66 years). The greatest proportion (82%, n=38) was between the ages of 60 and

69. Furthermore, most (90%, n=81) of the respondents were married, and more than half (58.9%, n=53) had completed secondary education. As for the distribution of personal monthly income, more than one third of the respondents (35.6%, n = 32) earned over 3,000 RMB per month, which was higher than the average retirement pension (2,450 RMB) in Chongqing.

Table 4. Socio-demographic characteristics of respondents (N = 90)

Socio-demographic Variables	n	%
Gender		
Male	17	18.9
Female	73	81.1
Age		
60–64	36	40.0
65–69	38	42.2
70–74	8	8.9
75–79	5	5.6
80–81	3	3.3
Marital Status		
Single	4	4.4
Married	81	90.0
Divorced	5	5.6
Education Level		
Primary	4	4.4
Secondary	53	58.9
Diploma	21	23.3
Bachelor	12	13.3
Income		
<1000	7	7.8
1000–2000	25	27.8
2000–3000	26	28.9
>3000	32	35.6

4.1.2. Descriptive Statistics of Measurement Variables.

(1) Frequency of Square Dance Participation

In order to understand the consistency of their square dance participation, participants were asked how frequently they participated in square dance in the latest month. Table 5 provides a breakdown of frequency of square dance participation. The largest percentage of respondents participated in square dance 3–4 times per month (41.1%, n=37), followed by 24.4% (n=22) who participated in square dance 2–3 times per week. It was interesting to note that almost 30% (n= 27) of respondents in this study participated more than 4 times per week.

Table 5. Frequency of square dance participation in the latest month (N = 90)

Frequency	n	%
3–4 per month	37	41.1
2–3 per week	22	24.4
4–5 per week	19	21.1
6–7 per week	8	8.8
1–2 per month	4	4.4

(2) Motivations for Square Dance Participation

In order to identify the motivations that underlie square dance participation, the participants were asked about their level of agreement with statements about square dance motivations. Respondents were given a list of 24 motivations, which were divided into four types based on the leisure motivation scale identified by Beard and Ragheb (1983). Those items on the questionnaire were evaluated using a 5-point Likert scale: “1” representing the lowest score and “5” the highest. Results based on the mean score are represented in Table 6. Each type of motivation had means over 3.0 (the midpoint on the 5-point Likert scale), indicating that this sample of individuals 60 and older strongly agreed with the motivation statements, and was highly motivated. Specifically, “to develop physical fitness” had the

highest mean score ($M = 4.57$, $SD = 0.75$), closely followed by “to be active” ($M = 4.37$, $SD = 0.81$) and “build friendship” ($M = 4.28$, $SD = 0.80$). Most of the items had a mean score close to or over 3.0, excluding the item of “avoiding duty and responsibility,” which had the lowest mean score ($M = 1.96$, $SD = 0.84$). In general, this sample scored competence motivations the highest ($M = 4.12$, $SD = 0.87$), followed by social motivations ($M = 3.83$, $SD = 0.92$) and intellectual motivation ($M = 3.63$, $SD = 0.96$) respectively. This indicates that respondents strongly regarded competence motivations as the most significant square dance motivations. In contrast, avoidance motivations were regarded as the least significant ($M = 3.51$, $SD = 0.94$).

Table 6. Descriptive statistics of measurement items: motivation items

Measurement Variables	Mean	Std. Dev.
Intellectual Motive (Total Scale)	3.63	0.96
To explore new things	3.86	0.93
To expand knowledge	3.91	0.92
To achieve self-realization	3.83	0.95
To satisfy curiosity	3.14	0.94
To develop creativity	3.51	0.99
To use imagination	3.54	1.08
Social Motive (Total Scale)	3.83	0.92
To interact with others	4.18	0.82
To meet people of different status	3.87	0.95
To build friendship	4.28	0.80
To gain sense of belonging	3.43	1.00
To gain respect from others	3.47	1.07
To reveal my thoughts, feelings, or physical skills to others	3.79	0.93

(continued)

Measurement Variables	Mean	Std. Dev.
Competence Motive (Total Scale)	4.12	0.87
To be active	4.37	0.81
To use my physical abilities	3.97	0.93
To improve skills and ability	3.8	0.96
To challenge my ability	3.9	0.94
To develop physical fitness	4.57	0.75
Avoidance Motive (Total Scale)	3.51	0.94
To slow down	3.33	1.04
To release sense of loneliness	3.67	1.03
To gain physical enjoyment	4.26	0.80
To gain mental satisfaction	3.7	0.98
To reorganize my time	3.94	0.95
To release stress	3.77	0.94
To avoid duty and responsibility	1.96	0.84

(3) Constraints

In order to understand the types of constraints that square dance participants have, the participants were asked about their level of agreement with statements about square dance constraints. Respondents were given a list of 17 constraints which were divided into three types based on Wang's (2007) leisure constraint scale and Crawford & Godbey's (1987) leisure constraint scale. The results based on the mean score are represented in Table 7. Most of the 17 constraints had mean scores below 3.0 (the midpoint on the 5-Likert scale), indicating that this sample of individuals 60 and older was moderately constrained. Specifically, "my friends have no time due to work" had the highest mean score ($M = 3.34$, $SD = 0.97$), indicating that it was strongly regarded as the most significant square dance

constraint. This was closely followed by “my friends have no interest” ($M = 3.22$, $SD = 0.93$) and “my friends have no time due to family responsibilities” ($M = 3.17$, $SD = 0.81$). In contrast, “This activity makes me feel uncomfortable” yielded the lowest mean score ($M = 2.37$, $SD = 0.99$), indicating that it was regarded as the least significant square dance constraint. In general, this sample scored interpersonal constraints the highest ($M = 3.01$, $SD = 0.93$) and intrapersonal constraints ($M = 2.61$, $SD = 0.99$) the lowest.

Table 7. Descriptive statistics of measurement items: constraint items

Measurement Variables	Mean	Std. Dev.
Intrapersonal Constraint (Total Scale)	2.61	0.99
I'm shy in the activity	2.61	1.01
I have no interest in this activity	2.38	0.95
I'm only interested in one specific activity, not this one	2.81	1.05
I don't have the ability to try this activity	2.89	0.98
This activity makes me feel uncomfortable	2.37	0.99
Interpersonal Constraint (Total Scale)	3.01	0.93
My family doesn't agree with me about trying this activity	2.7	1.01
My friends don't agree with me about trying this activity	2.58	0.98
My friends live far away from me and can't join in it with me	3.16	0.88
My friends have no time due to work	3.34	0.97
My friends have no time due to family responsibilities	3.17	0.81
My friends don't have related ability	2.93	0.96
My friends have no interest	3.22	0.93
Structural Constraint (Total Scale)	2.79	1.00
I have no time due to family responsibility	2.92	1.07
I have no time due to work	3.01	1.05
I have no information about this activity	2.79	0.91
There is no suitable weather	2.52	0.96
There is no suitable place for the activity	2.73	1.04

(4) Negotiation Strategies

In order to identify negotiation strategies the elderly use to overcome constraints to square dance participation, the participants were asked about the level of agreement with the statements about negotiation strategies. Respondents were given a list of 15 negotiation strategies divided into six types based on the constraint negotiation scale presented by Hubbard and Mannell (2001) and Stanis et al. (2010).

