

# THE RELATIONSHIP BETWEEN LEARNING SATISFACTION AND RE-PARTICIPATION INTENTION OF SENIOR LEARNING USING HAPPINESS AS A MODERATOR

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## ABSTRACT

*The present study aims to investigate the relationship between learning satisfaction and re-participation intention of senior learning, and use the happiness as a moderator. A questionnaire survey was conducted, with the community in Tainan city, and the learner aged 55 and above were tested. Total of 521 questionnaires were sent out, and 486 valid questionnaires were received. Results of the present study found that there is a positive effect between the happiness and the re-participate intention. When the psychological and emotional happiness of the senior learner is higher, the re-participate intention also higher. The result indicates that improving seniors' sense of happiness can enhance the promoting effect of course satisfaction on re-participation intention. When designing the senior learning courses, training institutions should not only focus on course quality and teaching effects, but also focus on improving learners' sense of happiness. Paying attention to the psychological and social happiness of senior learners can promote they continue to participate in learning activities, thereby improving their overall quality of life and happiness.*

**Keywords:** Senior learning, Learning satisfaction, Re-participation intention, Happiness.

## 1. INTRODUCTION

Taiwan is about to enter a super-aged society. It is necessary for the elderly to change their mind of themselves as a burden to society. Instead, they need to prepare and accept to face aging. From an educational point of view, the elderly need a complete learning system. While learning, education for the elderly should not only be regarded as a benefit, nor a waste; through various diversified learning activities and active participation, it can not only make the elderly healthier, but also reduce the expenditure on medical resources and long-term care, thereby achieving the goal of successful aging and making the elderly healthier and happier in the future [1].

The present study mainly to understand the learning satisfaction (LS) and re-participation intention (RPI) of senior learners after participating the learning course, and to explore the correlation with happiness.

The Ministry of Education [1] pointed out that in order to build a safe, happy, and healthy local learning environment for the elderly, it has cooperated with local governments since 2008, combining local organizations and civil society to build various senior learning center, and expands senior learning resources to villages and communities in towns and cities, allowing the elderly to learn on the spot. The learning targets are mainly citizens over 55 years old. Plan appropriate learning activities to prepare people for their future elderly life from the perspective of preventive education.

### **The Relationship between Long-term Care and Senior Learning**

Lin [2] pointed out in the study that institutions for the elderly provide day care, comprehensive care that provides 24-hour all-day care or night accommodation, and sometimes provide courses on activities for the elderly. The courses cover many aspects, including dynamic, static, arts and cultural activities, information technology and other activities. Arranged courses can allow the elderly to practice their muscles, develop new skills and expertise; allowing them to reconnect with society, thereby making life no longer dull and boring. Institutional care not only provides professional care of the environment, whether it is medical equipment or medical, social workers, and caregivers, we have a full range of equipment and manpower. It can also save caregivers a lot of effort in terms of family members.

Long-term care and senior learning complement each other. If comprehensive health support and continuous learning opportunities can be provided, the elderly can receive comprehensive support at the physical, psychological and social happiness, thereby achieving the goal of healthy aging.

### **Learning Satisfaction**

Flammger [3] described learning satisfaction (LS) as the fulfillment of learners' educational needs, which brings about a positive and adequate psychological response. The study suggested that senior students entering higher education may justify their choice, commit to a program or institution, and ultimately feel content with their decision.

Wong & Chapman [4] conducted an in-depth analysis of eight dimensions of senior student satisfaction, given its critical importance within higher education. Their study indicated that various aspects of student satisfaction are linked to three distinct types of interactions: formal peer relationships, informal peer relationships, and student-instructor relationships.

Following studies indicated that the factors that might affect the learner's LS.

- 1) Meng et al. [5] divided LS into six levels: administrative support, teacher teaching, course content, learning achievements, interpersonal relationships and learning environment.
- 2) Wu & Hong [6] divided LS into five levels: learning outcomes, teacher teaching, learning environment, school administration and course materials.
- 3) Huang & Zhang [7] divided LS into four levels: teacher teaching, peer relations, venue equipment and school administration.

Elfeky & Elbyaly [8] pointed that satisfied learners achieve more positive outcomes in their learning.

### **Re-participation Intention**

Oliver & Swan [9] pointed out that consumers' willingness to purchase again is based on the degree of consumer satisfaction (CS) with a product or service. If consumers do not meet their expectations and satisfaction, they will switch to other options.

