

# The Relevant Study of Leisure Motivation, Leisure Attitude and Health Promotion Lifestyle of Elderly People in Taiwan

Cheng-Yu Tsai, Chiung-En Huang, Ming-Tsang Wu

**Abstract**—The purpose of this study was to investigate the relationships among leisure motivation, leisure attitude, and health promotion lifestyle. The participants were recruited from a convenience sampling that subjects were at least 55 years of age in Tainan City, Taiwan. Three hundred survey instruments were distributed, and 227 effective instruments were returned, for an effective rate of 75.7%. The collected data were analyzed statistically. The findings of this research were as follows: 1. There is significantly correlated between leisure motivation and leisure attitude. 2. There is significantly correlated between leisure attitude and health promotion lifestyle. 3. There is significantly correlated between leisure motivation and health promotion lifestyle.

**Keywords**—Leisure motivation, leisure attitude, health promotion lifestyle.

## I. INTRODUCTION

POPULATION ageing comes about from a combination of declining fertility and increasing longevity and life expectancy. The twenty-first century will witness even more rapid ageing than did the century just past. Population ageing is occurring across the world, and especially in the world's most developed countries. This demographic trend is also taking place in Taiwan. The pace of population ageing in Taiwan is far greater than experienced in Western developed countries and Eastern developed countries such as Germany, America, Japan, and Korea. In Taiwan, with a population of approximately 23 millions, the number of elderly people (over 65 years) is exceedingly large at over 2.8 millions. This number is projected to increase to 5.6 millions in 2030 and 7.6 millions in 2050 [1]. However, increasing longevity in the population does not directly imply added years of healthy living. In general, these extra years added to life expectancy are spent in poor health or disability as chronic and degenerative diseases are more common at older ages.

Research has generally demonstrated that participation in leisure activity is a consequential determinant of successful aging. According to the World Health Organization, sedentary

living doubles the risk of cardiovascular diseases, diabetes, and obesity. Additionally, it increases the risk of colon cancer, high blood pressure, osteoporosis, depression, and anxiety. Conversely, physical activity interacts positively with strategies to improve diet, discourage the use of tobacco, alcohol, and drugs, helps reduce violence, enhances functional capacity, and promotes social interaction and integration [2]. Reference [3] indicated that leisure activities are positively influence self-efficacy, social support, and life satisfaction in the elderly.

Although there is clear scientific evidence that regular physical activity has powerful positive effects on both psychological and physical well-being. Reference [4] described that modernization, urbanization and improving economic conditions account for decrease in physical activity in Taiwan among both men and women. There is a 32.8% of Taiwan's senior citizens are classified as sedentary. It results in approximately 8,659 elderly people (over 65 years) deaths from chronic disease in 2012, and contributes to the escalating cost of health care expenditures for the elderly, which exceeded \$1.89 billion [5]. Therefore, how to use leisure activity as an implement for efficiently preventing diseases and avoiding illnesses for the older population has become a great concern.

Among the numerous factors that may affect leisure experiences, motivation may be the most important. Leisure motivation is considered an integral part of the leisure experience [6], [7] and is defined as a need, reason, or satisfaction that stimulates involvement in a leisure activity [8]. Therefore, leisure motivation can be referred as the energy that initiates, directs, and sustains leisure involvement, and was found to be the most important contributing factor in predicting leisure behavior related to physical activity participation [9], [10]. Reference [11] found that leisure motivation indirectly influences the individual's leisure behavior through leisure satisfaction, and leisure attitude indirectly influences leisure behavior through leisure motivation. Reference [12] also showed that there were positively correlations between leisure attitude, motivation, and leisure time physical activity participation.

Leisure attitude is an individual's cognition, faith, positive or negative affection toward leisure, and a prepared status to face his or her leisure life [13]. Attitudes have been typically seen as having affective, cognitive, and behavioral components. Reference [14] found that in a sample of working, unemployed, and retired people the more negative their leisure attitudes the more boredom they experienced in their free time. Positively

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leisure attitudes were associated with great leisure participation [15]. Research also showed that the attitude factor predicted leisure physical activity participation indirectly [16], [17]. Additionally, [18] indicated that leisure attitude was positively associated with health promotion lifestyle.

Health promotion has been defined as the process of enabling people to increase control over their health, and to make health lifestyle choices and motivating them to become better self-managers. It is a combination of science and art that helping people change their lifestyle, and enhancing their motivation to move toward a state of optimal health [19]. According to the World Health Organization, 60% of the quality of an individual's health and life depends on their behavior and lifestyle [20]. Health-risk behaviors are activities that increase a person's vulnerability or susceptibility to negative health outcomes [21]. In contrast, health promoting behaviors entail a positive approach to living and a means of increasing well-being and self-actualization [22]. Numerous publications have shown that practicing health promotion behaviours decreases the occurrence of disease and lowers the death rate, and positively associated with leisure motivation [23]-[25].