The results based on the mean score are represented in Table 8. These show that 12 of the 15 negotiation items had mean scores above 3.0, indicating that this sample of individuals 60 and older frequently used these negotiation strategies to participate in square dance. More specifically, “I try to find people with similar interests” (Mean = 4.2, SD = 0.73) and “I try to improve my communication skills” (Mean = 4.0, SD = 0.70) had the highest mean scores, indicating that these two were regarded as the most frequently used strategies. However, “I ignore what people think of me” (Mean = 2.44, SD = 0.91) and “I try to ignore others who bother me” (Mean = 2.68, SD = 0.84) had the lowest mean scores, indicating that these two were regarded as the least frequently used strategies. In general, this sample utilized interpersonal coordination strategies ($M = 4.03$, $SD = 0.78$) the most, and financial management ($M = 2.96$, $SD = 1.01$) the least.

Table 8. Descriptive statistics of measurement items: negotiation items

Measurement Variables	Mean	Std. Dev.
Time Management (Total Scale)	3.54	0.85
I try to prioritize my activity	3.57	0.88
I try to plan ahead	3.81	0.74
I try to get up earlier or stay up later to have more time	3.26	0.94
Skill Acquisition (Total Scale)	3.9	0.75
I try to improve my dancing skills	3.81	0.80
I try to improve my communication skills	4.00	0.70
Interpersonal Coordination (Total Scale)	4.03	0.78
I participate in square dancing with people like myself	3.93	0.77
I try to find people with similar interests	4.22	0.73
I try to find people with whom to recreate	3.96	0.86
Financial Management (Total Scale)	2.96	1.01
I save money	2.96	1.01
Cognitive Negotiation (Total Scale)	2.98	0.88
I think about how important physical activity is	3.82	0.90
I ignore what people think of me	2.44	0.91
I try to ignore others who bother me	2.68	0.84
Issue Management (Total Scale)	3.17	0.82
I want to change the location where I recreate	3.16	0.79
I recreate at times when square dancing is carried out	3.11	0.86
I talk to square dance group organizers	3.26	0.81

4.3. Results of Relationship Tests

4.3.1. Role of Demographic Factors on Motivations and Constraints.

Bivariate correlation analysis was applied to identify the impacts of selected demographic variables on square dance motivations and constraints, and the results are represented in Table 9. This involved analyzing two variables to determine the empirical relationship between them (Kanangire, 2016). Correlation analysis was conducted to assess the relationship between each dimension of motivation/constraint and each dimension of selected demographics in this study. In conclusion, there was no significant correlation between marital status, education level, square dance motivations, and constraints. However,

there were significant relationship in regard to gender, income, age, square dance motivations, and constraints. More specifically, a significant negative correlation was observed between gender and intellectual motivation. Meanwhile, a significant positive correlation was observed between age and structural constraint. Furthermore, income was also significantly (and negatively) correlated with interpersonal constraint.

Table 9. Correlation analysis for the relationship between selected demographics, motivation and constraint variables (N= 90)

Measurement Variables	Gender	Marital Status	Education Level	Income	Age
Motivations					
Intellectual Motive	-0.218*	-0.127	-0.158	-0.166	-0.126
Social Motive	-0.165	-0.041	-0.059	0.033	-0.086
Competence Motive	-0.146	-0.044	-0.065	0.013	-0.029
Avoidance Motive	-0.135	0.063	-0.03	-0.044	-0.112
Constraints					
Intrapersonal Constraint	-0.116	-0.062	-0.03	-0.095	0.144
Interpersonal Constraint	0.08	0.018	-0.181	-0.284**	-0.041
Structural Constraint	-0.103	-0.2	-0.059	-0.038	0.287**

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

In order to further verify the correlation between them, a series of one-way multivariate analyses of variance (MANOVA) were applied as follows. MANOVA was used to explore the case where more than two groups of subjects were being compared on several variables simultaneously (Tabachnick & Fidell, 2007). The advantage of using MANOVA to compare mean differences in several dependent variables between several independent variables was to prevent the inflation of the Type I error rate and to incorporate the relationship between dependent variables into the analysis (Field, 2009). In this study, MANOVA was performed

to investigate whether the means of the different selected demographic characteristics (gender, age, and income) of square dance participants varied as a function of the participation motivation factors and constraint factors.

(1) The Role of Gender on Intellectual Motivation

The researcher set the acceptable Type I error rate as 0.05 ($\alpha=0.05$) before conducting the test. Then MANOVA was used to identify the difference of gender in relation to their motivation factors. The results of the multivariate tests, shown in Table 10, indicate that gender showed significant negative linkages to intellectual motivations ($p=0.05$). Means in the motivation factors for gender differences of square dance participants indicated that males experienced more intellectual motivations than females. The significance in the test is that gender as an independent variable has a significant effect on intellectual motivations as dependent variables.

Table 10. *MANOVA results of difference between male and female in square dance motivation*

Motivations	Male	Female	F-score	p-value
Intellectual Motive	23.2	21.4	3.958	0.05*
Social Motive	24.4	22.7	3.187	0.078
Competence Motive	21.7	20.3	2.347	0.129
Avoidance Motive	25.7	24.3	0.694	0.407

* Correlation is significant at the 0.05 level (2-tailed).

(2) The Role of Age on Structural Constraint

This study divided the respondents into five age groups based on the survey results. Table 11 shows means in the constraint factors for age differences of square dance

participants and indicates that the respondents experienced more structural constraints as age increased.

Table 11. *Difference in square dance constraints among ages (N=90)*

Age	Intrapersonal Constraints	Interpersonal Constraints	Structural Constraints
60–64	13.1	21.3	12.5
65–69	14.2	13.2	13.2
70–74	14.6	22.1	13.6
75–79	16.4	18.8	14
80–81	14.6	22.3	14.3

Then MANOVA was used to further verify the difference of age in relation to structural constraints. The results of the multivariate tests, shown in Table 12, indicate that age showed significant positive linkages to structural constraints ($p = 0.041$), and that older sample groups experienced more structural constraints than younger groups. The significance of the test is that age as an independent variable has a significant effect on structural constraints as dependent variables.

Table 12. *MANOVA results of relationship between square dance constraints and ages*

Dependent Variables	F-score	p-value
Intrapersonal Constraints	2.617	0.64
Interpersonal Constraints	0.669	0.615
Structural Constraints	0.633	0.041*

Note. Independent Variable: Age

* Correlation is significant at the 0.05 level (2-tailed).

