Using Correspondence Analysis to Explore the Relationship Between Information Sources and Elderly Tourist Segments

Salitta Saribut¹

¹ Faculty of Business Administration, Rajamangala University of Technology Thanyaburi, Thailand

Correspondence: Salitta Saribut, Faculty of Business Administration, Rajamangala University of Technology Thanyaburi, Pathumthani, Thailand. Tel: 66-2549-4818. E-mail: salitta_s@rmutt.ac.th

Received: April 4, 2018	Accepted: April 16, 2018	Online Published: April 28, 2018
doi:10.5539/mas.v12n5p89	URL: https://doi.org/10.5539/mas	.v12n5p89

Abstract

This research aimed 1) to segment the target market of New-Age Elderly tourists, and 2) to define the data source that each group of New-Age Elderly tourists used for their trip planning by collecting data from 420 samples of Thai tourists aged between 60-80 years old in tourist attractions in cities. It was found from the findings that we can group New-Age Elderly tourists into five segments. Having analyzed the relationship between sources of tourism information and five segments of New-Age Elderly tourists the results can be summarized as follows. The first segment ('Worried') stressed making decisions and only felt confident after reading and having seen pictures. This group then stressed using tourism sources from leaflets or brochures. The second segment ('Accepting aging'), saw it as a fact of life that no one can control aging and that it should be accepted. They stressed using friends and relatives as sources of tourism information. The third segment ('Firmly with changes') dared to face up to new things and considered life as an adventure. Plus, they sought out new and unseen tourism destinations that seemed exciting and wild so, they stressed using tourism data sources from tourism magazines and TV programs. The fourth segment ('Young at hearth') were those with life satisfaction, who loved having fun and always felt young. They wanted to travel and stressed using data sources directly from tour agencies. The fifth segment ('Consciousness') were conscious in their actions and did not dwell on the past. This segment stressed using information sources from articles in travel magazines, newspapers, or journals. This study provides more understanding about the concept of the New-Age Elderly that makes a contribution to both research in the area of the New-Age Elderly and for practitioners in the tourism industry.

Keyword: New-Age Elderly, information sources for travel, correspondence analysis

1. Introduction

If considering the definition that elderly society is a society that has a population of which more than 10% is aged older than 60 years old or 7% which is over 65 years old 7% Thailand has been an aging society since 2005 because at that time Thailand had 10.4% of its population aged above 60 years old and it was expected that in the next 20 years it will completely become an Aged Society (Chompoonuch, 2013). In 2015, aging tourists generated an income for Thailand of 195,891 million baht or 8.66% of the total tourism revenue. This was received from 3,628,758 foreigners that generated 183,869 million baht and from 4,810,464 Thai tourists that generated about 12,022 million baht (Online Manager, 2017).

The fast growth of elderly tourist numbers is very interesting for the tourism industry to understand the decisions of elderly tourists .Wahab, Crampon & Rothfield (1976) noticed that elderly tourists seem to participate in information seeking to reduce uncertainty when purchasing. Fodness (1994) defined that tourists use various kinds and numbers of information sources to plan for holidays, and the most important sources they use to plan for their travel are family and past experiences (Capella & Greco, 1987), friends, tourism units, and media) Mcguire, Francis, Uysal, Muzaffer, Mcdonald & Cary, 1988). This conforms to the study by Blazey (1992) who found that the sources of information that aging travelers popularly use for their trip planning are maps, word of mouth communication, pamphlets/brochures, travel agents, American Automobile Association (AAA) travel guidebooks, State Tourism Offices, magazine articles and newspaper advertisements. Moreover, from past research, it was found that brochures are still the best sources to distribute information to tourists (Bieger & Laesser, 2000; Victor, Middleton, Fyall & Morgan, 2009; Na-Nan & Chalermthanakij, 2012; Na-Nan, 2016). Andereck (2005) found that

brochures can stimulate interest from the first time of travel and to the next visit. Besides, electronic media, especially the fast expansion of the internet, can promote tourism. Buhalis (2003) found that the internet is THE crucial source of information when looking for destinations among travelers.