## II. MATH

The primary purpose of this study was to investigate the relationships between leisure motivation, leisure attitude and health promotion lifestyle. The results were based on the collection and analysis obtained from traditional Chinese versions of Intrinsic Leisure Motivation Scale (ILMS), Leisure Attitude Scale (LAS), and Health Promotion Lifestyle Profile Questionnaire (HPLP) given to participants.

### A. Data Collection

Participants were from a convenient sampling of 300 aged people, who were at least 55 years of age. The participants were recruited from thirty-six Senior Citizens Learning Centers of Tainan City in Taiwan.

### B. Instrument

The instrument used in this study consisting of three components, in which including Intrinsic Leisure Motivation Scale (ILMS), Leisure Attitude Scale (LAS), and Health Promotion Lifestyle Profile Questionnaire (HPLP).

Intrinsic Leisure Motivation Scale was designed by [26]. Six-point Likert Scale was used to measure the extent to which individuals perceived that their personal needs are met through leisure activities. This scale is composed of 24 items, and is divided into four dimensions: self-decision, skill-development, challenge/adventure, and self-commitment.

Leisure Attitude Scale was developed by [2]. There are three categories in this scale: cognitive, affective, and behavioral/preference. These three categories are consisted of 18 identified items. Five-point Likert Scale was used for the assessment on individual's leisure attitude.

Health Promotion Lifestyle Profile Questionnaire was developed by [27] that were widely used to determine healthy life styles of the elderly. There are six categories in this scale:

self-actualization, health responsibility, exercise, nutrition, interpersonal support, and stress management. These six categories are consisted of 52 identified items which are scored on a five- point Likert Scale.

### C. The Null Hypotheses Posited

- 1) There are no significant correlations between each dimension of leisure motivation (self-decision, skill-development, challenge/adventure, and self-commitment) and each dimension of leisure attitude, which include cognitive, affective, and behavioral/preference.
- 2) There are no significant correlations between each dimension of leisure motivation and health promotion lifestyle which include self-actualization, health responsibility, exercise, nutrition, interpersonal support, and stress management.
- 3) There are no significant correlations between each dimension of leisure attitude and each dimension of health promotion lifestyle.

### D. Data Analysis

The SPSS 19.0 was used to analyze the data. The Alpha coefficient was conducted for the study components by utilizing intrinsic leisure motivation, leisure attitude, and health promotion lifestyle profile scales for all subjects in order to test instrumental reliability. Cronbach's  $\alpha$  is commonly used to measure the internal reliability and internal of a scale. Reference [28] suggested that Cronbach's alpha values above 0.7 are acceptable for psychometric scales. Pearson Product Moment Correlation was used to examine null hypotheses. In addition, descriptive statistics were also used to examine the sample.

## III. RESULT

A total of 300 aged people were surveyed. Seventy-three surveys were unusable; this number includes 47 surveys which were not returned and 26 surveys which were incomplete. Thus, 227 subjects were used for analysis (75.7 % response rate). The Alpha coefficient for the Intrinsic Leisure Motivation Scale was 0.94, the Leisure Attitude Scale was 0.92, and Health Promotion Lifestyle Profile Questionnaire was 0.97. Therefore, these survey instruments were considered very reliable. Mean score for each category of intrinsic leisure motivation, leisure attitude, and health promotion lifestyle are shown in Table I.

TABLE I  
MEAN SCORE AND SD OF EACH DIMENSION OF INTRINSIC LEISURE  
MOTIVATION, LEISURE ATTITUDE, AND HEALTH PROMOTION LIFESTYLE

	M	SD
Leisure motivation	4.5228	0.59888
Self-decision	4.5015	0.49132
Skill-development	4.4251	0.69520
Challenge	4.4634	0.74681
Self-commitment	4.4449	0.64988
Leisure attitude	4.1517	0.51807
Cognitive	4.3270	0.58647
Affective	4.1204	0.57238
Behavioral	4.0077	0.69623
Health promotion	3.4378	0.60444
Self-actualization	3.2731	0.73711
Health responsibility	3.2896	0.69414
Exercise	3.4175	0.59550
Nutrition	3.6559	0.69302
Interpersonal support	3.5658	0.63884
Stress management	3.4248	0.71364

Note. N=227.

Table II indicated that there is significant correlation between leisure motivation and leisure attitude ( $r=0.389$ ,  $p<0.001$ ). There is significant correlation between leisure motivation and health promotion lifestyle ( $r=0.557$ ,  $p<0.001$ ). There is significant correlation between leisure attitude and health promotion lifestyle ( $r=0.440$ ,  $p<0.001$ ).

