

## A Survey of Senior Students' Prospective and Reflective Ability

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**Keywords:** Seniority; Forward-looking ability; Reflective ability

**Abstract:** The purpose of this study was to investigate the background attributes of senior citizens in the Central District of Taiwan, the influence of senior students' forward-looking ability and reflective ability on their physical and mental health. This study adopted a questionnaire survey method. The senior students of the district's senior age learning activities have a total of 400 valid samples. Data processing and analysis are carried out through descriptive statistics, t-test, single-factor variation analysis, and Pearson statistical methods. The study found that: 1. Senior learners have a good sense of future forward-looking ability and future reflection ability; 2. Male, elderly, and highly educated are most likely to have forward-looking ability in the forward-looking ability of senior learners; In the reflective ability of senior learners, male, highly educated, over 60 years of age have a greater need for reflective ability; 4. The problem of senior hope has predictive power on the relationship of advanced anxiety. Finally, based on the results of this study, a number of relevant recommendations were made for senior students and follow-up researchers at the Senior Care Center in Central District of Taiwan.

### 1. Introduction

In the 1980s and 1990s, the study of active aging caused a lot of discussion and research. In 1999, the United Nations set the first international old age in human history. In 2002, the World Health Organization proposed the framework of the active aging policy and published The aging policy framework report, and the average life expectancy of Chinese people from 1999 to 2013, the average life expectancy has increased from 75.9 years to 80.2 years (Ministry of the Interior, 2014) [1], according to the Chief Executive Office of the Executive Yuan (2011) [2] Statistics, among the retired civil servants in China, the education staff is 50 years old, accounting for 28.69%, and the average age of retired employees is 57.1 years (Executive Council Economic Construction Committee, 2012) [3], and then comparing the average life expectancy of Chinese people, you can find After the Chinese retire, there are still about 20 years of life needs to arrange life. It can be known that older learners will need more post-planning, physical and mental health, re-employment ability, and even career peaks, and the plan needs a positive mental state. This is as the scholar Csikszentmihalyi, M. (2000) [4] put forward the concept of "positive psychology" and pointed out that "positive psychology" plays an important role in people's mental health, after which Eva Kahana (2003) [5] The authors also studied the relationship between prospective response and successful aging based on demographic variables, and pointed out that individuals can prevent and eliminate the sources of aging stress through corrective and reflective thinking through prospective response strategies, so explore the ability of senior learners to look forward to and reflect on their ability to reflect. It has its necessity and influence.

### 2. Research Purpose

- (1) Analysis of the differences in forward-looking ability of senior students with different background attributes;
- (2) Exploring the differences in reflective ability among senior students with different background attributes;
- (3) To explore the relationship between the forward-looking ability of senior students and the

reflective ability of senior students;

(4) Based on the research results, formulate appropriate measures for the appropriate learning of senior citizens.

### 3. Literature Discussion

#### 3.1 Related literature.

According to Taiwan's 2008, the Ministry of Education launched the Senior Age Learning Program and began to use "senior citizen" to refer to "the elderly". The so-called "ageing" is a middle-aged person, referring to retirees over 55 years old. Older people said that this age is the most ageable stage of happiness in the development of life (Wei Huijuan, 2014) [6]

#### 3.2 Relevant Literature on Forward-Looking Ability.

Bode (2007) [7] and others point out that forward-looking is an attitude to deal with things, and individuals can prepare for the future ahead of pressure or events.

#### 3.3 Relevant Literature on Reflective Ability.

Betty Ann Kitchener (1983) [8] pointed out that reflection will affect a person's self-thinking process, which can transcend simple information and integrate into personal thinking and learning.