Kozak [10] pointed out that RPI refers to tourists' willingness to participate in activities again, that tourists are willing to travel to a certain destination again or to travel to other attractions in the same country. It is believed that re-visiting means that tourists are satisfied with the recreational destination and are willing to visit the recreational spot again.

Leecharoen [11] identified notable mediating and moderating influences on the relationship between CS and repurchase behavior, proposing five key mediating factors: information

sharing, customer trust, customer commitment, perceived price value, and perceived product value. Leecharoen [11] also observed that the results suggest satisfied customers are more likely to make repeat purchases when their trust in the retail store is strong, which consequently enhances their commitment to the store.

Rahim et al. [12] applied the recency, frequency, and monetary (RFM) model to investigate the customers repurchase behaviour and indicated that the relationship between satisfaction and repurchase is inflated, with only satisfaction having a small effect on repurchase and increasing through more variables.

## **Happiness**

Happiness (H) is based on personal subjective preferences, and when individuals judge that they have a happy family life, good social connections, healthy physical and mental status, etc., they can usually enhance subjective happiness. Ryff & Singer [13] indicated that the happiness is the extent to which people feel good, content, or satisfied with their lives. Diener [14] believes that happiness includes life satisfaction, work satisfaction and leisure satisfaction. Conway [15] mentioned that interpersonal relationships are the cornerstone of human happiness, so establishing positive relationships between people is an important element in moving toward happiness.

The three-dimensional concept of happiness proposed by Keyes is emotional happiness, psychological happiness, and social happiness [16; 17].

- 1) Emotional happiness (EH): The connotation of EH is actually similar to the connotation of subjective happiness. Different scholars have slightly different discussions on this matter, but they are all subjective positive and negative emotions about current life or feelings. Strictly speaking, EH refers to the emotional quality of a person's daily life experience, that is, the frequency and intensity of experiencing happiness, interest, anxiety, sadness, anger, or emotions that make people happy or unhappy [18].
- 2) Psychological happiness (PH): PH refers to the development of overall psychological potential. The present study primarily utilizes the multifaceted concept of PH as outlined by Ryff & Singer [13], encompassing six key dimensions: self-acceptance, positive relationships with others, autonomy, environmental mastery, life goals, and personal growth. A PH scale was subsequently developed based on these six areas.
- 3) Social happiness (SH): The connotation of SH is social integration, acceptance of others, social contribution, social cohesion and social potential [16]. The SH scale developed by Keyes [16; 17] is grounded in a concept emphasizing the interaction between individuals and their social environment. This includes one's social position and relationships within the community, the impact of personal roles on society, and the level of harmony between the individual and society. SH reflects a person's status and social function, and is also a positive state in which a person can maintain optimal performance in interpersonal social networks and communities [19].

From the above literature review, we know that happiness has a positive effect on the overall quality of life of individuals; and happiness will affect emotional, psychological and social happiness. There is significant positive effect between social participation and happiness among older learners. The higher the participation level of older learners, the higher of their learning satisfaction and quality of life will be. Therefore, the happiness is set as a moderator in the present study to investigate whether happiness affects the learning satisfaction to re-participation intention (RPI) of senior learners.

## 2. RESEARCH METHOD

### Research Framework

Based on the literature review, the present study conduct the research framework in Figure 1. There are three levels of learning satisfaction (LS): teacher teaching (TT), course content (CC), and peer relationship (PR). There are three levels of happiness (H): psychology (P), emotional (E), and social (S).

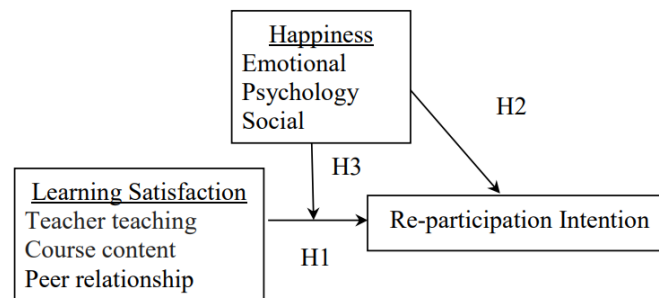


Figure 1. Research framework of the present study

The present study aims to investigate the relationship between LS, RPI, and H. Based on the literature review and research framework, the following research hypotheses are proposed for analysis. The research hypotheses are as Table 1:

