

# Case Study of the Exercise Habits and Aging Anxiety of Taiwanese Insurance Agents

W. T. Hsu, H. L. Tsai

**Abstract**—The rapid aging of the population is a common trend in the world. However, the progress of modern medical technology has increased the average life expectancy. The global population structure has changed dramatically, and the elderly population has risen rapidly. In the face of rapid population growth, it must be noted issues of the aging population must face up to, which are the physiological, psychological, and social problems associated with aging. This study aims to investigate how insurance agents are actively dealing with an aging society, their own aging anxiety, and their exercise habits. Purposive sampling was the sampling method of this study, a total of 204 respondents were surveyed and 204 valid surveys were returned. The returned valid ratio was 100%. Statistical method included descriptive statistics, *t*-test, and one-way ANOVA. The results of the study found that the insurance agent's age, seniority, exercise habits to aging anxiety are significantly different.

**Keywords**—Insurance agent, aging anxiety, exercise habits, elderly.

## I. INTRODUCTION

### A. Research Background and Motivation

IT is worth to attention on elderly people issue in the world. According to the United Nations World Health Organization definition, the proportion of people over 65 years old is known as the "age of aging" at 7% of the total population, reaching 14% in the elderly society, and if it reaches 20%, it is called a super-aged society. The rapid growth of the elderly population in the world is very common. In Taiwan, the total population ratio of population above 65 years of age was about 7% (1.56 million) in 1993, and until to 2016, the elderly population increased to more than 2.86 million [1]. In 2018, Taiwan will enter the segment of "elderly society", and by 2025, will be considered a super-aged society [2]. There is a need for more devise policies to help cope with the challenges posed by the aging population.

With the promotion and popularization of scientific and technological information, the public's perception and acceptance of insurance has changed and improved considerably, insurance practitioners are engaged in insurance marketing; it is the life insurance industry facing the front line of consumers, and it is important to understand what is going on in consumers' minds and determine their actual needs. Therefore, an insurance agent has professional ideals and attitudes about aging issues such as pension preparation, health care planning, health care and long-term care, aging knowledge, and aging anxiety.

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Ageism describes the negative attitudes and discrimination against the elderly [3]. Harris & Dollinger coined the term "ageism", and believed that there were widespread negative attitudes and discrimination in society [4]. Law [5] and Stryker [6] argue that age discrimination will bias us about the process of aging or aging, which will affect self-image and increase fear and anxiety about their own aging [7].

Good exercise habits can reduce the risk of hypertension, heart disease, diabetes, and other diseases. However, in society today, the sedentary lifestyle has become the mainstream lifestyle, and how to develop sports habits has become an important public health issue. The U.S. Department of Health and Human Service [8] recommend the public daily accumulation of at least 30 minutes, more than five days a week in the intensity of physical activity. In Taiwan, more than 60% of the adult population aged over 30 years has no regular exercise habits, and another 20% of them are overweight. Therefore, how to develop sports habits has become an important public health issue in the country.

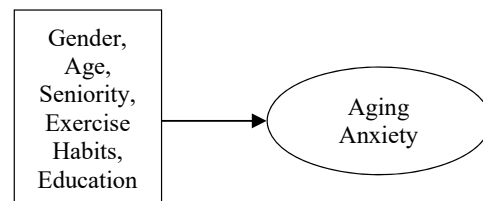


Fig. 1 Structure Model

### B. Research Purpose

This study is based on research background motivation; the purpose of this study is as follows:

- (1) Explore the differences between the genders of insurance agents to aging anxiety.
- (2) Explore the differences between various ages of insurance agents to aging anxiety.
- (3) Explore the differences between varying levels of seniority of insurance agents to aging anxiety.
- (4) Explore the differences between the various exercise habits of insurance agents to aging anxiety.
- (5) Explore the differences between the various levels of education of insurance agents to aging anxiety.

## II. METHODOLOGY

### A. Structure Model and Research Hypothesis

The theoretical framework and concept of this study, the author mainly studied insurance practitioners and analyzed the

research expectations of aging anxiety. The research hypothesis is as follows:

H1: Insurance practitioners with different background variables and different frequency of movement, experience significant differences in aging anxiety.

### 1. Sampling, Data Collection, and Questionnaire Design

The subjects of this study were selected from insurance agents. The first part of the questionnaire was demographic, while the second part was the "Aging Anxiety Scale". This study uses a Likert five-point scale, where 1 = "Strongly Agree", 2 = "Agree", 3 = "Neutral", 4 = "Disagree", 5 = "Strongly Disagree".

Sampling method was used purposive sampling; a total 204 were surveyed, with 204 returned valid, for a valid return rate of 100%. The reliability analysis was carried out with SPSS statistical software, and the scale Cronbach's  $\alpha$  value with 0.641.