(3) The Role of Income on Interpersonal Constraint

This study divided the income into four groups. Table 13 shows means in the constraint

factors for income differences of square dance participants and indicates that the respondents experienced fewer interpersonal constraints as income increased.

Table 13. *Difference in square dance constraints among incomes (N=90)*

Income	Interpersonal Constraints	Intrapersonal Constraints	Structural Constraints
≤1000	22.7	13.1	14.1
1000–1999	21.9	13.5	14.1
2000–2999	21.7	13.1	13.9
≥3000	19.5	12.5	13.8

Then MANOVA was used to further verify differences of income in relation to interpersonal constraints. The results of the multivariate tests are shown in Table 14 and indicate that interpersonal constraints are significantly affected by monthly income ($p = 0.031$). Results show that the square dance participants who had higher levels of income experienced fewer interpersonal constraints. However, there is no significant difference in other constraint factors between different monthly income groups.

Table 14. *MANOVA results of relationship between square dance constraints and incomes*

Dependent Variables	F-score	p-value
Intrapersonal Constraints	0.374	0.772
Interpersonal Constraints	3.096	0.031*
Structural Constraints	0.045	0.987

Note. Independent Variable: Income

* Correlation is significant at the 0.05 level (2-tailed).

4.3.2. Role of Motivations and Constraints on Negotiations

To identify research objective 4(as described in Chapter1), multiple linear regression analysis was applied using the SPSS program. Multiple linear regression analysis was used to

determine how a variety of factors may influence the dependent variable, and to attempt to model the relationship between one dependent variable and two or more independent variables (Miao, 2016). Elkins (2005) proposed using regression analysis to identify the relationship between motivations, constraints and negotiations. Because this method could provide increased explanatory power, controls for measurement error, and have more indicators of appropriate fit than the ordinary least squares statistical method. In this study, multiple linear regression analysis was used to measure how square dance motivations and constraints influence negotiation strategies.

This study conducted negotiations as the dependent variable, as well as motivations and constraints as independent variables. Table 15 presents a summary of test results showing correlation coefficients of motivation and constraint dimensions with square dance negotiation strategies. Firstly, the results indicate a significant relationship between square dance motivation and negotiations. Three motivation dimensions are significantly correlated with square dance negotiations:(a)intellectual motivations($\beta= 0.435, p<0.05$), (b) competence motivations ($\beta= 0.418, p<0.05$), and (c) avoidance motivations ($\beta= 0.456, p<0.05$).These results indicate that intellectual, competence and avoidance motivations significantly positively influence square dance negotiation strategies. However, there is no significant relationship between constraints and negotiations ($p>0.05$). In general, the influence of motivations on negotiations was significant, and influence of constraints on negotiations was not found.

Table 15. The role of motivations and constraints on negotiations

Variables	β	S.E.	P-value	Sig
Intellectual Motive	0.435	0.175	0.015	Attained
Social Motive	-0.27	0.219	0.221	None
Competence Motive	0.418	0.186	0.027	Attained
Avoidance Motive	0.456	0.166	0.007	Attained
Intrapersonal Constraint	-0.111	0.183	0.544	None
Interpersonal Constraint	0.039	0.146	0.79	None
Structural Constraint	-0.326	0.165	0.052	None

Note. Dependent Variable: Negotiation. Statistical significance is considered <0.05 p-values.

4.3.3. Role of Motivations, Constraints, and Negotiations on Participation.

Table 16 presents a summary of test results of the relationship between motivation, constraint, constraint negotiation, and square dance participation. The regression analysis was conducted with frequency of square dance participation as the dependent variable, as well as motivations, constraints, and negotiation strategies as independent variables. The results indicate a significant relationship between motivation, constraint, constraint negotiation, and square dance participation ($p < 0.05$). As expected—based on the results from Hubbard and Mannell's (2001) study—motivations and constraint negotiation strategies demonstrated a significant positive influence on square dance participation ($\beta = 0.046$, $p < 0.05$; $\beta = 0.018$, $p < 0.05$), whereas constraints had a significant negative impact ($\beta = -0.075$, $p < 0.05$). Among the constructs, constraint was found to be the best negative predictor ($\beta = -0.075$) of square dance participation, followed by the positive predictor of motivation ($\beta = 0.046$) and constraint negotiation ($\beta = 0.018$). These results indicate that square dance participation was influenced the most by constraints. Square dance participation may be reduced due to constraints and became enhanced through constraint negotiation strategies. At the same time, square dance participation can increase due to motivations.

Table 16. The influence of motivations, constraints and negotiations on square dance frequency

Variables	β	S.E.	P-value	Sig
Motivations	0.046	0.021	0.034	Attained
Constraints	-0.075	0.012	0	Attained
Negotiations	0.018	0.009	0.046	Attained

Note. Dependent Variable: Frequency. Statistical significance is considered 0.05 p-values or less.

4.4. Summary

This section presents the results of the questionnaire survey. The results are derived from responses to questions asking what factors influence their square dance participation. By using SPSS to analyze the data, the results are divided into three themes and discussed below.

Firstly, of the five demographic variables tested, gender was negatively related to intellectual motivation, age was positively related to structural constraint, and income was negatively related to interpersonal constraint.

Secondly, based on the results concerning the dimensions of motivation, constraints, and constraint negotiation: interpersonal, competence, and avoidance motivations had significant impacts on square dance negotiation strategies. However, there was no significant relationship between square dance constraint and negotiation strategy.

Last but not least, all constraints, motivations, and negotiation strategies had significant impacts on square dance participation. Motivations and constraint negotiation strategies demonstrated a significant positive influence on square dance participation, whereas constraints had a significant negative impact.

Chapter 5: Discussion

This research aimed to facilitate better square dance management that maximizes the positive (and minimizes negative) impacts on the elderly, by investigating the motivation, constraint, and negotiation factors of square dancers over 60 in Chongqing, China. It is important not to neglect the social benefits of square dancing, because such impacts can have significant and profound influences on community life and social stability.

The following objectives were followed to fulfill the research aim:

1. To identify motives for participating in square dancing;
2. To understand the types of constraints that square dance participants have to overcome to engage in square dancing activities;
3. To identify negotiation strategies used by the elderly to overcome constraints to square dance participation;
4. To identify factors that influence their efforts to negotiate those constraints;
5. To recommend strategies that will enhance square dance provision for the Chinese elderly in urban environment.

In 2016, in Chongqing, China, data was collected through questionnaire surveys to assess respondents' motivations, constraints, and negotiations with respect to square dance participation. All variables were evaluated using questions based on the scales from Hubbard & Mannell (2001), Stanis (2010), and Wang (2007). A total of 90 square dance participants were included in this research. Correlation analysis, MANOVA analysis and regression analysis were used to analyze the data.