The research on information sources that tourists used may have more value in practice in the destination management, marketing, and promotion when stressing specific groups of tourists. Thus, market segmentation is usually applied to get better in-depth information on the use of data sources. It was found by Victor, Alan, Michael & Ashok (2009) that market segmentation will help define the goal with the best effectiveness for marketing activities. Market segmentation is part of a large different market to small business that can be efficiently and effectively reached via products and services that serve the different needs of individuals (Kotler, John, Bowen, James & Makens, 2009; Na-Nan, Sanamthong & Sulong, 2016) Market segmentation for tourism helps define the particular characteristics of the tourists that can create understanding about consumers' differences and become the basis for suitable marketing strategic design and successful marketing strategies for a tourism destination.

This research aims to segment the Thai aging tourists for domestic travel using the approach of A Posteriori Segmentation from the information retrieved from questions developed using the NAVO scale (Mathur et al., 1998). Then, it will identify information sources of each segment of elderly tourist using Quantitative Research Methodology, New-Age Elderly tourists' segment information and information sources that are categorized using Correspondence analysis to study the relationship between domestic tourism information and the group of New-Age Elderly tourists.

2. Literature Review

2.1 Tourist Market Segmentation Concept

Tourist market segmentation means to divide the tourist segment and has gained lot of interest among the academicians of tourism marketing (Bieger & Laesser, 2002; Koc & Altinay, 2007) because tourists' needs are diverse and a different response to their needs in the same form was impossible (Pesonen, 2012; Na-Nan, Chaiprasit & Pukeree, 2017). Many tourism academicians defined the meaning of market segmentation as the technique to be used when grouping different markets into segments (Mok & Iverson, 2002; Park & Yoon, 2009). Tourism market segmentation is used in marketing strategies to understand the relationship between tourists and destinations (Bloom, 2004). Moreover, tourist segmentation is also used to help organizations to generate the highest financial return (Perdue, 1996), since if any destinations aim at all tourists without segmentation, it could lead to the loss of unit's resources, being unable to make tourists satisfied and having the chance to make mistakes in marketing strategy (Koc & Altinay, 2007; Bloom, 2004).

2.2 Aging Tourist Segmentation Concept Using NAVO Scale

The concept of subjective age was first presented by Tuckman and Lorge (1953) in their study of the elderly and then developed into a set of non-chronological age variables (Barak & Gould 1985). González et al. (2009) used questions based on chronological age as the criteria for elderly tourist segmentation. This is because in the psychological study, many of the elderly showed that the older group tended to see themselves as younger than their real age and explains the subjective age in the definition of Cognitive age. For example, in the study by Mathur et al. (1998), it was found that the cognitive ages of all groups were less than their chronological ages. Besides, it was also found that there are differences between chronological age and cognitive age when comparing the New-Age Elderly to the Traditional elderly. For almost 12 years Shiffman and Sherman (1991) defined the word New-Age Elderly to be used to explain the sub-segment that differs from the traditional elderly. The New-Age Elderly segment will have the values, attitudes and behaviors that differ from the traditional elderly. They love to travel like those in the younger age group and join in adventure tourism activities such as rafting, etc. Mathur et al. (1998) has studied the New-Age Elderly by using 257 samples of family members with a Bachelor degree or higher in Marketing, aged over 55 years old. It was found from the result of study that the average age of the New-Age Elderly was 63.3 years old by cognitive age which was less than their chronological age by 12 years. It was also found that to set the direction for New-Age Elderly was different from the Traditional elderly. The New-Age Elderly were consumers with the power to control their own lives and were satisfied with their health, social life, learning new things and were happy with work and actions more than the Traditional Elderly (Salitta, Khahan and Nattapol, 2017). The tool that Mathur et al. used in the research was the so called NAVO scale in which NAVO was the abbreviation of New-Age Value Orientation. The NAVO scale is a set of characteristics used to segment the New-Age Elderly from the Traditional elderly. For example, in the research of Sherman, Elaine, Schiffman, and Mathur in 2001 on 'The Influence of Gender on the New-Age Elderly's Consumption Orientation', one of the study objectives was to evaluate the confidence value and validity of the NAVO scale. The results showed that, this scale had high levels of confidence value and validity. The NAVO scale is the tool that was designed to define the New-Age Elderly and has high benefits in the aging tourist segmentation.