Table 1. The Research Hypotheses

|      |   |
|------|---|
| H1   | LS had significant positive effect on RPI.            |
| H1-1 | TT had significant positive effect on RPI.            |
| H1-2 | CC had significant positive effect on RPI.            |
| H1-3 | PR had significant positive effect on RPI.            |
| H2   | H had significant positive effect on RPI.             |
| H2-1 | EH had significant positive effect on RPI.            |
| H2-2 | PH had significant positive effect on RPI.            |
| H2-3 | SH had significant positive effect on RPI.            |
| H3   | H has a significant moderating effect on TT with RPI  |
| H3-1 | EH has a significant moderating effect on TT with RPI |
| H3-2 | PH has a significant moderating effect on TT with RPI |
| H3-3 | SH has a significant moderating effect on TT with RPI |
| H3-4 | EH has a significant moderating effect on CC with RPI |
| H3-5 | PH has a significant moderating effect on CC with RPI |
| H3-6 | SH has a significant moderating effect on CC with RPI |
| H3-7 | EH has a significant moderating effect on PR with RPI |
| H3-8 | PH has a significant moderating effect on PR with RPI |
| H3-9 | SH has a significant moderating effect on PR with RPI |

### Questionnaire Design

The present study adopts a questionnaire that includes four parts: the first part is basic personal information; the second part is learning satisfaction; the third part is happiness; and the fourth part is re-participation intention.

- 1) Basic personal information includes eight items: gender, age, education, marital status, living status, health status, economic status, and employment status.
- 2) LS is divided into three levels: TT, CC and PR; with 3 questions each, totaling 9 questions.
- 3) Happiness is divided into three levels: EH, PH, and SH; with 3 questions each, totaling 9 questions.
- 4) RPI has 5 questions.

## Research Participants

The participants of the questionnaire were senior learners aged 55 and above in the Tainan city area. The number of completed questionnaires was 521, and received 486 valid questionnaires.

## Statistical Analysis

After collecting the questionnaires, the questionnaires were first checked, then the valid questionnaires were numbered and archived, and SPSS 20.0 was used for data analysis. Statistical methods are used as follows: descriptive statistic, reliability analysis, validity analysis, Spearman's rank-order correlation, and regression analysis.

## 3. RESULTS AND DISCUSSIONS

### Descriptive Statistic

- 1) LS: The average rating scores in the three aspects of learning satisfaction: TT is 4.7009, CC is 4.6283, and 4.6968 for PR.
- 2) Happiness: The average rating score in the three aspects of happiness: EH is 4.6043, PH is 4.5535, and 4.4671 for SH.
- 3) RPI: The overall average rating score is 4.7202.

### Reliability and Validity Analysis

- 1) Reliability analysis: The Cronbach's Alpha values of the questionnaire were 0.939 points, 0.949 points, and 0.929 points for the learning satisfaction, happiness, and re-participation intention, respectively.
- 2) Validity analysis: The research scales in the present study all used questionnaires developed and published by other researchers. Therefore, the content of the questionnaire should already have content validity.

### Spearman's Rank-order Correlation

The present study uses Spearman's rank-order correlation coefficient analysis method to explore the correlation between learning satisfaction and various aspects of happiness. The degree of linear correlation between two variables is measured by the Spearman rank correlation coefficient. The value of the Spearman rank correlation coefficient is between -1 and 1. When the value is greater than 0, the two variables are said to be positively correlated, and when it is equal to 1, the two variables are said to be positively correlated. It is a perfect positive correlation; when it is less than 0, it is said that the two variables are negatively correlated; when it is equal to -1, it is called a perfect negative correlation; when it is equal to 0, it is said that the two variables are uncorrelated. Table 2 shows the Spearman's rank-order correlation coefficients of all variables are between 0.435-0.867.

Table 2. The Spearman's rank-order correlation coefficients

| Variables |    | LS           |       |        | Happiness |        |        | RPI    |
|-----------|----|--------------|-------|--------|-----------|--------|--------|--------|
|           |    | TT           | CC    | PR     | PH        | EH     | SH     | RPI    |
| LS        | TT | Coefficient  | 1.000 | .762** | .743**    | .619** | .601** | .540** |
|           |    | Significance | 0.000 | 0.000  | 0.000     | 0.000  | 0.000  | 0.000  |
|           | CC | Coefficient  |       | 1.000  | .736**    | .581** | .586** | .547** |
|           |    | Significance |       |        | 0.000     | 0.000  | 0.000  | 0.000  |
|           | PR | Coefficient  |       |        | 1.000     | .698** | .688** | .624** |
|           |    | Significance |       |        |           | 0.000  | 0.000  | 0.000  |
| Happiness | PH | Coefficient  |       |        |           | 1.000  | .844** | .750** |
|           |    | Significance |       |        |           |        | 0.000  | 0.000  |
|           | EH | Coefficient  |       |        |           |        | 1.000  | .829** |
|           |    | Significance |       |        |           |        |        | 0.000  |

|     |     |              |       |        |
|-----|-----|--------------|-------|--------|
|     | SH  | Coefficient  | 1.000 | .654** |
|     |     | Significance |       | 0.000  |
| RPI | RPI | Coefficient  |       | 1.000  |
|     |     | Significance |       | 0.000  |