This chapter summarizes the key findings from the data analyses, and also compares the

findings of the current research with that of related previous studies. The first section summarizes the influence of age, gender, and income on square dance motivations and constraints. The second section presents the impacts of square dance motivations and constraints on negotiations, and the third discusses how the participants' motivations, constraints, and negotiations affect square dance participation. Lastly, I make recommendations to square dance organizers and offer further research suggestions.

5.1. Discussion of Findings

5.1.1. Role of Demographic Factors on Motivations and Constraints.

Previous studies have identified that leisure activity participants with different experiential histories and demographics had different motivations and constraints (Alexandris, 2002; Wang, 2007), since demographics are important determinants of human behavior (including leisure behavior) (Chick & Dong, 2005). But not every demographic factor showed an influence on motivations and constraints in this study—only age and income of the senior participants influenced square dance constraints (as well as gender-influenced intellectual motivations).

In this research, MANOVA analysis demonstrated a statistically significant negative relationship between income and interpersonal constraints ($p=0.031$). Specifically, senior square dance participants who had a higher level of income experienced fewer interpersonal constraints. This is consistent with previous research findings (Dong & Chick, 2012). Dong and Chick (2012) conducted a series of studies on leisure constraints in China and found that lack of money was one of the most important factors that influenced leisure participation. This finding is also similar to the research conducted by Shu in similar leisure activity (2009),

who identified that low-income group was the most constrained segment, while high-income groups was presented to be the least constrained one. Because the participants lacked the financial resources, they had to reduce their leisure opportunities and social activities (Dong & Chick, 2012).

MANOVA analysis demonstrated a statistically significant positive relationship between age and structural constraints ($p = 0.041$). Senior square dance participants experienced more structural constraints with increasing age. This is consistent with previous research findings (Kleiber & Norman, 2008). Kleiber and Norman pointed out that structural constraints experienced by senior participants intensify as they age due to increasing losses (such as loss of spouse and friends) that accompany this stage of life.

Admittedly, the correlation between age and structural constraints had its limitations in this research, because participants were from a truncated age range. This research utilized a convenient sample of people 60 and older but did not compare cross-sections of middle-aged and senior participation. Middle-aged and older adults may be quite distinct in terms of square dance activity. Additional research could examine this possible relationship, using a more age-diverse sample, to determine its reliability and generalizability.

Correlation analysis demonstrated a statistically significant negative relationship between gender and intellectual motivations in this research at the 0.05 level. Male, senior square dance participants experienced greater intellectual motivation than females. This is consistent with previous research findings (Chiang, 2001), who identified that tourists' gender indicated a significant difference related to motivations in golf activities.

There is one possible explanation for the findings in this research: that males

experienced more intellectual motivations than females because they preferred to choose more challenging tasks, and were more likely to demonstrate an increased capacity for conceptual learning (Chiang, 2001). Male square dance participants experienced more intellectual motivations to achieve for intrinsic reasons, such as valuing intellectual matters, their wide range of interests, and their curiosity.

5.1.2. Role of Motivations and Constraints on Negotiations.

As for the role of motivations on negotiation strategies, this research showed that intellectual motivations ($\beta= 0.435$, $p<0.05$), avoidance motivations ($\beta= 0.456$, $p<0.05$) and competence motivations ($\beta= 0.418$, $p<0.05$) had positive effects on negotiation strategies based on the results from regression analysis. However, there was no significant relationship between social motivation and negotiations.

Hubbard and Mannell (2001) reported that the strength and effectiveness of negotiation efforts depend on an individual's motivations. The results in my research provided partial support for this finding, since not all of the motivations were shown to significantly affect the negotiation strategies. Specifically, intellectual motivations significantly influenced time management and skill acquisition. In this study, avoidance motivations significantly affected financial management and issue management, while competence motivations significantly affected skill acquisition and interpersonal coordination. The results reinforced the finding that most motivations had an important effect on negotiations. Where there were stronger motivations, there were stronger negotiation strategies used by individuals.

The following also supported the findings of this study: Lai (2005) found that seniors' main motives for leisure activities were to learn, and to make full use of time. But social

motivation was not found to be related to negotiation in this study. Motivations' limited predictive power meant that there were more other factors that determine the development of negotiation strategies. This reinforced the study findings of Loucks-Atkinson (2007), who proposed that "negotiation self-efficacy" may also influence negotiations. Loucks-Atkinson developed a measure of negotiation efficacy and linked it to leisure participation. She found that individuals with high negotiation efficacy reported higher levels of motivation and were more likely to be successful negotiators.

As for the role of constraints on negotiations, my study shows (based on the regression analysis) that constraints ($p>0.05$) are not significantly related to negotiations. The finding in this research was inconsistent with previous findings (Lyu, 2013) in which constraints and negotiations in leisure activities were negatively correlated.

There can be several explanations for the findings in this research. Most respondents in this study were elderly square dancers (the mean age was 66). However, the association between constraints and negotiation efforts may vary depending on different population groups (Son, 2008). As Son indicated, the inconsistent relationship between the two concepts may also result from the measurement issues of negotiation. Several frequently used dimensions of negotiation strategies, such as financial management (Mean=2.98), may not have exactly measured the characteristics of constraints the elderly commonly perceive in this research.

5.1.3. Role of Motivations, Constraints, and Negotiations on Participation

The results in this study, based on regression analysis, indicated that all motivations, constraints, and negotiations were found to be significantly related to square dance

participation. Specifically, motivations and negotiations were positively related to the frequency of square dance participation, whereas constraints were negatively related to the frequency of square dance participation.

According to the findings from this research, square dance motivation ($\beta=0.046$, $p <0.05$) had significant positive effects on leisure participation, in that the greater the leisure motivation, the higher the frequency of leisure participation. Specifically, motivations were shown to have both a direct and indirect influence on square dance participation. These findings were inconsistent with findings from Hubbard and Mannell (2001), who reported that motivations indirectly affected participation through their positive influence on negotiations.

In this research, negotiation dimensions partially mediated the relationship between competence, avoidance, and intellectual motivation as well as square dance participation, which was a strong relationship found at the beginning of the regression analysis. However, there was no mediation of relationship between social motivation and square dance participation, symbolizing that there was a direct interaction between social motivation and square dance participation. The direct relationship between motivation and participation is not a surprising finding, since the majority of previous studies have established the link (Vallerand, 2001).

It is not clear why—in this research—negotiation mediated competence, avoidance, and intellectual motivation, whereas it had no effect on social motivation. One possible explanation is that social motivation directly influenced square dance participation. Future research is recommended to investigate the direct and indirect relationship between square

dance motivations and participations.

Furthermore, square dance constraints were found to have a direct negative effect on participation ($\beta=-0.075$, $p <0.05$), as constraints increased the frequency of square dance participation decreased. This result is consistent with previous studies (White, 2008). However, square dance negotiation had a direct positive effect on participation ($\beta= 0.018$, $p <0.05$); as negotiations increased, the frequency of square dance participation increased. This finding is also consistent with other research findings (Hubbard & Mannell, 2001; Loucks, 2007). However, it is inconsistent with the proposition by Jackson (1993), who stated that leisure participation “is dependent not on the absence of constraints (although this may be true for some people) but on negotiation through them” (p. 4). Mannell (2001) and Loucks-Atkinson and Mannell (2007) suggested that, when constraints were faced, higher levels of negotiation strategies may be employed to mitigate the effects on participation.