2.3 Concept Related to the Key Tourism Information Sources that the Tourists Used in Trip Planning

Mansfield (1992) divided the information sources for travel into two main categories as follows: 1) The official or private sources of communication information such as via travel agencies' brochures, travel manuals, and maps, and 2) The unofficial sources of contact or interpersonal communication between a person and their friends and relatives. The study by Ngamsom (2001) found that the main sources of travel information for foreign tourists to plan their trip to Thailand was information from travel agencies, family recommendations, books, travel programs, friends, the internet, brochures, printed media and advertisements from TV and radio respectively. The study by Suh (2001) found that foreign tourists (Japanese, American and European) mostly decided to travel to Seoul, South Korea because they were introduced by friends or self-experience.

2.4 Concept Related to the Key Tourism Information Source that Aging Tourists Used in Trip Planning

The research by Phillips and Sterntha (1997) showed that the elderly used a variety of media to compensate for the reduction in their interpersonal relations. It was found that older consumers relied on mass information more than younger consumers. They relied on printed media such as newspapers rather than television. Research by Capella and Greco (1998) studied a sample group aged over 60 years old in the middle part of New York and found that the most important sources of information that helped elderly to set up their holiday destinations are first, family, second, from past experiences, friends, magazines, TV, consumer publications, direct mail, point of purchase displays, neighbors, radio, and tour agents respectively. The study by Fall and Knutson (2001) found that the top beneficial sources of information for aging tourists are continual suggestions from friends and relatives, second, from TV travel programs, brochure/direct mail, government tourism media, articles in newspapers, articles in magazines, car clubs, internet websites, travel agents, TV advertisements, newspaper advertisements, product exhibitions, magazine advertisements, radio spots and CD-Roms respectively. The research by Kim et al.) 2007 (aimed to check the relationship between the travel motivation and the information searching behavior of the tourists in three segments. It was found that, 1) the tourists who sought knowledge tended to consult with official data sources such as the government's Office of travel information before traveling, 2) The escape group such as those looking to avoid the cold weather and other routines to rest and relax in other amusing activities, thus, this tourist group had few chances to seek out travel information and, 3) The traveler who is looking for relatives, who will spend time with friends and family, had no interested in finding out travel information. The study by Patterson, Pegg and Litster, (2011) on the sources of information that the elderly used to decide for their traveling and destinations found that they paid attention to information sources, word of mouth and personal experiences and second, by brochures, magazines and TV.

2.5 Correspondence Analysis

Correspondence analysis or so called CA is the technique used in categorical data analysis (Benzecri, 1992) in the marketing and ecology branches. The researcher can perform CA by using the ready-made program, Statistical Package for the Social Sciences (SPSS).

CA was formed about 50 years ago and was referred by different names such as dual scaling, method of reciprocal averages and categorical discriminant analysis (Hoffman, & Franke, 1986) These names came from the idea that CA was used to analyze many questions and always got different names when the questions changed. These names may result from any versions of CA that were simultaneously being developed in various countries (Abdi & Williams, 2010)

Jean-Paul Benzecri, the French analyst, is the key man who initiated the use of CA in the 1970s to make it very popular in France (Greenacre, 2007). CA was then distributed to other countries, such as Japan and England (Clausen, 1988), while CA was published in English and added into the SPSS program in 1980 (Clausen, 1988). Today, CA is popularly used in some Social Science fields, for example, Marketing and Ecology (Hoffman & Franke, 1986; Ter Braak, 1985).

3. Research Methodology

Populations in this research are Thai tourists aged between 60-80 years old from the four provinces of Bangkok, Nakhon Ratchasima, and Chiang Mai. The group of 420 samples were randomized via the approach of Judgmental Sample to distribute them according to the ratio of Thai tourists in the four provinces with those aged over 60 years old (TGRI, 2014). The tool used in data collection was the questionnaire which was divided into two parts. The first part was a set of 8 questions related to tourism sources used in planning, allowing the respondents to choose more than one item from the check list. The second part was a set of 28 questions related to values defining the elderly group with reference to the NAVO scale in the study of Mathur (1998) in the form of a 5-point Likert Scale.