- The Demographic: included Gender, Age, Seniority, Exercise Habits, Education.
- Aging Anxiety of this study was divided into four indicators: Fear of Old People, Psychological Concerns, Physical Appearance, and Fear of Loss [9].

## III. RESULTS

### A. Demographic Profile of Respondents

A total of 204 respondents participated in the survey, and the data provided was used in the analysis, as described in the table below.

TABLE I  
RESPONDENTS' DEMOGRAPHIC PROFILE (N=204)

| Demographic     | Category           | Frequency | Percentage |
|-----------------|--------------------|-----------|------------|
| Gender          | Male               | 104       | 51.0%      |
|                 | Female             | 100       | 49.0%      |
| Age             | Under 30 years old | 56        | 27.5%      |
|                 | 31-35 years old    | 48        | 23.5%      |
|                 | 36-40 years old    | 60        | 29.4%      |
|                 | 41-45 years old    | 32        | 15.7%      |
|                 | 46 years old       | 8         | 3.9%       |
| Seniority       | Under 1 year       | 28        | 13.7%      |
|                 | Above 1-5 years    | 64        | 31.4%      |
|                 | 6-10 years         | 56        | 27.5%      |
|                 | 11-15 years        | 32        | 15.7%      |
|                 | Above 16 years     | 24        | 11.8%      |
| Exercise Habits | Once a week        | 56        | 27.5%      |
|                 | 2-3 times/week     | 40        | 19.6%      |
|                 | 4-5 times/week     | 8         | 3.9%       |
|                 | Everyday           | 4         | 2.0%       |
| Education       | No-Habits          | 96        | 47.1%      |
|                 | High School        | 52        | 25.5%      |
|                 | Junior College     | 64        | 31.4%      |
|                 | Bachelor           | 88        | 43.1%      |

### B. Analysis Results for Differential Analysis

#### 1. Gender to Aging Anxiety Differential Analysis

According to a  $t$ -test of Gender for Aging Anxiety, the "Fear of Old People" ( $t=5.460$ ,  $p=0.000$ ) show significant and "Fear

of Loss" ( $t=0.746$ ,  $p=0.457$ ), "Psychological Concerns" ( $t=0.748$ ,  $p=0.456$ ), "Physical Appearance" ( $t=0.661$ ,  $p=0.509$ ) show non-significant.

TABLE II  
GENDER TO AGING ANXIETY DIFFERENTIAL ANALYSIS

| Variable | Gender | n   | M    | SD    | $t$   | $p$    |
|----------|--------|-----|------|-------|-------|--------|
| FOP      | Male   | 104 | 3.15 | 0.80  | 5.460 | 0.000* |
|          | Female | 100 | 2.58 | 0.68  |       |        |
| FoL      | Male   | 104 | 2.05 | 0.738 | 0.746 | 0.457  |
|          | Female | 100 | 2.12 | 0.511 |       |        |
| PC       | Male   | 104 | 1.96 | 0.65  | 0.748 | 0.456  |
|          | Female | 100 | 1.91 | 0.41  |       |        |
| PA       | Male   | 104 | 2.11 | 0.71  | 0.661 | 0.509  |
|          | Female | 100 | 2.17 | 0.52  |       |        |

FOP = Fear of Old People; FoL = Fear of Loss; PC = Psychological Concerns; PA = Physical Appearance.

#### 2. Age to Aging Anxiety Differential Analysis

According to a one-way ANOVA of Age for Aging Anxiety, the "Fear of Old People" ( $F=0.766$ ) show non-significant and "Fear of Loss" ( $F=9.550^*$ ), "Psychological Concerns" ( $F=4.826^*$ ), "Physical Appearance" ( $F=11.169^*$ ) show significant.

TABLE III  
AGE TO AGING ANXIETY DIFFERENTIAL ANALYSIS

| Variable | Age (yrs) | n  | M    | SD    | $F$     |
|----------|-----------|----|------|-------|---------|
| FOP      | Under 30  | 56 | 2.72 | 0.602 | 0.766   |
|          | 31-35     | 48 | 2.96 | 0.640 |         |
|          | 36-40     | 60 | 2.93 | 0.898 |         |
|          | 41-45     | 32 | 2.91 | 1.135 |         |
|          | Above 46  | 8  | 2.78 | 0.229 |         |
| FoL      | Under 30  | 56 | 2.41 | 0.653 | 9.550*  |
|          | 31-35     | 48 | 2.21 | 0.511 |         |
|          | 36-40     | 60 | 1.85 | 0.618 |         |
|          | 41-45     | 32 | 1.77 | 0.587 |         |
|          | Above 46  | 8  | 2.00 | 0.000 |         |
| PC       | Under 30  | 56 | 2.11 | 0.613 | 4.826*  |
|          | 31-35     | 48 | 1.98 | 0.524 |         |
|          | 36-40     | 60 | 1.82 | 0.395 |         |
|          | 41-45     | 32 | 1.70 | 0.634 |         |
|          | Above 46  | 8  | 2.30 | 0.320 |         |
| PA       | Under 30  | 56 | 2.42 | 0.410 | 11.169* |
|          | 31-35     | 48 | 1.91 | 0.632 |         |
|          | 36-40     | 60 | 2.24 | 0.643 |         |
|          | 41-45     | 32 | 1.70 | 0.643 |         |
|          | Above 46  | 8  | 2.50 | 0.178 |         |