### Regression Analysis

Regression analysis of the moderating effect of happiness on the relationship between learning satisfaction and re-participation intention, respectively adding demographic variables, three levels of learning satisfaction (TT, CC, and PR), and three levels of happiness (EH, PH, and SH) are independent variables, and the results are shown in Table 2.

Table 2. Results of regression analysis

| Regression model<br>Variable | Re-participation Intention |           |           |           |            |
|------------------------------|----------------------------|-----------|-----------|-----------|------------|
|                              | M1                         | M2        | M3        | M4        | M5         |
| Gender                       | -0.2265***                 | -0.1025   | -0.1433   | -0.1191*  | -0.1207*   |
| Age                          | -0.0131                    | -0.0073   | -0.0292   | -0.0238   | -0.0201    |
| Education                    | -0.0066                    | -0.0053   | -0.0074   | -0.0091   | -0.0064    |
| Living status                | 0.0229                     | 0.0148    | 0.0084    | 0.0145    | 0.0214     |
| Health status                | 0.0273                     | 0.0117    | 0.0098    | 0.0191    | 0.0155     |
| Economic status              | 0.0602                     | 0.0484    | 0.0077    | 0.0053    | 0.0141     |
| Employment status            | 0.0433                     | 0.0403    | 0.0290    | 0.0344    | 0.0441*    |
| learning area                | -0.0767                    | 0.0385    | -0.0431   | -0.0127   | 0.0065     |
| TT                           |                            | 0.3297*** |           |           | 0.2554     |
| CC                           |                            | -0.0239   |           |           | -0.3287    |
| PR                           |                            | 0.4346*** |           |           | 1.4866***  |
| EH                           |                            |           | 0.2138*** |           | 1.3800     |
| PH                           |                            |           | 0.2242*** |           | -0.7819**  |
| SH                           |                            |           | 0.1317*   |           | 0.8074     |
| TT * EH                      |                            |           |           | 0.4352**  | 0.3593*    |
| TT * PH                      |                            |           |           | -0.3661   | -0.3093*   |
| TT * SH                      |                            |           |           | -0.0324   | -0.0710    |
| CC * EH                      |                            |           |           | -0.0589   | -0.0067    |
| CC * PH                      |                            |           |           | -0.1579   | -0.1569    |
| CC * SH                      |                            |           |           | 0.2151*   | 0.2368*    |
| PR * EH                      |                            |           |           | -0.3496   | -0.6348*** |
| PR * PH                      |                            |           |           | 0.5612*** | 0.6667***  |
| PR * SH                      |                            |           |           | -0.1616   | -0.3145**  |
| F-value                      | 2.946*                     | 43.466*** | 45.138*** | 41.601*** | 34.523***  |
| R <sup>2</sup>               | 0.0470                     | 0.5020    | 0.5120    | 0.6020    | 0.6320     |
| Adj R <sup>2</sup>           | 0.0310                     | 0.4910    | 0.5000    | 0.5870    | 0.6140     |

- 1) From the table, the demographic variables in model M1 are independent variables and have a significant level on the dependent variable RPI (F=2.946, Adj R<sup>2</sup>=0.031), indicating that demographic characteristics have an significant effect on RPI, among which Gender ( $\beta$ =-0.2265) has the most significant.
- 2) In model M2 (F=43.466, Adj R<sup>2</sup>=0.491), TT is significant affecting on the standardized coefficient of RPI ( $\beta$ =0.3297), which means that the higher the teacher teaching satisfaction, the higher the RPI, which has a significant positive effect, so the hypothesis H1-1 is supported.
- 3) In model M2, peer relationship is significant affecting on the standardized coefficient of RPI ( $\beta$ =0.4346), which means that the higher the peer relationship satisfaction, the higher the RPI, which has a significant positive effect, so the hypothesis H1-3 is supported.