For this study, the aim was to conduct Thai New-Age Elderly tourist market segmentation for domestic travel using the A Posteriori Segmentation approach with three procedures from 1) information survey, 2) data analysis, and 3) defining the segment.

In the first step, an information survey with the elderly sample group using a questionnaire that consists of questions developed from the NAVO scale. The second step was transferring the information from the first step to conduct Factor Analysis, and the final step was to use Cluster Analysis to define the Thai New-Age Elderly tourist market segment. The New-Age Elderly tourist segment analysis results are used to find the relationship with the main sources of tourism information that the elderly used for trip planning. This is to analyze two-way contingency or cross tabulation and bring the frequency in the cross tabulation to form the variables of segment and data sources segment, and then analyze by Correspondence analysis.

4. Research Results

4.1 Analysis of New-Age Elderly Tourists Values Perception Factor

The researcher brought the data of value perception in New-Age Elderly tourists from 420 samples that were assessed on their perception by 35 questions referring to the NAVO scale in the research by Mathur (1998) to analyze the factors of main components analysis techniques detailed processes as follows.

Using 28 questions to analyze the factor a third time, it was found that KMO=0.828 Bartlett's Test (Chi-square = 3241.883, df = 378, Sig=0.000) Communalities values were between .417-.760 which was more than 0.4 from all 28 questions. There were 7 Eigenvalues with a value of more than 1 (5.812, 2.965, 1.798, 1.482, 1.210, 1.115 and 1.076 respectively) that the 28 questions measured on 7 factors. Factors 1-7 can explain the deviation of the variable group with percentages of 20.758, 10.590, 6.422, 5.293, 4.320, 3.980 and 3.844 respectively. It was also found that in all factors, there are more than 0.4 factor loading in all 28 questions and when considering the coefficient confidence Alpha, it was between .486 - .756 (as in Table A in the appendix). So, it can be concluded that 28 question items are able to separate the qualification quite well; the researcher then used seven components of the 28 questions as factors to analyze further segmentation.

From factor analysis on 7 factors which were to be used as the factors in elderly tourist segmentation, the researcher set the name of 7 factors considering the questions with the highest factor loading in each factor. The first factor has 6 items and it was called "Capability to do things". The second factor has 5 items and called "Lack of confidence". The third factor has 6 items and called "Decisiveness as consumers". The fourth factor was called "Adventure". The fifth factor has 3 items and called "Life satisfaction". The sixth factor has two items and was called "Shopping enjoyment" and the seventh factor has two items and called "Acceptance of aging".

4.2 Group Analysis for New-Age Elderly Tourists Market Segmentation

In the next step, the researcher used the K-mean Cluster Analysis approach to categorize the group of elderly into sub-segments using 7 factors from the factor analysis (as in Table B in the appendix) where the analysis results divided the elderly int o five segments as follows.

Segment 1 has the fourth highest number of samples, at 80 samples or 19.05 percent, consisting of the second factor, "Lack of confidence", so this group was called "Worried".

Segment 2 has the fewest number of samples, at 67 samples or 15.95 percent, consisting of the seventh factor, "Acceptance of Aging", and this group was called "Accept aging".

Segment 3 has the highest number of samples, 93 samples or 22.14 percent, consisting of the fourth factor and it was called "Adventure" with this group named as "Firmly with change".

Segment 4 ranked as the second largest sample group with 91 samples or 21.67 percent consisting of the fifth factor called "Life satisfaction" with this group named as "Young at heart".

Segment 5 ranked as the third largest sample group with 89 samples, or 21.19 percent, consisting of the third factor "Decisiveness as consumers" and was named as "Consciousness".