Findings from this research indicated that negotiation dimensions significantly mediated the relationship between square dance motivation and participation; however (based on the regression analysis), there was no mediation of relationship between constraints and square dance participations. This demonstrates that square dance constraints had a direct negative effect on participation but cannot be directly negotiated in this research. And the negotiations showed a positive effect on leisure participation through successfully negotiating square dance motivations to participate in this activity.

There can be several explanations for the findings in this research. This finding of the relationship between constraints, negotiations and participation resulted from the truncated age range of the participants. This research utilized a convenient sample of people 60 and

older which has not compared cross-sections of middle-aged and senior participants. Perhaps middle-aged-and-older adults are quite distinct in terms of constraint negotiations. Additional research could examine this possible relationship with a more age-diverse sample, to enhance its reliability and generalizability. Furthermore, no mediation of relationship between constraints and square dance participation may also result from the measurement issues of negotiation. In this research, several frequently used dimensions of negotiation strategies, such as financial management (Mean=2.98), may not have exactly measured the characteristics of constraints the elderly commonly perceive. Additional research could examine this possible relationship by combining an interview, focus group and questionnaire survey to enhance its reliability and generalizability.

5.2. Recommendations for Future Square Dance Organizers

Square dance will likely continue to play an important role in enhancing life qualities of the elderly as a social, less demanding and easy-to-access activity as well as investing in community well-being (Zheng, 2013). The findings of this research provide a better understanding of the factors that influence square dance participation. Based on these findings, this research proposes a range of suggestions for square dance organizers in order to successfully manage square dance in future, as well as continuously foster square dance in healthy directions.

5.2.1. Meet the Needs of Different Groups.

Organizers should understand that square dances should be designed for different needs according to different participants. When planning and marketing square dancing, organizers

should seek strategies that satisfy the various needs of different square dance participants.

This will cause more people to participate in square dancing, and raise their level of support.

Passive participants (who are strongly constrained, and square dance fewer than four times per month) are perhaps the most important cluster the organizers need to pay attention to, as they might be interested in participating in square dance but are often constrained by “My friends have no time due to work” (Mean=3.34), “My friends have no time due to family responsibilities” (Mean=3.17) and “I have no time due to family responsibility” (Mean=3.01). Based on this finding, organizers can get them excited by sharing what to expect from square dancing. As a big portion of the cluster is 60–69 years old, square dance can also market itself as an excellent place for family activities—and maybe also a good resource for those with kids to nurture their children’s sporting spirits. If passive participants understand that square dance can be a great opportunity for families to get together and to socialize, they maybe more motivated to attend.

For active participants, it is more important to enhance their experiences of attending square dance. The members of this group are most likely to feel frustrated by structural constraints due to increasing age. This means that even though they are interested in participating in square dance at first, they can lose their enthusiasm because of the frustration they experience while square dancing. Organizers should consider ways to retain this group by minimizing such personal frustrations, such as holding square dances in community centers to reduce costs and transportation inconveniences.

5.2.2. Facilitate Negotiation Strategies.

Square dance organizers should be aware of the need to facilitate negotiation strategies

to help retain and attract participants. For example, interpersonal coordination such as “I try to find people with similar interests “can be used by square dance organizers as a negotiation strategy to accelerate square dance participation. The organizers can add different themes for square dance activities that would facilitate communication among individuals with similar interests and ultimately double the number of participants. Folk dances could be also designed to attract and involve more minority groups.

5.2.3. Recommendations for Community Managers and Local Government

There are also implications for community managers from this research. Square dance can be regarded as a community leisure activity that can bring benefits to both individuals and the community as a whole. It provides many opportunities for community members to socialize with friends, enhance physical fitness, and so on. Moreover, square dance can contribute to community well-being, such as by increasing community cohesion. As square dance organizers ensure the experience of these participants, the community plays an essential role in working with square dance organizers to ensure better square dance participation experiences(whether they want to attend, or not).

Furthermore, local government also plays an important role in the development of square dance. The importance of square dance activity to health outcomes for the elderly has been recognized by the government and has established loads of squares and parks for the elderly. Governments should offer more practical support to the elderly rather than simply establishing more parks and squares in future. Specifically, if the governments supported square dance in practical ways by training professional dance leaders and offering suitable

programs according to participants' actual and specific needs, it can help elders reach satisfaction in life.

5.3. Recommendations for Future Research

As with other studies, the current research has its limitations. Firstly, it is necessary to conduct a qualitative study to explore the details of elders' participation in square dancing. The available research on this topic is often quantitative (Wang, 2007). By exploring, in more detail, the current situation of square dance participation for the elderly, more comprehensive aspects of square dance motivation, constraint, negotiation, and elder demographics should be considered. Analyzing only a limited number of demographic, motivation, constraint, and negotiation variables was not enough. Future research can add and explore more variables expand research dimensions based on combining focus groups and in-depth interviews with questionnaire surveys. It would be interesting to see if there are other variables that are important to square dance participation.

Another recommendation is for the study to be extended to other populations and other areas, to determine its generalizability. Additional research could examine this possible relationship with a more age-diverse sample, to enhance its reliability. Future research on different age groups may identify different motivations, constraints, and negotiation strategies.

Further investigation of non-participants is also necessary to provide a better understanding of square dance. Based on the findings of this research, there were additional constraint factors and negotiation strategies affecting the lack of participation. More research is necessary to understand why non-participants do not participate in square dancing. In order

to have a more complete picture concerning how people negotiate their leisure constraints, comparisons among subjects across different cities, provinces—even countries—are also recommended.