FOP = FEAR OF OLD PEOPLE; FoL = FEAR OF LOSS; PC = PSYCHOLOGICAL CONCERNS; PA = PHYSICAL APPEARANCE.

1 = Under 30; 2 = 31-35; 3 = 36-40; 4 = 41-45; 5 = Above 46

#### 3. Seniority to Aging Anxiety Differential Analysis

According to a one-way ANOVA of Seniority for Aging Anxiety, the "Fear of Old People" ( $F=2.953$ ) show non-significant and "Fear of Loss" ( $F=14.501^*$ ), "Psychological Concerns" ( $F=6.053^*$ ), "Physical Appearance" ( $F=8.275^*$ ) show significant.

TABLE IV  
SENIORITY TO AGING ANXIETY DIFFERENTIAL ANALYSIS

| Variable | Seniority      | n  | M    | SD    | F       |
|----------|----------------|----|------|-------|---------|
| FOP      | Under 1 year   | 28 | 2.89 | 0.667 | 2.953   |
|          | Above 1-5      | 64 | 2.74 | 0.532 |         |
|          | 6-10 years     | 56 | 3.16 | 0.997 |         |
|          | 11-15 years    | 32 | 2.67 | 0.496 |         |
|          | Above 16 years | 24 | 2.78 | 1.138 |         |
| FoL      | Under 1 year   | 28 | 2.65 | 0.703 | 14.501* |
|          | Above 1-5      | 64 | 2.27 | 0.450 |         |
|          | 6-10 years     | 56 | 1.80 | 0.642 |         |
|          | 11-15 years    | 32 | 1.87 | 0.600 |         |
|          | Above 16 years | 24 | 1.86 | 0.402 |         |
| PC       | Under 1 year   | 28 | 2.02 | 0.538 | 6.053*  |
|          | Above 1-5      | 64 | 2.12 | 0.600 |         |
|          | 6-10 years     | 56 | 1.71 | 0.468 |         |
|          | 11-15 years    | 32 | 2.05 | 0.376 |         |
|          | Above 16 years | 24 | 1.73 | 0.585 |         |
| PA       | Under 1 year   | 28 | 2.14 | 0.808 | 8.275*  |
|          | Above 1-5      | 64 | 2.45 | 0.409 |         |
|          | 6-10 years     | 56 | 1.85 | 0.669 |         |
|          | 11-15 years    | 32 | 2.12 | 0.446 |         |
|          | Above 16 years | 24 | 2.00 | 0.652 |         |

FOP = FEAR OF OLD PEOPLE; FoL= FEAR OF LOSS; PC= PSYCHOLOGICAL CONCERNS; PA= PHYSICAL APPEARANCE.

1= UNDER 1 YEAR; 2= ABOVE 1-5 YEARS; 3=6-10 YEARS; 4=11-15 YEARS; 5= ABOVE 16 YEARS

#### 4. Exercise Habits to Aging Anxiety Differential Analysis

According to a one-way ANOVA of Exercise Habits for Aging Anxiety, the "Fear of Old People" ( $F=12.777^*$ ), "Fear of Loss" ( $F=3.269^*$ ), "Psychological Concerns" ( $F=3.460^*$ ), "Physical Appearance" ( $F=9.941^*$ ) show significant.