4.3 The Analysis of Travel Information Sources that New-Age Elderly Tourists Used in Their Travel Planning

Table 1. Frequency and percentage of travel information sources that New-Age Elderly tourists used in their travel planning

Information sources for travel planning	Frequency	Percentage
1. Travel agecies	219	20.0
2. Friends and family	272	24.8
3. Tourism TV programs	122	11.1
4. TV, radio, newspaper or magazine advertisement	110	10.0
5. Travel books	92	8.4
6. Tourism articles in magazines, newspapers, and journals	74	6.8
7. Leaflets and brochures	82	7.5
8. Websites and fan pages relates to tourism	125	11.4
Total	1096	100.0

4.4 Analysis of the Relationship Between the Information of Tourism Sources that New-Age Elderly Tourists used in their Travel Planning and the Group of New-Age Elderly Tourists in Five Segments

4.4.1 The analysis of the relationship between the information of tourism sources that New-Age Elderly tourists used in their travel planning and five segments of New-Age Elderly tourists via two-way contingency or cross tabulation

Table 2. Number of travel information sources that New-Age Elderly tourists used in their travel planning categorized by five segments of New-Age Elderly tourists

Information sources for travel planning	Segment						
	1	2	3	4	5		
Travel agency	41	33	43	52	50		
Friends and family	52	51	57	46	66		
Tourism TV programs	24	18	27	24	29		
TV, radio, newspaper or magazine advertisements	15	16	26	22	31		
Travel books	17	14	20	17	24		
Tourism articles in magazines, newspapers, and journals	15	7	16	13	23		
Leaflets and brochures	20	11	14	15	22		
Websites and Fan Pages related to tourism	25	11	23	21	45		

Pearson Chi-Square=22.87, df=28, Sig=.739

4.4.2 The analysis on the relationship between the tourism source information the New-Age Elderly tourists used in their trip planning and five segments of New-Age Elderly tourists via Correspondence analysis.

Table 3. Conclusion of Correspondence analysis to analyze the relationship between the tourism source information the New-Age Elderly tourists used in their trip planning and five segments of New-Age Elderly tourists

				Proportion of Inertia Confidence Sin				gular Value	
					Accounted			Correlation	
Dimension	Singular Value	Inertia	Chi Square	Sig.	for	Cumulative	Standard Deviation	2	
1	.112	.013	•		.603	.603	.029	.037	
2	.063	.004			.191	.794	.031		
3	.061	.004			.177	.970			
4	.025	.001			.030	1.000			
Total		.021	22.871	.739ª	1.000	1.000			

a. 28 degrees of freedom

From Table 3, it can be explained that sources of tourism information are associated with the five segments of New-Age Elderly tourists at the statistical significance level of 0.739 and with the following results:

1. Proportion of inertia accounted for a value of Dimension 1 is 0.603 which means that Dimension 1 can explain the relationship of the variables for 60.3 percent.

2. Proportion of inertia accounted for a value of Dimension 2 is 0.191 which means that Dimension 2 can explain the relationship of the variables for 19.1 percent.

3. Proportion of the cumulative inertia value of Dimension 2 is 0.794 which means if there is Dimension 2 present it will be able to explain the relationship of variables for 79.4 percent.

Using dimension considerations for the proportion of cumulative inertia it was found that the proportion of cumulative inertia value of Dimension 2 can explain the relationship of variables for 79.4 percent which is an increase from Dimension 1 of 19.1 percent. Thus, it is considered enough for choosing the suitable dimension. Therefore, the researcher selected Dimension 2 to explain the correspondence mapping and the relationship of variables.

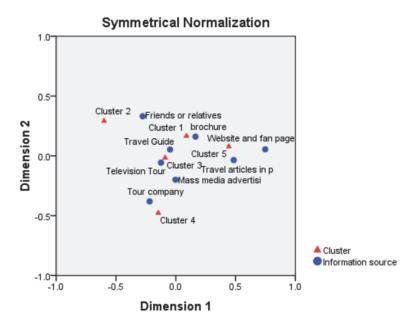


Figure 1. Correspondence mapping shows the relationship between the different levels of tourism information sources factors under the segments of New-Age Elderly tourists: tourism information sources variables and New-Age Elderly tourist segment variables

According to Figure 1, the relationship between the levels of variables in any levels of tourism information sources variables under the New-Age Elderly tourist segment's tourism information sources variable and New-Age Elderly tourist segment variable in the form of a 2-dimensional graph shows that:

1. The relationship of tourism information sources is, for example, the relationship between websites and fan pages related to tourism and travel articles in magazines/newspapers/radio/journals, the relationship between travel book and tourism TV programs, the relationship between TV/radio/newspaper/magazine advertisements and travel agencies, and the relationship between friends or family and brochures or leaflets.