References

- Albert, S. M. (2004). *Public health and aging: An introduction to maximizing function and well-being*. Springer Publishing Company.
- Alexandris, K., Tsorbatzoudis, C., & Grouios, G. (2002). Perceived constraints on recreational sport participation: Investigating their relationship with intrinsic motivation, extrinsic motivation and amotivation. *Journal of Leisure Research*, 34(3), 233.
- Beard, J. G., & Ragheb, M. G. (1983). Measuring leisure motivation. *Journal of leisure research*, 15(3), 219.
- Berson, J. (2005). *Building bodies politic: Community dance in the contemporary United States* (Doctoral dissertation, University of Wisconsin–Madison).
- Blackburn, J. A., & Dulmus, C. N. (Eds.). (2007). *Handbook of gerontology: Evidence-based approaches to theory, practice, and policy*. John Wiley & Sons.
- Borg, W. R., Gall, M. D., & Gall, J. P. (1983). *Instructor's manual for educational research*. Longman.
- Buchanan, T., & Allen, L. R. (1985). Barriers to recreation participation in later life cycle stages. *Therapeutic Recreation Journal*, 19(3), 39–50.
- Busse, E. W., Maddox, G. L., & Buckley, C. E. (1985). *Duke longitudinal studies of normal aging, 1955-1980*. Springer Pub. Co.
- Chen, C. H. (2005). *Personality traits and their relationship to leisure motivation and leisure satisfaction in Southern Taiwan university students* (Unpublished doctoral dissertation, University of the Incarnate Word, San Antonio, Texas).
- Chen, S. H. (2004). *A study of leisure needs and constraints for middle-aged or old people in*

- Taichung city. Nanhua University, Master's thesis, Chiayi, Taiwan.
- Chiang, C. H. (2001). *The study of golf holiday participation motivation and satisfaction of sport tourists*. National Taiwan Sport University, Master's thesis, Taoyuan County.
- Chick, G., & Dong, E. (2005). Cultural constraints on leisure. *Constraints to Leisure*, 169-183.
- Chiou, H. L. (2004). *The study on the leisure activity participation and happiness of retired elderly in Kaohsuing city*. Da-Yeh University, Master's Thesis, Penghu, Taiwan.
- Cohen-Stratyner, B. (2001). Social dance: Contexts and definitions. *Dance Research Journal*, 33(2), 121–124.
- Crawford, D. W., & Godbey, G. (1987). Reconceptualizing barriers to family leisure. *Leisure Sciences*, 9(2), 119–127.
- Crawford, D. W., Jackson, E. L., & Godbey, G. (1991). A hierarchical model of leisure constraints. *Leisure Sciences*, 13(4), 309–320.
- Creswell, J. W. (2013). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage Publications.
- Cromie, W. J. (2002). Treating ills with music. From anxiety to Alzheimer's, from pain to Parkinson's. *Harvard University Gazette*.
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. Springer Science & Business Media.
- Directorate-General of Budget, Accounting, and Statistics, Executive Yuan, R.O.C. (2000). Leisure Activities. Retrieved from <http://www.dgbas.gov.tw>.
- Dominguez, L. A. (2003). *Constraints and constraint negotiation by women sea kayakers*

- participating in a women-only course* (Unpublished Ph. D. dissertation. Michigan State University).
- Dong, E., & Chick, G. (2012). Leisure constraints in six Chinese cities. *Leisure Sciences*, 34(5), 417–435.
- Elkins, D. J. (2005). *Levels of perceived constraint: A comparative analysis of negotiation strategies in campus recreational sports*. Kinesiology Publications, University of Oregon.
- Field, A. (2009). *Discovering statistics using SPSS*. Sage Publications.
- Fredline, L., Jago, L., & Deery, M. (2003). The development of a generic scale to measure the social impacts of events. *Event Management*, 8(1), 23–37.
- Freysinger, V. J., & Kelly, J. R. (2004). *21st century leisure: Current issues*. Venture Pub.
- Godbey, G., Crawford, D. W., & Shen, X. S. (2010). Assessing hierarchical leisure constraints theory after two decades. *Journal of Leisure Research*, 42(1), 111.
- Guinn, B. (1990). The importance of healthy behaviors to the leisure satisfaction of elderly recreational vehicle tourists. *Wellness Perspectives*, 6(4), 33–41.
- Hailong, Q. I. U. (2009). An investigation and analysis of middle-old aged women square dance development. *Journal of Hubei Sports Science*, 6, 022.
- Hanna, J. L. (1995). The power of dance: Health and healing. *The Journal of Alternative and Complementary Medicine*, 1(4), 323-331.
- Henderson, K. A., Bedini, L. A., Hecht, L., & Schuler, R. (1995). Women with physical disabilities and the negotiation of leisure constraints. *Leisure Studies*, 14(1), 17–31.

- Henderson, K. A., Stalnaker, D., & Taylor, G. (1988). The relationship between barriers to creation and gender-role personality traits for women. *Journal of Leisure Research*, 20, 69–80.
- Hill, R. D. (2005). *Positive aging: A guide for mental health professionals and consumers*. WW Norton.
- Huang, S., & Hsu, C. H. (2009). Effects of travel motivation, past experience, perceived constraint, and attitude on revisit intention. *Journal of Travel Research*, 48(1), 29–44.
- Hubbard, J., & Mannell, R. C. (2001). Testing competing models of the leisure constraint negotiation process in a corporate employee recreation setting. *Leisure Sciences*, 23(3), 145–163.
- Jackson, E. L. (1994). Activity-specific constraints on leisure participation. *Journal of Park and Recreation Administration*, 12(2), 33–49.
- Jackson, E. L. (2000). Will research on leisure constraints still be relevant in the twenty-first century? *Journal of leisure Research*, 32(1), 62.
- Jackson, E. L., Crawford, D. W., & Godbey, G. (1993). Negotiation of leisure constraints. *Leisure Sciences*, 15(1), 1–11.
- Jackson, E. L., & Henderson, K. A. (1995). Gender-based analysis of leisure constraints. *Leisure Sciences*, 17(1), 31–51.
- Jackson, E. L., & Rucks, V. C. (1995). Negotiation of leisure constraints by junior-high and high-school students: An exploratory study. *Journal of Leisure Research*, 27(1), 85.
- Jain, S., & Brown, D. R. (2001). Cultural dance: An opportunity to encourage physical activity and health in communities. *Journal of Health Education*, 32(4), 216–222.

- Jun, J., Kyle, G. T., & Mowen, A. J. (2009). Market segmentation using perceived constraints. *Journal of Park and Recreation Administration*, 27(1), 35-55.
- Juniu, S. (2000). The impact of immigration: Leisure experience in the lives of South American immigrants. *Journal of Leisure Research*, 32(3), 358.
- Kanangire, R. R., Mbabazize, M., & Shukla, J. (2016). Determinants of adoption of improved biomass stove in rural households of muhazi sector in rwamagana district. *European Journal of Business and Social Sciences*, 5(6), 201–223.
- Kao, C. H. (2002). Sport Leisure Properties related Analysis. *National P.E. Quarterly*, 31(4), 13-16.
- Kelly, J. R., Steinkamp, M. W., & Kelly, J. R. (1986). Later life leisure: How they play in Peoria. *The Gerontologist*, 26(5), 531–537.
- Kim, M. K., Lee, D., Kim, S. K., & Kim, M. (2015). Leisure constraints affecting experienced martial arts participants. *Asia Pacific Journal of Tourism Research*, 20(9), 1063–1079.
- Kim, Y. K., & Trail, G. (2010). Constraints and motivators: A new model to explain sport consumer behavior. *Journal of Sport Management*, 24(2), 190–210.
- Kleiber, D., McGuire, F. A., Aybar-Damali, B., & Norman, W. (2008). Having more by doing less: The paradox of leisure constraints in later life. *Journal of Leisure Research*, 40(3), 343.
- Kuo, H. L. (2007). *A study of participants' motivation, anticipation and satisfaction on scuba diving of sport tourism*. National Taiwan College of Physical Education, Master's thesis, Taichung, Taiwan.

