

# Senior Citizens' Satisfaction on Continuing Education

Cheng Fang Hsu, and Shinn-Jong Lin

**Abstract**—This research is to explore the satisfaction for senior citizens on continuing education in Taiwan. The purpose of this research aims at the difference on teacher's teaching, personal relationship, learning result, materials and environment. Through different sexual and living area as the background variables, a questionnaire is adopted as the methodology in this research. Three results are found in this research. In overall, senior citizens taking continuing education put the most important attention on personal relationship but materials and leaning environment put the least. There is a significant difference on personal relationship, teacher's teaching and research result between different sexes. Female senior citizens attach more importance to teacher's teaching and learning results but male senior citizens value on personal relationship. Another significant difference is shown on teacher's teaching and personal relationship because of senior citizens living area. Urban senior citizens put importance on personal relationship and rural senior citizens respect teacher's teaching more.

**Keywords**—Learning satisfaction, continuing education, senior citizens.

## I. INTRODUCTION

THE Ministry renamed the Bureau of Statistics of Taiwan reported that there was 2,382,242 senior citizens (over 65 years old) in Taiwan which took 12.49% of total population of Taiwan, until September 2008. It is greatly over the standard of World Health Organization, WHO. The result shows that Taiwan enters an aging population society. It may sound obvious, but varying age groups use different products – and marketers need to understand the demands of each generation to earn the most profit [1]. Therefore, the senior citizens market is getting important. During the retired life, senior citizens have more and more interests on learning new such as computer, dancing, language, cooking etc. This research aims to investigate determinants of senior citizens' satisfaction on continuing education. Senior citizens taking continuing education program is to extend their retired life with fun. Though learning activity, senior citizens create their retired personal relationship. So, senior citizens bring not only new opportunities but also new challenges for organizations.

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## II. LITERATURE REVIEW

### A. Continuing Education

[17] indicated that continuing education is the provision of opportunities for people to continue their learning. Through continuing education, society provides a varied educational environment with the wide range opportunities of learning through not only formal systems but also informal systems. Continuing education depends on the interests and literacy skills of people. The richer and various learning environment presented the typical characteristics of continuing education. Moreover, continuing education implements non-formal education to help educationally-deprived adults to reach standards that are equivalent to those in the formal system. [6] ; [14] ; [18].

### B. Perceived Service Quality and Satisfaction

[10] indicated that customer-oriented marketing is essential for organizations to retain their customers. Consumers go through different decision processes when they make a contractual transaction compared to when they make a single discrete transaction. Perceived service quality is a form of attitude related but not equivalent to customer satisfaction [9]. [21] argued that customer satisfaction is a precursor of service quality. [13] agreed that service quality leads to customer satisfaction. Organizations deliver high service quality as a way of increasing customer satisfaction. Therefore, this relationship engender customer to maintain their place in the market place. [1] ; [8]

Perceived service quality could be the product of a number of service encounter evaluations by students. Moreover, such encounters would be with administrators, teaching staff and managers as well as other education employees. [12] Providing a good service quality leads to customers satisfied. Hence, customer satisfaction is discernible in many forms of service quality. However, education services include intent to research at a higher level within the same institution, how frequently and recently a student used additional services, like catering and IT services, student retention, and lastly the willingness to recommend the institution to friends, neighbors and fellow employees. [3] ; [16]

Service encounters is recognized within the service quality as a key concept [3] ; [5] ; [9] ; [22] ; [24] Service involves direct interaction between service provider and service user. Furthermore, customer satisfaction put the efforts on identifying the drivers of satisfaction or dissatisfaction. Dissatisfaction is the lack of which causes dissatisfaction, but

the research presence of which does not cause satisfaction. Otherwise, a Satisfier leads to satisfaction with the presence but the absence of which does not lead to dissatisfaction. [3] ; [5] ; [9] ; [13] ; [23] ; [24]

[19] indicated that all the satisfiers do not necessarily create dissatisfied customers. Also, service quality may be classified important to customers that may cause satisfaction but not necessarily dissatisfaction. Motivators bring satisfaction with the perceived service factors only served to dissatisfaction. SERVQUAL satisfaction/expectation survey instrument initially that introduced the ten determinants of service quality and these were later evolved into five dimensions [4] ; [20] ; [21] which called RATER dimensions (Reliability, Assurance, Tangibles, Empathy, and Responsiveness). The instrument is to measure customer expectations and perceptions of quality.