2. The relationship of New-Age Elderly tourist segment between segment 1 (Worried), segment 3 (Firmly with changes) and segment 5 (Consciousness) relate to each other more than the other groups.

3. New-Age Elderly tourists in Segment 1 (Worried) stresses using tourism information sources from leaflets or brochures, Segment 2 (Acceptance of aging) stresses using tourism information sources from friends and family. Segment 3 (Firmly with changes) stresses using tourism information sources from travel books and tourism TV programs. Segment 4 (Young at heart) stresses using tourism information sources from travel agencies, and New-Age Elderly tourists in Segment 5 (Consciousness) stresses using tourism information sources from travel articles from magazines/newspapers/journals.

5. Results Discussion

From the results, it was found that top-ranked tourism information sources that New-Age Elderly tourists used in their travel planning are friends and family. Second are travel agencies which conformed to the research by Ngamsom (2001) who found that the key tourism information sources foreigners used to plan for trips to Thailand were information from travel agencies and suggestions from friends and family. This also conformed to the study of Suh (2001) who found that most foreign tourists)Japanese, American, and European (decided to travel to Seoul, South Korea, after receiving information from friends' suggestions. This conformed to the research of Capella and Greco (1989) who found that the most important sources of tourism information that helped the elderly to decide on their holiday destination is their family. This was the same as the study of Fall and Knutson (2001) who found that the most imformation for the elderly was word of mouth from friends and family which was aligned with the study of Patterson (2007) who studied the information sources used by the elderly to decide on their travel destinations in which they seemed pay attention to word of mouth and personal experiences.

From the analysis and segmentation of Thai New-Age Elderly tourists in domestic travel, there are five segments while each has a main characteristic that stresses the use of travel information sources to plan for domestic trips as follows.

Segment 1 (Worried) has the fourth large rank with 80 samples, or 19.05 percent, consisting of factor 2 from the 7 factors 'Lack of confidence', having decision problems, worries about wrong decision making, lack of confidence in making decisions and will be confident only having seen pictures or having read information. This segment tends to rely on brochures and leaflets as their tourism information sources.

Segment 2 (Acceptance of aging) has the fewest samples at 67 persons, or 15.95 percent, consisting of the seventh factor from the 7 factors which is 'Acceptance of aging', accepting older age and uncontrollable aging, acceptance of aging and need to travel when friends and family suggest or invite. This segment stressed friends and family as their tourism information sources.

Segment 3 (Firmly with changes) is the largest segment with 93 samples, or 22.14 percent, consisting of factor 4 from the 7 which is 'Adventure', buying never used before products, initiating new things, considering life as an adventure then seeking out strange destinations, that are exciting and wild. This segment relied on travel books and tourism TV programs as their tourism information sources.

Segment 4 (Young at heart) ranked as the second largest with 91 samples, or 21.67 percent, consisting of fifth factor of the 7 which is 'Life satisfaction', the older you are the better the fun, never considering themselves old, and love to travel. This segment stresses using travel agencies as their direct tourism information sources.

Segment 5 (Consciousness) ranked as the third largest with 89 samples, or 21.19 percent, consisting of the third factor which is 'Decisiveness as consumers', do not regret one's past life, do all you can to be happy, know all about things you are doing, and thus, seeking a variety of tourism activities to compare before making a decision. This segment stresses travel articles from magazines, newspapers and journals as their tourism information source.