### 4. Research Architecture and Method

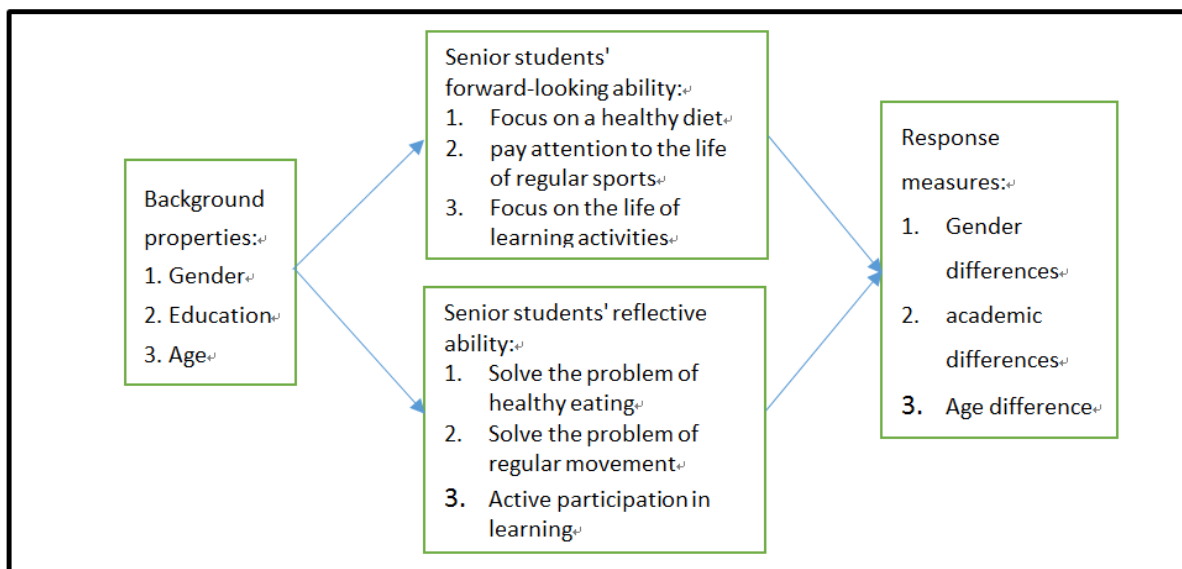


Figure. 1 The structure of the study

#### 4.1 Research Hypothesis.

According to the research structure, the research hypotheses established in this study are as follows:

Hypothesis 1: Background attributes have a significant relationship with the ability of seniors to look ahead.

Hypothesis 2: Background attributes have a significant relationship to the ability of senior students to reflect.

Hypothesis 3: Predictive ability of seniors is predictive of the relationship between seniors' ability to reflect.

Hypothesis 4: Relevant learning measures can be proposed based on the research results.

#### 4.2 Research Objects.

This study takes the Taiwan Senior Citizens Centre as the research site, and takes the senior

students of the Senior Citizens Centre in Central Taiwan as the research object. The purposive sample is used, supplemented by snowball sampling to seek research cases. Yi Zhi, 2000) [9], and using the forward-looking ability of senior students, the ability of reflection of senior students is most suitable for ethnic groups, 241 males and 159 females. The sample selection conditions are as follows: (1) the number of genders is not limited; (2) the age between 45 and 64 years old and older; (3) the case can be communicated and written in Mandarin, Cantonese or Taiwanese; (4) ) willing to accept the scale; (5) have active learning motivation; (6) the degree of education is limited to the national level; (7) the motivation to participate in the research initiative.

## 5. Research Results

### 5.1 The Differences in the Ability of Seniors with Different Background Attributes to the Senior Students' Prospective Ability.

Table 1 Results

<b>Panel A: Gender</b>									
<i>Differences in the forward-looking ability of senior students</i>	<i>Male</i>		<i>Female</i>		<i>Difference</i>				
	<i>Number of people</i>	<i>Average Value</i>	<i>Number of people</i>	<i>Average Value</i>					
Focus on a healthy diet	241	4.2130	159	4.1887					
Pay attention to the life of regular sports	241	4.0000	159	3.8415	Male > Female	*			
Focus on the life of learning activities	241	4.1141	159	3.9706	Male > Female	***			
Senior students' forward-looking ability	241	4.2130	159	4.1887	Male > Female	*			
<b>Panel B: Educational Background</b>									
<i>Differences in the forward-looking ability of senior students</i>	<i>(1) Elementary school</i>		<i>(2) secondary</i>		<i>(3) High school (vocational)</i>		<i>(4) College</i>		<i>Difference</i>
	N.P.	A.V.	N.P.	A.V.	N.P.	A.V.	N.P.	A.V.	
Pay attention to the life of regular sports	92	4.2772	174	4.0479	107	4.3536	27	4.3580	1,3>2***
Focus on the life of learning activities	92	3.8696	174	3.8713	107	4.0280	27	4.2296	
Senior students' forward-looking ability	92	4.1005	174	3.8966	107	3.9182	27	4.5185	4>1,2,3***
<b>Panel C: Age Group</b>									
<i>Differences in the forward-looking ability of senior students</i>	<i>(1) 45-49 years old</i>		<i>(2) 50-54 years old</i>		<i>(3) 55-59 years old</i>		<i>(4) 60 years old or older</i>		<i>Difference</i>
	N.P.	A.V.	N.P.	A.V.	N.P.	A.V.	N.P.	A.V.	
Pay attention to the life of regular sports	119	4.4244	161	3.9503	107	4.2617	13	4.8333	1,3,4>2*** 4>3***
Focus on the life of learning activities	119	4.2504	161	3.6696	107	3.8617	13	5.0000	4>1,2,3*** 1>2,3***
Senior students' forward-looking ability	119	4.0084	161	3.8540	107	4.0864	13	4.7500	4>1,2,3*** 3>2***

