

## RESEARCH ON THE RELATIONSHIPS AMONG LEARNING NEEDS, COPING STRATEGIES AND LIFE SATISFACTION OF SENIOR CITIZENS IN SHANGDONG CHINA

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### Abstract

This paper takes senior citizens aged over 60 from Jinan, Shandong Province as research objects, probing into the relations between learning needs, coping strategies and life satisfaction. It uses questionnaire method to capture relevant theories and documents as theoretical basis to build up research structure; it makes use of questionnaire as the research tool to test, count and analyze the functioning mechanism of learning needs, problem-solving coping strategies and life satisfaction in senior citizens' learning process, aiming to find the disciplines to help senior citizens promote active aging by engaged learning, and improve their life satisfaction as well as provide suggestions for the development of the education of senior citizens.

**Key Words:** Senior Citizens, Learning Needs, Coping Strategies, Life Satisfaction

### Introduction

As population aging becomes a trend of the world, how to improve life quality after people enter into their last life stage has become a hot topic around the world. Since “active aging”, which means the process of making efforts to gain the opportunities of health, participation and guarantee, has

been put forward in 1980s (World Health Organization, 2002), how to value and achieve active aging is a highly concerned issue. As is researched, life satisfaction is one of the important judging criterion, while educational activities play an important part in influencing senior citizen's individual life and social development. Learning behavior can not only im-

120

proves life quality of senior citizens but also life satisfaction (Henry, 1989). It is also found that after entering into the last period, the method adopted to cope with problems and pressure brought by aging is relevant to life satisfaction (Blanchard, Chen & Norris, 1997). Based upon these, this paper seeks to discuss whether for senior citizens learning needs and coping methods have any influence over life satisfaction, whether life satisfaction can be predicted by analyzing learning need and coping strategies and how to improve senior citizens' life satisfaction relying on the influence and prediction.

## Literature Review

### *Life Satisfaction*

Life satisfaction depending upon how well the senior citizens accept and adapt to aging, as well as how they govern their life (Talento, 1984), is the judgement of senior citizen's personal life, which is long-time cognitive assessment of process. The gap between senior citizens' realistic condition and expectation can be known by making use of life satisfaction, so as to accurately define if they have adapted to life well (Brandmeyer, 1987). Different from "subjective happiness" and "life quality", this paper define life satisfaction as the subjective evaluation process of the senior citizens on their overall state and their internal psychological feelings. Actively coping with and adapting to aging, and narrowing the gap between the desired goal and ac-

tual achievement contribute to higher life satisfaction of senior citizens.

### *Learning Needs*

Learning needs-individual's desire for learning, is that individuals, for the sake of himself or herself, organizations and society, need to learn something. It is also the gap between the target state and the realistic condition that individuals, organizations, and society expect to achieve (Knowles, 1980). When individual realize his or her shortage or need, or the outer world consider him/her as some deemed-quality lacking, the desire or preference shown is learning need (Peterson, 1983). McClusky's (1971) Demand Range Theory states that education at any stage of life will facilitate the development of human nature. Through learning, senior citizens can gain more energy to cope with the increased burden of the aging to maintain a good living condition, thereby gaining new social roles and getting new levels of life development. McClusky (1971) divides the learning need of senior citizens into five levels, namely, the need of coping, the need of expressing, the need of contributing, the need of influencing and the need of self-transcending.

### *Coping Strategies*

Coping strategies is the process of confronting difficulties and trying to overcome them, thinking and acting actively and purposefully. Each individual has a unique coping strategies

(Huang, 1993). The aim of coping strategies is to lessen anxiety and solve problems. The effect can be positive, thus reducing troubles caused by anxiety, however, the opposite can be led to, harming both mental and physical health (Chang, 1989). The paper takes senior citizens over 60 from Jinan, Shandong as the research object, putting forward the following assumptions.

【 H<sub>1</sub> 】 Learning needs and coping strategies of senior citizens in Jinan, Shandong Province have a significant influence on life satisfaction.

H<sub>1-1</sub>: Learning needs of senior citizens in Jinan, Shandong Province has a significant influence on life satisfaction.

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H<sub>1-2</sub>: Coping strategies of senior citizens in Jinan, Shandong Province has a significant influence on life satisfaction

【 H<sub>2</sub> 】 Coping strategies of senior citizens in Jinan, Shandong Province has a mediating effect between learning needs and life satisfaction.

Learning needs of senior citizens facilitated by coping strategies will influence life satisfaction. When the learning needs become stronger, the more active the orientation of coping strategies is, the higher life satisfaction of the senior citizens.