6. Recommendations

Correspondence analysis can help to reduce the complexity of information from large tables to clearly present the variables more easily and to keep all the valuable information in the data set. These are precious thus it is suggested to further study the new-age tourist segmentation for the benefits of planning for tourism marketing as follows:

1. Research the use of Correspondence analysis in the study of the relationship between domestic tourism destinations and the New-Age Elderly tourist segment.

2. Research the use of Correspondence analysis in the study of the relationship between ecology tourism (ecotourism) and the New-Age Elderly tourist segment.

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Appendix

Table A The factor analysis of New Age Elderly

Questions (from NAVO scales)	Factor	Cronbach's	Eigenvalues	% of	Communality
	Loding	Alpha		Variance	
1.Capability to do things					
10. I have more control over what I do and	.554	756.	5.812	20.758	.450
don't do than at any other point in my life.					
11. If I really wanted to, I could pick myself	.546				.417
up and go around the world within two					
weeks.					
12. I have more control over my life now than	.732				.597
I have ever had.					
13. I pretty much can decide what I want to do,	.664				.533
and then do it.					

Table A. The factor analysis of New Age Elderly (Cont.)

Questions (from NAVO scales)	Factor Loding	Cronbach's Alpha	Eigenvalues	% Variance	of Communali
1.Capability to do things		•			
14. As I've gotten older, I actually have more opportunities to do what I want to do.	.576				.485
17. Even under pressure, I make good decisions regarding what to buy.	.534				.478
2.Lack of Confident					
4. Being older has proven to be a barrier for me.	.490	730.	2.965	10.590	.532
20. I tend to be unsure of myself when it comes to knowing what to buy.	.721				.545
24. I'm a little too uncertain of myself when making a purchasing decision.	.817				.712
25. I worry that I might make the wrong choice when buying things at the store.	.761				.637
30. Things don't interest me as much as they use to.	.608				.516
3.Decisiveness as consumers					
19. When it comes to making the right choice at a store, I'm confident that I know what I'm doing.	.467	687.	1.798	6.422	.581
26. As a consumer, I know what I'm doing.	.537				.536
28. I find it easy to make up my mind, when it comes to deciding what to do.	.501				.546
31. I have no regrets, as to how I lived my life so far.	.676				.561
33. I am fortunate that I have a really good life.	.487				.558
35. I have all the things I really need to enjoy life.	.566				.479
4. Adventure					
8. I see life as an adventure, and I like the thought of doing new and different thing each	.616	.703	1.482	5.293	.516
day.					
9. I'm frequently doing new things, that I haven't done before.	.639				.570
10. I have more control over what I do and don't do than at any other point in my life.	.514				.563
27. I will buy unfamiliar products, if I feel they might be useful to be.	.664				.577
5.Life satisfaction					
1. You are really as young as you think you are.	.626	.564	1.210	4.320	.480
5. Being older has proven to be more fun than I had expected.	.695				.609
6. Unknown is for other people, I take comfort in kwowing what is coming next.	.535				.527
6.Shopping Enjoyment					
21. I'm a better shopper than most other people I know.	.443	.507	1.115	3.980	.474
22. I enjoy shopping and buying things	.734				.613
7.Acceptance of Ageing					
3. Let's face it, try as hard as you can, You can't control your age.	.852	.486	1.076	3.844	.760
19. When it comes to making the right choice at a store, I'm confident that I know what I'm doing.	.430				.606

Table B. The 5 clusters of New Age Elderly	
	Cluster Number o

	_	Cluster Number of Case					One-way ANOVA		
	1	2	3	4	5	F	Sig.		
1. Capability to do things	.798	034	272	.501	467	26.286	.000		
2. Lack of Confident	1.095	.173	365	-1.244	.393	99.764	.000		
3. Decisiveness as consumers	.159	105	686	.186	.571	27.613	.000		
4. Adventure	.683	225	.070	.112	344	12.632	.000		
5. Life Enjoyment	.511	-1.209	143	.683	.421	88.180	.000		
6. Shopping Enjoyment	.445	.203	173	.328	455	13.104	.000		
7. Acceptance of Ageing	342	.669	955	.627	.207	71.846	.000		

*p<.05

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