## 5.2 The Differences of Senior Students' Reflective Ability in Senior Citizens with Different Background Attributes

Table 2 Results

Panel A: Gender									
<i>Differences in the ability of senior students to reflect</i>	<i>Male</i>				<i>Female</i>				<i>Difference</i>
	<i>Number of people</i>		<i>Average Value</i>		<i>Number of people</i>		<i>Average Value</i>		
Solve healthy eating problems	241		4.4191		159		4.44537		
Solve healthy eating problems	241		4.3451		159		4.1426		Male > Female **
Active participation in learning problems	241		4.2459		159		4.1777		
Old age anxiety problem	241		4.3522		159		4.2789		
Panel B: Educational Background									
<i>Differences in the ability of senior students to reflect</i>	<i>(1) Elementary school</i>		<i>(2) secondary</i>		<i>(3) High school (vocational)</i>		<i>(4) College</i>		<i>Difference</i>
	N.P.	A.V.	N.P.	A.V.	N.P.	A.V.	N.P.	A.V.	
Solve healthy eating problems	92	4.7174	174	4.4959	107	4.0641	27	4.5185	1,2,4>3*** 1>2***
Solve healthy eating problems	92	4.3442	174	4.2308	107	4.2274	27	4.3580	
Active participation in learning problems	92	4.3859	174	4.2011	107	4.0280	27	4.5185	1,4>3***
Panel C: Age Group									
<i>Differences in the ability of senior students to reflect</i>	<i>(1) 45-49 years old</i>		<i>(2) 50-54 years old</i>		<i>(3) 55-59 years old</i>		<i>(4) 60 years old or older</i>		<i>Difference</i>
	N.P.	A.V.	N.P.	A.V.	N.P.	A.V.	N.P.	A.V.	
Solve healthy eating problems	119	4.1561	161	4.4907	107	4.6195	13	4.7143	2,3,4>1***
Solve healthy eating problems	119	4.3277	161	4.1035	107	4.3474	13	5.0000	1,3,4>2*** 4>1,3***
Active participation in learning problems	119	4.1891	161	3.9519	107	4.5584	13	5.0000	1,3,4>2*** 3、 4>1** *

## 5.3 The Relationship between the Forward-Looking Ability of Senior Students and the Reflective Ability of Senior Students.

This study used Pearson's statistical methods to analyze the correlation between the forward-looking ability of senior students and the level of reflective ability of senior students. The results are presented in Table 3.

Table 3 Relevant situation between the senior levels of seniority learning

	<b>Senior students' forward-looking ability</b>	<b>Senior students' reflective ability</b>
Senior students' forward-looking ability	1	0.549***
Senior students' reflective ability	0.549***	1

Indicate:\*p < 0.05    \*\*p < 0.01    \*\*\*p < 0.001

There is a positive correlation between the forward-looking ability of senior students and the reflective ability of senior students (0.549), and the correlation between them is significant, showing

the senior students' forward-looking ability and there is a significant positive relationship between the senior students' reflective ability level.

#### 5.4 Exploring the Predictive Ability of the Senior Students of the Senior Citizens and the Predictive Ability of the Senior Students.

The predictive ability of the senior middle-aged seniors is the predictive variable, and the predictive effect is the predictive analysis result of the senior students' reflective ability level. After testing the collinearity, the tolerance (1-R<sup>2</sup>) is found to be 0.699, which is greater than 0.4. The collinearity problem; the predictive ability of the seniors in the middle-aged age is the predictive variable, and the reflective ability level of the senior learner enters the regression equation for the predictive criterion. The F value of the overall regression model significant test  $p < 0.001$  reaches a significant level. The display predictive variables are significantly correlated with the benchmark variables, which can effectively predict the level of reflective ability of senior students. The test results show that the ability of senior students to reflect has a significant positive impact on the forward-looking ability of seniors ( $\beta = 0.549, p < 0.001$ ), the multivariate step-by-step model reaches a significant level, and the regression equation based on the multivariate stepwise regression analysis method: the forward-looking ability of senior students  $= 2.097 + 0.549 \times$  The reflection ability of senior students, the summary of prediction analysis results are shown in Table 4. :

Table 4 the summary of prediction analysis results

Input forecast variable order	R	R <sup>2</sup>	$\Delta R^2$	F value	$\Delta F$	B	Beta ( $\beta$ )
Senior students' reflective ability	0.549	0.301	0.300	171.658* **	171.658* **	0.549	0.549***

Indicate: \* $p < 0.05$     \*\* $p < 0.01$     \*\*\* $p < 0.001$

#### 5.5 Appropriate Measures for the Appropriate Learning of the Elderly.

This study collects data using the "Foresight Response Initiative Assessment Form" and the "Rethinking Response Capability Assessment Form" and collects patient data with a patient guidance attitude. It can be found that the method of catalytic conversion learning [10] and the translation learning of Mezirow, Jack (1975) can be improved by improving the negative thinking of senior learners. [11] In the learning part, the researchers analyzed and formulated appropriate response measures for the results of this study.