- Kwon, M. (2001). The effect of entering a continuing care retirement community on the leisure activity participation of the elderly. Retrieved from
<http://ezproxy.viu.ca/login?url=http://search.proquest.com.ezproxy.viu.ca/docview/250066593?accountid=12246>
- Lai, C. T. (2003). *The Participants' Motives and Behaviors of Playing Golf Among Taichung Citizens*. Chaoyang University of Technology, Master Thesis, Taichung, Taiwan).
- Lai, X. H. (2005). Current situation of leisure activities for the elderly in China. *Economy and Culture*, 10, 25–26.
- Lawton, L., & Daniels, M. (2009). Resident non-visitation to a national museum site: The Steven F. Udvar-Hazy center. *Visitor Studies*, 12(1), 16–29.
- Leedy, P. D., & Ormrod, J. E. (2005). *Practical research*. Publisher not identified.
- Li, H. (2012). *Survey research of contemporary square dance*. Yunnan Arts University, Master Thesis, Kunming, Yunnan, China.
- Li, R. (2013). *The Investigation and Research of Developing Present Situation for Square Dance in Chongqing*. Southwestern University, Master Thesis, Chongqing, China.
- Li, S. Q. (2009). The function of square dance in the establishment of community culture. *Science and Technology Information*, 10(19), 18.
- Liu, D. W., & Hu, X. H. (2012). The origin, features and current status of square dance. *Contemporary Sports Technology*, (11), 61–62.
- Liu, J. (2014). *The investigation of the role of square dance in building a harmonious society*. Central China Normal University, Master Thesis, Wuhan, Wubei, China.
- Liu, X. Y. (2015). The analysis of the aging trend in China. *Business*, 14(11).

- Loucks-Atkinson, A., & Mannell, R. C. (2007). Role of self-efficacy in the constraints negotiation process: The case of individuals with fibromyalgia syndrome. *Leisure Sciences*, 29(1), 19–36.
- Losier, G. F., Bourque, P. E., & Vallerand, R. J. (1993). A motivational model of leisure participation in the elderly. *The Journal of Psychology*, 127(2), 153–170.
- Lyu, S. O., Oh, C. O., & Lee, H. (2013). The influence of extraversion on leisure constraints negotiation process: A case of Korean people with disabilities. *Journal of Leisure Research*, 45(2), 233.
- MacNeil, R. D., & Anderson, S. C. (1999). Leisure and persons with developmental disabilities: Empowering self-determination through inclusion. *Retish P, Reiter S. Adult with disabilities. Mahwah, NJ: Lawerence Erlbaum Associates*, 125–143.
- Manfredo, M. J., Driver, B. L., & Tarrant, M. A. (1996). Measuring leisure motivation: A meta-analysis of the recreation experience preference scales. *Journal of leisure Research*, 28(3), 188.
- Manning, R. E. (2011). *Studies in outdoor recreation: Search and research for satisfaction*. Corvallis: Oregon State University Press. Retrieved April 10, 2017, from Project MUSE database.
- Maslow, A. H., & Murphy, G. (1954). *Motivation and Personality*. Harper & Bros.
- Menec, V. H. (2003). The relation between everyday activities and successful aging: A 6-year longitudinal study. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 58(2), S74–S82.
- Miao, Y. (2016). The Role of Social Media as a Constraint Negotiation Resource: Implication

- for Collegiate Women's Sporting Event Attendance.
- Mo, G. L. (2009). The analysis of the aging population impact on Chinese labor supply-demand and economics. (Order No. 10421912, Sun Yat-Sen University (People's Republic of China)). *PQDT - Global*, Retrieved from <http://ezproxy.viu.ca/login?url=http://search.proquest.com.ezproxy.viu.ca/docview/1869997282?accountid=12246>
- Mou, D. H. (2010). The review of current research on square dance. *Social Science*, (24).
- National Bureau of Statistics PRC. (2014). *China Statistical Yearbook 2014*. China Statistics Press.
- National Bureau of Statistics PRC. (2015). *China Statistical Yearbook 2015*. China Statistics Press.
- Odawara, E. (2006). *Life crisis in old age: Occupation, culture and the problem of "good aging" in Japan*. ProQuest.
- Ragheb, M. G., & Griffith, C. A. (1982). The contribution of leisure participation and leisure satisfaction to life satisfaction of older persons. *Journal of Leisure Research*, 14(4), 295.
- Rand, R. (2004). *Dancing away an anxious mind: A memoir about overcoming panic disorder*. Terrace Books.
- Rowe, J. W., & Kahn, R. L. (1998). *Successful aging: The MacArthur foundation study*. New York: Pantheon.
- Scott, D. (2005). The relevance of constraints research to leisure service delivery. In E. L. Jackson (Ed.) *Constraints to Leisure* (n.d.), pp. 279–293.
- Searle, M. S., & Jackson, E. L. (1985). Socioeconomic variations in perceived barriers to

- recreation participation among would-be participants. *Leisure Sciences*, 7(2), 227–249.
- Shinew, K. J., Floyd, M. F., & Parry, D. (2004). Understanding the relationship between race and leisure activities and constraints: Exploring an alternative framework. *Leisure Sciences*, 26(2), 181–199.
- Shu, Y. M. (2009). *A Study on the Motivation, Constraints, and Satisfaction of golfers' Participation*. NanHua University, Master's thesis, Chiayi, Taiwan.
- Slagle, C. (2011). *Psychometric construction and validation of a measure of positive aging*. University of Utah.
- Sneegas, J. J. (1986). Components of life satisfaction in middle and later life adults: Perceived social competence, leisure participation, and leisure satisfaction. *Journal of Leisure research*, 18(4), 248–258.
- Son, J. S., Mowen, A. J., & Kerstetter, D. L. (2008). Testing alternative leisure constraint negotiation models: An extension of Hubbard and Mannell's study. *Leisure Sciences*, 30(3), 198–216.
- Stanis, S. A. W., Schneider, I. E., & Pereira, M. A. (2010). Parks and health: Differences in constraints and negotiation strategies for park-based leisure time physical activity by stage of change. *Journal of Physical Activity and Health*, 7(2), 273–284.
- Stodolska, M. (1998). Assimilation and leisure constraints: Dynamics of constraints on leisure in immigrant populations. *Journal of Leisure Research*, 30(4), 521.
- Stodolska, M., & Alexandris, K. (2004). The role of recreational sport in the adaptation of first generation immigrants in the United States. *Journal of Leisure Research*, 36(3), 379.