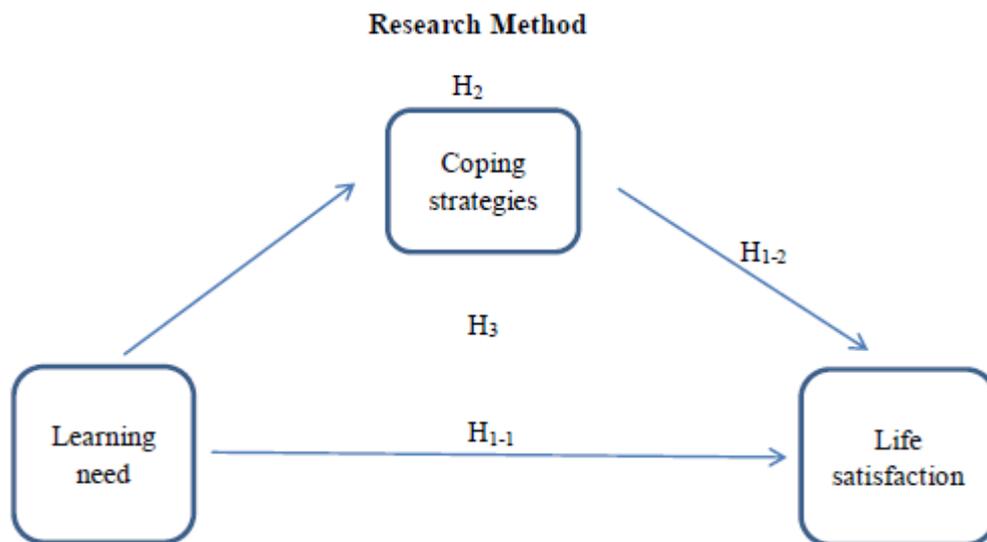


Figure 1 Research Structure

【 H<sub>3</sub> 】 Learning needs and coping strategies of senior citizens in Jinan, Shandong, have significant predictive power on life satisfaction.

Their learning needs and coping strategies powerfully predict life satisfaction. When learning needs strengthen, more positive coping strategies can improve life satisfaction.

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The paper uses the questionnaire, based on Mcclusky (1971) demand Range theory, to study the relationship between Chinese senior citizens' learning needs, coping and life satisfaction. The research of life satisfaction uses Huang (2011) Life Satisfaction Survey Questionnaire as a tool, which is divided into four dimensions: fun of life, emotional feelings, self-cognition and family relationship; the research of learning needs uses the Joung (2011) Learning Needs Questionnaire as a tool, which is divided into four dimensions: life-skills learning needs, health-improving learning needs, life-enriching learning needs and the pursuit at spiritual level; the research of coping strategies uses Chiu (2011) Coping strategies questionnaire as a tool, which is divided into four

specific dimensions: specific solution strategy, supportive system building, cognitive evasion and emotion repression. The above questionnaires all adopts a 5-point Likert-type scale, which uses respondents' answers to analyze and explore the relationship between Chinese senior citizens' learning needs, the coping strategies and life satisfaction.

### Results

The research altogether provides 1, 080 questionnaires and the completed questionnaires are 886, of which 752 are qualified questionnaires and the effective response rate is 82%. The participants include 308 students who participated in senior universities, accounting for 41%, and the number of participants who do not participate in senior universities is 444, accounting for 59%.

Table 1. Analytic Summary of Linear Regression Of Learning Needs And Life Satisfaction

	Life Satisfaction		
	B	SE B	$\beta$
Overall learning needs	.308***	.030	.351***
Life-skills learning needs	.020	.018	.041
Health-improving learning needs need	.055*	.021	.096*
Life-enriching learning needs	-.025	.018	-.062
Spiritual-pursuit learning need	.235***	.024	.414***
R <sup>2</sup>	.175		
Adj R <sup>2</sup>	.170		
F	39.512***		
Df	(4, 747)		

注: N = 752

\* $p < .05$  \*\*\*  $p < .001$

Table 2. Analytic Summary Of  
 Linear Regression Of Coping Strategies And Life Satisfaction

	Life satisfaction		
	B	SE B	$\beta$
Overall coping strategies	.463***	.024	.573***
Specific solution strategy	.037	.021	.055
Supportive system building	.160***	.017	.285***
Cognitive evasion	.097***	.013	.257***
Emotion repression	.115***	.014	.289***
R <sup>2</sup>	.304		
Adj R <sup>2</sup>	.300		
F	81.512***		
Df	(4, 746)		

注: N = 752 \*\*\*  $p < .001$

To learn the effects of learning needs and coping strategies on life satisfaction, this research adopts general linear regression analysis. It is found that both learning needs and coping strategies have significant influence over life satisfaction (Table 1 and 2). The rate of significance is lower than .001, so H1 is valid.

In the regression analysis of learning need and life satisfaction,  $\beta = .351$ ,  $p < .001$ . Assuming H1-1 is valid, the learning needs of spiritual pursuit makes a big difference to life satisfaction considering other variants as well,  $\beta = .414$ ,  $p < .001$ , the same happens on health-improving learning needs on life satisfaction,  $\beta = .096$ ,  $p < .05$ . That is, the higher the dimensions of spiritual-pursuit and health-improving learning needs score, the better life

satisfaction is; while the two other dimensions in learning need makes no significant difference to life satisfaction.