### C. Learning Satisfaction

Learning satisfaction is an attitude toward to current research situation formed in students' learning process. Learning satisfaction is a perception or attitude by different satisfied or dissatisfied levels on student's expectations. [1] ; [17]

The key of learning is how to learn and how to ask. Learning is influenced by the environment and it is a personal experience through learning process. Learning satisfaction is a criterion for measuring teaching quality. [2] indicated that school no longer considers the student as a learner of knowledge and attitude, but a combination of customers, producers and products. To have the best overall performance, teaching quality as learning effectiveness and instructor enthusiasm is more and more important.

[11] emphasized that teaching quality is correlated with learning satisfaction. The learning content satisfies the interest or needs of students influences learning satisfaction directly [7] ; [16]

Furthermore, [15] indicated that teaching content and materials have important influence on learning satisfaction. Moreover, teaching skill and school administrative system has a positive influence on learning satisfaction [11]. The interactive between teachers and students is also important on student's interest direct affecting learning results. How to enhance learning satisfaction becomes an important lesson to have a successful in continuing education program. Therefore, there are four framework administrated in the research questionnaire. They are teacher's teaching, learning result, teaching content and materials.

### III. RESEARCH METHODOLOGY

According to explore the satisfaction for senior citizens on continuing education, there are three hypotheses indicated in this research.

1. There is a significant difference with different sexual senior citizens on satisfaction for continuing education.
2. There is a significant difference with different area senior citizens on satisfaction for continuing education.
3. There is a significant difference with teacher's performance on the satisfaction for senior citizens on continuing education.

4. There is a significant difference with personal relationship on the satisfaction for senior citizens on continuing education.

This research aims at the senior citizen who is over 65 years old in Taiwan with the continuing education experience at open schools in Taiwan. Total 230 questionnaire surveys were administrated with 192 (83.5%) valid returning survey between 2008/10/01-2008/10/20.

### IV. DISCUSSION AND FINDING

For the survey responder percentage, had the continuing education experience (43.22%) is male and female is 56.78%. From Table I, this research found that the senior citizens are interested in learning dancing most which took 96%. Learning language also took 57% as the second popular for senior citizens. Due to the technology development, computer took the third popular. It is interesting to notice that cooking with low percentage, only 10%. This appeared that most senior citizens prefer to create the new life thought social activities such as dancing, language or computing to communicate with more people but not cooking in the kitchen.

TABLE I  
THE LEARNING FOCUS OF SENIOR CITIZENS

	Learning focus	Senior citizens (No.)
1	Language	57
2	Cooking	10
3	Dancing	96
4	Computer	40
5	others	27
<b>Total</b>		230

Moreover, the principal components factor analysis with varimax rotation was adopted on four major factors from 17 questions that measured the perceived in this research. Before going the factor analysis, it should take an evaluation for checking if the model is suitable for factor analysis. Kaiser-Meyer-Olkin measure of sampling adequacy (KMO) and Bartlett's Test of Sphericity are the main methods to examine if the data is fitting the factor analysis. In this research, the results are noticeable for KMO and Bartlett. KMO = 0.88 which is close to 1.

Bartlett Test of Sphericity,  $X^2 = 2600.43$ , and significance, P-value  $\leq 0.01$ . Due to [15] indicated that selecting the eigen value is bigger than 1 and use the orthogonal rotation for rotating which can extract the final factors that were captured by eight factors in this research. The four satisfaction factors are teacher's teaching, personal relationship, learning result, materials and environment.

Moreover, the recommended test of reliability is coefficient  $\alpha$ , Cronbach's  $\alpha$  that measures that internal consistency extension between or correlation among the set of features making up each the four dimensions. Cronbach's  $\alpha$  equal or greater than 0.5 are considered acceptable and a good

indication of construct reliability [10]. From Table II, Cronbach's  $\alpha$  of all factors are over 0.8 which appears high reliability and consistence in this research. (See Table II)

TABLE II  
THE CRONBACH'S A RESULT OF SENIOR CITIZENS ON CONTINUING EDUCATION

Factor	Question	Cronbach' $\alpha$	
Teacher's teaching	1-1	0.865	0.856
	1-2		
	1-3		
	1-4		
	1-5		
	1-6		
Personal relationship	2-1	0.820	0.856
	2-2		
	2-3		
	2-4		
Learning result	3-1	0.887	0.856
	3-2		
	3-3		
Materials and environment	4-1	0.842	0.856
	4-2		
	4-3		
	4-4		

Through t-test analysis, this research found that there is a significant difference with different sexual senior citizens on satisfaction for continuing education. The p is separately 0.000, 0.000, 0.066 and 0.009 for the four factors. It shows that different sexual senior citizens have a significant difference on teacher's teaching, personal relationship and materials and environment. Also, the mean of male senior citizens is bigger than female senior citizens citizens.