TABLE V  
EXERCISE HABITS TO AGING ANXIETY DIFFERENTIAL ANALYSIS

| Variable | Exercise Habits | n  | M    | SD    | F       |
|----------|-----------------|----|------|-------|---------|
| FOP      | Once a week     | 56 | 2.95 | 0.923 | 12.777* |
|          | 2-3 times/week  | 40 | 3.12 | 0.605 |         |
|          | 4-5 times/week  | 8  | 2.71 | 0.000 |         |
|          | Everyday        | 4  | 5.00 | 0.000 |         |
|          | NO-HABITS       | 96 | 2.64 | 0.662 |         |
| FoL      | Once a week     | 56 | 2.95 | 0.923 | 3.269*  |
|          | 2-3 times/week  | 40 | 3.12 | 0.605 |         |
|          | 4-5 times/week  | 8  | 2.71 | 0.000 |         |
|          | Everyday        | 4  | 5.00 | 0.000 |         |
|          | NO-HABITS       | 96 | 2.64 | 0.662 |         |
| PC       | Once a week     | 56 | 1.95 | 0.529 | 3.460*  |
|          | 2-3 times/week  | 40 | 2.04 | 0.723 |         |
|          | 4-5 times/week  | 8  | 2.00 | 0.000 |         |
|          | Everyday        | 4  | 1.00 | 0.000 |         |
|          | NO-HABITS       | 96 | 1.92 | 0.477 |         |
| PA       | Once a week     | 56 | 2.38 | 0.399 | 9.941*  |
|          | 2-3 times/week  | 40 | 2.36 | 0.731 |         |
|          | 4-5 times/week  | 8  | 2.00 | 0.712 |         |
|          | Everyday        | 4  | 1.00 | 0.000 |         |
|          | NO-HABITS       | 96 | 1.97 | 0.595 |         |

FOP = FEAR OF OLD PEOPLE; FoL= FEAR OF LOSS; PC= PSYCHOLOGICAL CONCERNS; PA= PHYSICAL APPEARANCE.

1= Once a week; 2= 2-3 times/week; 3=4-5 times/week; 4= Everyday; 5= Non

#### 5. Education to Aging Anxiety Differential Analysis

According to a one-way ANOVA of Education for Aging

Anxiety, the "Fear of Old People" ( $F=0.510$ ), "Fear of Loss" ( $F=1.630$ ), "Psychological Concerns" ( $F=1.323$ ), and "Physical Appearance" ( $F=1.113$ ) show non-significant.

TABLE VI  
EDUCATION TO AGING ANXIETY DIFFERENTIAL ANALYSIS

| Variable | Education      | n  | M    | SD    | F     |
|----------|----------------|----|------|-------|-------|
| FOP      | High School    | 52 | 2.85 | 0.880 | 0.510 |
|          | Junior College | 64 | 2.95 | 0.834 |       |
|          | Bachelor       | 88 | 2.82 | 0.720 |       |
| FoL      | High School    | 52 | 2.06 | 0.527 | 1.630 |
|          | Junior College | 64 | 1.98 | 0.610 |       |
|          | Bachelor       | 88 | 2.17 | 0.705 |       |
| PC       | High School    | 52 | 2.00 | 0.494 | 1.323 |
|          | Junior College | 64 | 1.85 | 0.506 |       |
|          | Bachelor       | 88 | 1.97 | 0.607 |       |
| PA       | High School    | 52 | 2.05 | 0.541 | 1.113 |
|          | Junior College | 64 | 2.12 | 0.649 |       |
|          | Bachelor       | 88 | 2.21 | 0.659 |       |

FOP = FEAR OF OLD PEOPLE; FoL= FEAR OF LOSS; PC= PSYCHOLOGICAL CONCERNS; PA= PHYSICAL APPEARANCE.

1= High School; 2= Junior College; 3= Bachelor.

#### IV. CONCLUSION AND SUGGESTIONS

##### A. Conclusion

- Most of the subjects, Gender was Male (51%); Age was 36-40 Years Old; Seniority was 1-5 Years; Exercise Habits were No-Habits; Education was Bachelor Degree.
- Gender for Aging Anxiety, the "Fear of Old People" show significant and "Fear of Loss", "Psychological Concerns", "Physical Appearance" show non-significant.
- Age for Aging Anxiety, the "Fear of Old People" show non-significant and "Fear of Loss", "Psychological Concerns", "Physical Appearance" show significant.
- Seniority for Aging Anxiety, the "Fear of Old People" show non-significant and "Fear of Loss", "Psychological Concerns", "Physical Appearance" show significant.
- Exercise Habits for Aging Anxiety, the "Fear of Old People", "Fear of Loss", "Psychological Concerns", "Physical Appearance" show significant.
- Education for Aging Anxiety, the "Fear of Old People" show non-significant and "Fear of Loss", "Psychological Concerns", "Physical Appearance" show significant.

##### B. Suggestion

According this study finding, suggesting that:

- Among the demographic differences, females were higher in number than males in regard to Fear of Old People. This may be because females have a responsible for the family, so the feeling of aging is more profound. Therefore, this study suggests that women should be given more tolerance and care and reduce their anxiety.
- Younger and less experienced insurance agents, often because of structural changes in the family, lack relative life experience, and face greater anxiety related to "Fear of Loss", "Psychological Concerns", "Physical Appearance". Therefore, this study encourages more participation in the social activities of elderly people to create a friendly

environment.

- c) A good habit of regular exercise can reduce the anxiety caused by aging.
- d) Different levels of Education do not affect the Anxiety of aging.

The study only surveys a single insurance company, and therefore, cannot be expanded for different objects of study. For future research, it is recommended to include different areas and various sized insurance companies in order to enhance the research and offer a more complete picture.

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