TABLE II  
PEARSON PRODUCT MOMENT CORRELATION FOR LEISURE MOTIVATION,  
LEISURE ATTITUDE, AND HEALTH PROMOTION LIFESTYLE

Variables	Leisure motivation	Leisure attitude	Health promotion lifestyles
Leisure motivation	1	0.389**	0.557**
Leisure attitude	0.389**	1	0.440**
Health promotion lifestyles	0.557**	0.440**	1

Note. N = 227  
\*\* $p < 0.01$ .

Table III indicated that there is significant correlation between each dimension of leisure motivation and leisure attitude, and the correlation coefficients was positively correlated ( $p<0.001$ ) and have median correlations at least ( $r>0.132$ ,  $p<0.001$ ). Therefore, hypothesis 1 was totally rejected.

TABLE III  
PEARSON PRODUCT MOMENT CORRELATION FOR EACH DIMENSION OF  
LEISURE MOTIVATION AND LEISURE ATTITUDE

Leisure attitude	Leisure motivation	Self-decision	Skill-development	Challenge	Self-commitment
Cognitive	0.195***	0.304***	0.216***	0.311***	
Affective	0.243***	0.301***	0.132***	0.289***	
Behavioral	0.255***	0.412***	0.302***	0.429***	

Note. \*\*\* $p < 0.001$ .  
N = 227.

Table IV indicated that there is significant correlation between each dimension of leisure motivation and health promotion lifestyle, and that was positively correlated ( $p<0.001$ ), the correlation coefficients are between 0.16 to 0.58. Results showed that each dimension of leisure motivation and health promotion lifestyle have median correlations. Therefore,

hypothesis 2 was also rejected.

TABLE IV  
PEARSON PRODUCT MOMENT CORRELATION FOR EACH DIMENSION OF  
LEISURE MOTIVATION AND HEALTH PROMOTION LIFESTYLE

Health promotion	Leisure motivation	Self-decision	Skill-development	Challenge	Self-commitment
Self-actualization	0.415***	0.562***	0.583***	0.540***	
Health responsibility	0.483***	0.484***	0.434***	0.343***	
Exercise	0.443***	0.539***	0.395***	0.472***	
Nutrition	0.222***	0.367***	0.155***	0.246***	
Interpersonal support	0.548***	0.436***	0.448***	0.405***	
Stress management	0.502***	0.585***	0.473***	0.533***	

Note. \*\*\* $p < 0.001$ .  
N = 227.

Table V indicated that there is significant correlation between each dimension of leisure attitude and health promotion lifestyle, and the correlation coefficients was positively correlated ( $r>0.21$ ,  $p<0.001$ ). Findings demonstrated that each dimension of leisure attitude and health promotion lifestyle have median correlations at least. Therefore, hypothesis 3 was rejected.

TABLE V  
PEARSON PRODUCT MOMENT CORRELATION FOR EACH DIMENSION OF  
LEISURE ATTITUDE AND HEALTH PROMOTION LIFESTYLE

Health promotion	Leisure attitude	Cognitive	Affective	Behavioral
Self-actualization	0.386***	0.368***	0.259***	
Health responsibility	0.211***	0.238***	0.232***	
Exercise	0.355***	0.329***	0.383***	
Nutrition	0.380***	0.316***	0.316***	
Interpersonal support	0.386***	0.382***	0.306***	
Stress management	0.349***	0.493***	0.315***	

Note. \*\*\* $p < 0.001$ .  
N = 227.

#### IV. CONCLUSION AND SUGGESTION

##### A. Conclusions

According to the results, the analysis of each research hypothesis was described as follows:

- 1) There were significant relationships among each dimension of intrinsic leisure motivation (self-decision, skill-development, challenge, self-commitment) and each dimension of leisure attitude (cognitive, affective, behavioral).
- 2) There were significant relationships among each dimension of intrinsic leisure motivation (self-decision, skill-development, challenge, self-commitment) and each dimension of health promotion lifestyle (self-actualization, health responsibility, exercise, nutrition, interpersonal support, stress management).
- 3) There were significant relationships among each dimension of leisure attitude (cognitive, affective, behavioral) and each dimension of health promotion lifestyle (self-actualization, health responsibility, exercise, nutrition, interpersonal support, stress management).

### B. Suggestions

Over the last few decades, there has been a dramatic increase in life expectancy, presenting challenges for both individuals and society. Therefore, people must determine which exercise and physical activity can improve health, functional capacity, and quality of life. Engaging in a physical active lifestyle during one's later years is about more than a physical experience.

Recommendations to the government: designing proper leisure activity programs and increasing leisure areas for older adults. Government should adequately investigate and evaluate citizen's needs and interests, according to the demographic variables such as economic status or educational level.

Recommendations for older adults: it is the responsibility of individual to step back and reappraise their priorities with a perspective to establishing health promotion lifestyles that include more daily participation in physical related activity. Older adults might enjoy their later life if they have a clear plan of leisure participation before retirement.

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