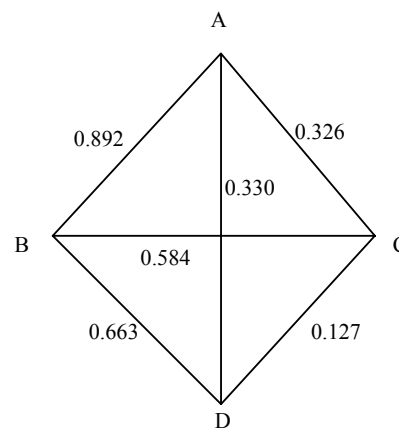
This displays that female senior citizens attach more importance to teacher's teaching and materials and environment but male senior citizens value on personal relationship when they go for continuing education programs.

As well, there is a significant difference with different area senior citizens on satisfaction for continuing education. By ANOVA analysis, the p-value for four factors is respectively 0.067, 0.006, 0.857 and 0.529. When P is under 0.005 which means having a significant difference; therefore, urban senior citizens attach more importance on personal relationship than rural senior citizens when they go on the for continuing education programs. In other words, urban senior citizens consider going for the continuing education programs that is a social activity to communicate with people and wide their retired life.

According to post-hoc comparison by Duncan, this research found that different sexual senior citizens have a significant

difference on personal relationship. It also demonstrates that male senior citizens value personal relationship much more than female senior citizens citizens. Besides, from ANOVA analysis result, there is a significant difference with teacher's teaching performance on the satisfaction for senior citizens on continuing education. The p-value of four factors is 0.032, 0.008, 0.439 and 0.132 respectively. This results that senior citizens have different level satisfaction related to different teacher's teaching performance and personal relationship building situations. Through post-hoc comparison by Duncan, this research also found that male senior citizens value personal relationship much more than female senior citizens citizens.

Furthermore, referring to Pearson correlation coefficients (See Fig. 1) with p-value (0.007), there is a significant difference among four factors, teacher's teaching, personal relationship, learning result, materials and environment. As the result, teacher's attitude or professional knowledge and personal relationship development present a high correlation with senior citizens' learning satisfaction. It indicated that female senior citizens put more importance on teacher's teaching and learning result but male senior citizens value on personal relationship to communicate with people.



A: teacher's teaching; B: personal relationship; C: learning result;  
D: materials

Fig. 1 Pearson correlations among four factors of seniors going for continuing education programs

## V. CONCLUSION

This research aims at the satisfaction for senior on continuing education in Taiwan. Three results are found in this research. In overall, first, different senior citizens have a significant difference on teacher's teaching, personal relationship and materials and environment. Second, there is a significant difference on personal relationship between different sexes. Female senior citizens attach more importance to teacher's teaching and research result but male senior citizens value on personal relationship by different area senior citizens citizens. Urban senior citizens put importance on personal relationship and communications and rural senior

citizens respect teachers more. Moreover, teacher's attitude or professional knowledge direct influences the interests of senior citizens to go for continuing education programs especially female senior citizens.

The purpose of this research aims at the satisfaction difference by the four factors, teacher's teaching, personal relationship, learning result, and materials and environment. This research had found that there is the significant difference among all factors with learning satisfaction. Hence, this research purposes two recommendations on future study or school administration.

Firstly, for administrating continuing education programs, this research found that teacher's attitude and professional knowledge direct influences the interests of senior citizens to go for continuing education programs. In order to promote continuing education successfully, therefore, administrator can centre on arranging a suitable teacher who attracts and increases senior student's interest and pushes them to take continuing education programs. Secondly, this research only focuses on senior citizens. Hence, administrator can consider at expanding target students for continuing education to explore if learning satisfaction change because of age or occupation background. The result also provides school administrator to create new and successful continuing education programs.

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