## 6. Conclusion

This study is aimed at the research on the forward-looking ability and reflective ability of senior students in the Senior Learning Center. It is hoped that the forward-looking and reflective thinking survey can help senior learners to have more assistance in the later life. Presented in this study focus on the following:

This study is aimed at senior learners. In the hypothesis 1, the background attribute has a significant relationship with the seniors' ability to look ahead. The significant attribute results are 1. Gender: a healthy diet, a life of regular exercise Life with a focus on learning activities (male>female); 2. Education: a life that focuses on a healthy diet, a life that emphasizes regular exercise, and a life that focuses on learning activities (highly educated are most prone to prospective ability); 3. Age: focus on health Dietary life, life that emphasizes regular exercise, and life that focuses on learning activities (aged people are prone to prospective ability). In hypothesis 2. The background attribute has a significant relationship with the senior students' ability to reflect, and the significant attribute results are 1. Gender: Solving the problem of regular exercise (male>female) 2. Education: Solving healthy eating problems and actively participating in learning Part of the problem is more demanding for translation and reflective learning (higher-educated people are most likely to produce forward-looking ability); 3. Age: Solving healthy eating problems, actively participating in learning problems, and solving problems of regular exercise (over 60 years of

reflexive ability) there is a need. In the hypothesis 3. The forward-looking ability of the senior-age students is predictive of the relationship between the senior students' reflective ability. The significant attribute results are: 1. Gender: "focus on regular sports life", "focus on learning activities" "Life", "Difficulties in the ability of seniors to look forward to the future", "Questions for solving the problem of regular sports", 2. Education: "Life with a healthy diet", "Life with a focus on regular sports", "Life with a focus on learning activities" "Resolving Healthy Eating Problems" and "Proactively Participating in Learning Problems" section 3. Age: "Life with a healthy diet" and "Regular exercise "Life", "life-oriented learning", "solving healthy eating problems", "solving regular sports problems", and "active participation in learning", find that gender, age, education and other demographic attributes all affect forward-looking ability And the "learning" part of the ability to reflect, and the "gender" difference affects the "male" part. This shows that the male's ability to look and reflect and reflect is slightly higher than that of women. In the planning of seniority learning, It is also possible to improve the design of more senior learning after the movement and the trend of such thinking ability. This is a space for the senior learning center to improve, and it is also a problem that senior students can challenge.

## References

- [1] Ministry of the Interior, The tenth National Life Table statistics, September 4, 2014, taken from [http://www.moi.gov.tw/eng/chi\\_news/news\\_detail.aspx?sn=8819&type\\_code=02](http://www.moi.gov.tw/eng/chi_news/news_detail.aspx?sn=8819&type_code=02)
- [2] The Chief Office of the Executive Yuan, Demographic table. Online Inspection Date: January 15, 2013, Website: <http://www.dgbas.gov.tw/pubiic/Attachment/29211595971.xls>
- [3] Executive Yuan Economic Construction Committee, Taiwan population projections from 2010 to 2060. Taipei: Executive Yuan. Online Inspection Date: January 15, 1012, Website: <http://www.cepd.gov.tw/ml.aspx?sNo=0000455>
- [4] M. Csikszentmihalyi, Positive psychology: An Introduction, American Psychologist.2000, vol.55, pp 5-14.
- [5] E. Kahana, B. Kahana, K. Kercher, Emerging lifestyles and proactive options for successful ageing, Ageing international. 2003, vol.28, pp.155-180.
- [6] H.C. Wei, Seniors Learning Center Business Workbook. Taipei City, Ministry of Education, 2014.
- [7] C. Bode, D. De Ridder, R.G. Kuijer, J. Bensing, Effects of an intervention promoting proactive coping competencies in middle and late adulthood, The Gerontologist, 2007, vol. 47, pp. 42-51.
- [8] K.S. Kitchener, Cognition, metacognition, and epistemic cognition, Human Development, 1983, vol.26, pp. 222-232.
- [9] Y.J. Hwang. Self-reported questionnaires for students in educational research, validity analysis, National Science Council Research Journal: Humanities and Social Sciences, 2000, vol. 10, pp.403-415.
- [10] L.M. Barmgantnrn, Tnansfonmativr learning: Fundamental concerts, Adult learning theory, 2003, pp.17-22.
- [11] J. Mezirow, Education for Perspective Transformation: Women's Reentry Programs in Community Colleges. New York: Center for Adult Education Teachers College, Columbia University, 1975.