In the regression analysis of coping strategies and life satisfaction,  $\beta = .573$ ,  $p < .001$ . Assuming H1-2 valid, the dimensions of supportive system building, cognitive evasion and emotion repression have great influence over life satisfaction, considering other variants as well. The  $\beta$  values are .289, .285, .257, and the significance is  $< .001$ . That is, the higher the dimensions of emotion repression, supportive system and cognitive evasion score, the better life satisfaction is. The dimension of strategic solution has no notable influence on life satisfaction.

To test the mediating effect of senior citizens' coping strategies has on

learning needs and life satisfaction, this research adopts Four-step Regression Analysis. Knowing from table 3, learning needs have a significant explanatory power over coping strategies ( $\beta = .301, p < .001$ ), and life satisfaction ( $\beta = .351, p < .001$ ), while coping does over life satisfaction ( $\beta = .573, p < .001$ ). Taking the explanatory power of learning needs and coping strategies have over life satisfaction into consideration, the explanatory power of learning

needs is  $p < .001$ , which is still outstanding. If  $\beta$  lowers from .351 to .196, that power from coping strategies shines,  $p < .001$  and the figure  $\beta$  drops from .573 to .513. The mediating effect is valid according to the criteria of Baron and Kenny (1986). Coping strategies is the relationship between part of the mediating effect of learning needs and life satisfaction, which validates H2.

Table 3. The Analytic Summary Of The Mediating Effect From Coping Strategies Over Learning Needs And Life Satisfaction

	Coping strategies	Life satisfaction Y		
	Model 1	Model 2	Model 3	Model 4
Learning need	.301***	.351***		.196***
Coping strategies			.573***	.513***
R <sup>2</sup>	.091	.123	.328	.363
Adj R <sup>2</sup>	.090	.122	.327	.361
F	74.822***	105.202***	365.747***	213.206***
Degree of freedom	(1, 750)	(1, 750)	(1, 750)	(2, 749)

Note: The figures in the table are standardized regression coefficients ( $\beta$ )  
 \*\*\*  $p < .001$

Table 4. Total, Direct, And Indirect Effects Of Learning Need On Life Satisfaction

Total effect of learning need on life satisfaction					
Effect	se	t	p	LLCI	ULCI
.3082	.0300	10.2661	.0000	.2493	.3672
Direct effect of learning need on life satisfaction					
Effect	se	t	p	LLCI	ULCI
.1725	.0269	6.4208	.0000	.1197	.2252
Indirect effect (s) of learning need on life satisfaction					
Effect	BootSE	BootLLCI	BootULCI		
Coping strategies	.1358	.0186	.0997	.1735	

This research, referring to the test method of mediating variables proposed by Hayes (2017), adopts PROCESS Hayes Module 4 to analyze the overall power the learning needs and coping strategies of senior citizens have over life satisfaction. Knowing from table 4, the mediating test result of “learning need->coping strategies ->life satisfaction” does not contain 0 (LLCI=. 0997, ULCI=. 1735),the mediating power is. 1358. When controlling the mediating path, the impact of learning need on life satisfaction is still significant, and the interval (LLCI=. 1197, ULCI=. 2252) is exclusive of 0. The effect of learning need on life satisfaction has been dropped from. 3082 to. 1725, so the learning need and coping strategies have an overall predictive effect on life satisfaction, and H3 is validated.

### Conclusion and Suggestions

This research assumes that senior citizens' learning needs and coping strategies have a significant impact on life satisfaction, coping strategies plays as a mediator in the impact of learning needs on life satisfaction, and the learning needs and coping strategies have a joint predictive power on life satisfaction. It is found that the learning needs and coping strategies of senior citizens in Jinan, Shandong Province have a positive and significant impact on life satisfaction, which is consistent with the study by Chae & Gusup (2018) and Gurjot (2017). Chae & Gusup (2018) studied the senior citizens from Korean, finding that sat-

isfying their learning needs can improve life satisfaction. Gurjot's (2017) study of 928 senior citizens from Phoenix and Sun City in terms of coping strategies and life satisfaction found that coping strategies is significantly related to life satisfaction. At the same time, it verified the partial mediating effect of the coping in the relationship between learning needs and life satisfaction, which support Oznur's (2019) research in which 586 university students were studied to testify the mediating effect of coping strategies in the relationship between incentives and life satisfaction. Assumption is verified and the structural equation model is established. Finally, the study concluded that the higher the learning need of senior citizens, the more positive their coping strategies is, thus the higher life satisfaction is. The learning needs and coping strategies of senior citizens have overall predictive power for life satisfaction.

Based upon all above, it is suggested that government attaches importance to education for senior citizens, promote educational welfare policies for senior citizens and stimulate their participation in learning activities, as well as integrating social forces to enrich educational resources of senior citizens. It is necessary for senior citizens education organizers to understand the learning needs of senior citizens to provide a diversified curriculum, guide senior citizens to adopt a proactive approach to cope with problems, thus enriching their last life period and finally improving life satis-

faction. For senior citizens, it is recommended to establish a lifelong learning concept, actively participate in learning activities, analyze learning needs, and strengthen coping strategies through learning to improve their quality of life and subjective feelings.

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