- 4) In model M3 ( $F=45.138$ ,  $\text{Adj } R^2=0.500$ ), EH is significant affecting on the standardized coefficient of RPI ( $\beta=0.2138$ ), which means that the higher the EH, the higher the RPI, which has a significant positive effect, so the hypothesis H2-1 is supported.
- 5) In model M3, PHs is significant affecting on the standardized coefficient of RPI ( $\beta=0.2242$ ), which means that the higher the PH, the higher the RPI, which has a significant positive effect, so the hypothesis H2-2 is supported.
- 6) In model M3, SH is significant affecting on the standardized coefficient of RPI ( $\beta=0.2242$ ), which means that the higher the SH, the higher the RPI, which has a significant positive effect, so the hypothesis H2-3 is supported.
- 7) In model M4 ( $F=41.601$ ,  $\text{Adj } R^2=0.587$ ), EH has a significant moderating effect on TT with RPI ( $\beta=0.4352$ ), means the higher TT satisfaction and EH, the higher the RPI, so the hypothesis H3-1 is supported.
- 8) In model M4, SH has a significant moderating effect on course content with RPI ( $\beta=0.2151$ ), means the higher TT satisfaction and SH, the higher the RPI, so the hypothesis H3-6 is supported.
- 9) In model M4, PH has a significant moderating effect on peer relationship with RPI ( $\beta=0.5612$ ), means the higher TT satisfaction and PH, the higher the RPI, so the hypothesis H3-8 is supported.
- 10) In model M5 ( $F=34.523$ ,  $\text{Adj } R^2=0.614$ ), all variables are introduce into the model, the results shows that the Gender ( $\beta=-0.1207$ ), employment status ( $\beta=0.0441$ ), PR ( $\beta=1.1866$ ), PH ( $\beta=-0.7819$ ), interaction of TT \* EH ( $\beta=0.3593$ ), interaction of TT \* PH ( $\beta=-0.3093$ ), interaction of CC \* SH ( $\beta=0.2368$ ), interaction of PR \* EH ( $\beta=-0.6348$ ), interaction of PR \* PH ( $\beta=0.6667$ ), and the interaction of PR \* SH ( $\beta=-0.3145$ ) were reach the statistical significant level.

Therefore, combine the above results, the hypothesis H1-1, H1-3, H2-1, H2-2, H2-3, H3-1, H3-2, H3-6, H3-7, H3-8, and H3-9 were supported. The summary of hypothesis is shows in Table 3.

Table 3. Summary of hypothesis

|    |      |               |
|----|------|---------------|
| H1 |      |               |
|    | H1-1 | Supported     |
|    | H1-2 | Not Supported |
|    | H1-3 | Supported     |
| H2 |      |               |
|    | H2-1 | Supported     |
|    | H2-2 | Supported     |
|    | H2-3 | Supported     |
| H3 |      |               |
|    | H3-1 | Supported     |
|    | H3-2 | Supported     |
|    | H3-3 | Not Supported |
|    | H3-4 | Not Supported |
|    | H3-5 | Not Supported |
|    | H3-6 | Supported     |
|    | H3-7 | Supported     |
|    | H3-8 | Supported     |
|    | H3-9 | Supported     |

#### 4. CONCLUSIONS AND SUGGESTIONS

##### Learning Satisfaction

- 1) Teacher teaching of learning satisfaction has a significant positive effect on RPI. Teachers can provide high-quality teaching and respect and care for the needs of learners during the teaching process. Seniors will feel valued and satisfied, thus stimulating their interest in learning and motivation to continue participating.
- 2) Peer relationship of learning satisfaction has a significant positive effect on RPI. When senior learners form stable and satisfactory peer relationships during learning, they will feel a strong social connection, which will strengthen their social support network and thereby increase their RPI.

##### Happiness

- 1) Emotional happiness has a positive effect on RPI. When senior learners participate in class, they can experience a sense of success and accomplishment. These positive emotional experiences can significantly enhance their emotional happiness. This positive emotional happiness experience will make them more inclined to participate in learning activities again in order to pursue continued emotional happiness.
- 2) Psychology happiness has a positive effect on RPI. When senior learners feel supported by peers and teachers, their psychological happiness will significantly improve. These positive experiences will motivate them to engage in learning activities again to maintain and enhance these positive social connections.
- 3) Society happiness has a positive effect on RPI. After senior learners in learning activities, they can establish and consolidate social connections through interactions with peers and teachers, which helps to improve their social happiness. When senior learners feel social support and a sense of belonging during learning. These positive emotional experiences will stimulate seniors' RPI.

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