- Tabachnick, B. G., & Fidell, L. S. (2007). *Using Multivariate Statistics, 5th ed.* Boston, MA: Pearson.
- Vagias, W. M. (2006). *Likert-type scale response anchors*. Clemson International Institute for Tourism & Research Development, Department of Parks, Recreation and Tourism Management, Clemson University.
- Vallerand, R. J. (2007). A hierarchical model of intrinsic and extrinsic motivation for sport and physical activity.
- Veal, A. J. (2006). *Research methods for leisure and tourism: A practical guide*. Pearson Education.
- Wang, C. C. (2008). *Leisure participation, leisure motivation, and life satisfaction for elders in public senior resident homes in Taiwan*. University of the Incarnate Word, Taiwan.
- Wang, L. (2014). The analysis of the trend of aging population in China. *Population and Economics*, 121(38).
- Wang, W. (2007). *A study of leisure motivations and constraints for old people in Nanjing*. Nanjing Normal University, Master Thesis, Jiangsu, China.
- Wang, Y. L. (2003). The development of leisure activities for the elderly in China. *Academic Exploration*, 12(11), 72–74.
- White, D. D. (2008). A structural model of leisure constraints negotiation in outdoor recreation. *Leisure Sciences*, 30(4), 342-359.
- World Health Organization. (2002). *The world health report 2002: Reducing risks, promoting healthy life*. World Health Organization.
- Wu, C. P. (1999). The study of the elderly over 100 years in China. *Chinese Journal of*

- Population Science, 6(42).*
- Yang, L. L. (2006). The characteristics of the elderly in leisure activities in China. *Journal of Liaoning Radio University, 3(12)*, 30–32.
- Ying, W. A. N. G. (2013). The development present situation and analysis research of older women square dance. *Journal of Shangqiu Vocational and Technical College, 11(2)*, 046.
- Zhang, L. P. (2012). Living arrangements and living willingness of the aged population. *Population Journal, 6*, 003.
- Zhang, Y. (2014). The characteristics and reason analysis of old population in Chongqing. *Chongqing World, 31(12)*.
- Zheng, T. (2013). Square Dance Fitness Effects. *Journal of Hohai University, 13(7)*, 19-21.
- Zheng, X. Y. (2000). Health evaluation research of Chinese aging population. *Journal of Peking University Humanities and Social Sciences, 37(4)*, 31.

Appendix A. Research Questionnaires

Section A

Motivation questionnaire					
Please rate the following statements from 1-Strongly Disagree to 5-Strongly Agree.					
	Strongly Disagree				Strongly Agree
I participate in square dance because I want	1	2	3	4	5
1. to explore new things					
2. to expand knowledge					
3. to achieve self-realization					
4. to satisfy curiosity					
5. to develop creativity					
6. to use imagination					
7. to interact with others					
8. to meet people of different status					
9. to build friendship					
10. to gain sense of belonging					
11. to gain respect from others					
12. to reveal my thoughts, feelings, or physical skills to others					
13. to be active					
14. to use my physical abilities					
15. to improve skills and ability					
16. to challenge my ability					
17. to develop physical fitness					
18. to slow down					
19. to release sense of loneliness					
20. to gain physical enjoyment					
21. to gain mental satisfaction					
22. to reorganize my time					
23. to release stress					
24. to avoid duty and responsibility					

Section B

Constraint questionnaire					
Please rate the following statements from 1-Strongly Disagree to 5-Strongly Agree.					
	Strongly Disagree		Neutral		Strongly Agree
	1	2	3	4	5
I won't participate in square dancing in future because					
1. I'm shy in the activity					
2. I have no interest in this activity					
3. I'm only interested in one specific activity, not this one					
4. I don't have the ability to try this activity					
5. this activity makes me feel uncomfortable					
6. my family don't agree with me about trying this activity					
7. my friends don't agree with me about trying this activity					
8. my friends live far away from me and can't join in it with me					
9. my friends have no time due to work					
10. my friends have no time due to family responsibilities					
11. my friends don't have related ability					
12. my friends have no interest					
13. I have no time due to family responsibility					
14. I have no time due to work					
15. I have no information about this activity					
16. there is no suitable weather					
17. there is no suitable place for the activity					

Section C

Negotiation questionnaire					
Please rate the following statements from 1-Strongly Disagree to 5-Strongly Agree.					
	Strongly Disagree		Neutral		Strongly Agree
I negotiate constraints through	1	2	3	4	5
1. I try to prioritize my activity					
2. I try to plan ahead					
3. I try to get up earlier or stay up later to have more time					
4. I try to improve my dancing skills					
5. I try to improve my communication skills					
6. I participate in square dancing with people like myself					
7. I try to find people with similar interests					
8. I try to find people with whom to recreate					
9. I save money					
10. I think about how important physical activity is					
11. I ignore what people think of me					
12. I try to ignore others who bother me					
13. I want to change the location where I recreate					
14. I recreate at times when square dancing is carried out					
15. I talk to square dance group organizers					

Section D

Demographics and Frequencies of Participation						
1. Age						
2. Gender	Female	Male				
3. Marital status	Single	Married	Divorced			
4. Highest education level	Primary	Secondary	Diploma	Bachelor		
5. Income	≤1000	1000-1999	2000-2999	≥3000		
6. Number of square dance participation in the latest month	1-2 a month	3-4 a month	2-3 per week	4-5 per week	6-7 per week	

Appendix B. Research Consent Form

RESEARCH CONSENT FORM

(Purpose) I am a student from Sustainable Leisure Management and I am completing my thesis. This thesis is to study the square dance motives and constraints for the elderly in Chongqing, China. As such, I have designed a questionnaire survey to study how the factors (i.e., motivation and constraints) and processes (i.e., constraint negotiation strategies) influence square dance participation amongst the elderly in Chongqing, China.

(Description) During this study, you will be asked to complete a questionnaire concerning your personal experience in square dance. You will also be asked for some demographic information such as age, marriage condition, education level and income. Your participation will require approximately 20 minutes of your time.

(Potential harm) There are no known harms associated with your participation in this research.

(Confidentiality) All records of participation will be kept strictly confidential, such that only I and my supervisor will have access to the information. Data will be stored in a locked filing cabinet. Data will be destroyed by shredding at the end of the project, approximately. Electronic files will also be deleted at that time. The results from this study will be reported in my thesis and an oral report during thesis defense. Information about the project will not be made public in any way that identifies individual participants.

(Participation) Your participation is completely voluntary. You may withdraw at any time for any reason without explanation and without penalty. You may choose not to answer any question for any reason.

(Concerns about your Treatment in the Research) If you have any concerns about your treatment as a research participant in this study, please contact the VIU Research Ethics Officer, by telephone at 250-753-3245 (ext., 2665) or by email at reb@viu.ca.

If you have any questions about this research project, or would like more information, please feel free to contact me at the e-mail address below:

Ying Ma
Sustainable Leisure Management Student
Vancouver Island University
maying2014app@126.com

(Consent) I have read the above form, understand the information read, understand that I can ask questions or withdraw at any time. I consent to participate in today's research study.

Participant's Signature

Date

