

Application of Life Style Model to Analyze the Market of Department Stores

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ABSTRACT

This paper is focus on satisfaction of consumer behaviors in different department stores and using life style model to analyze their market difference. Customers were randomly selected from six different large department stores in Kaohsiung City during anniversary periods. The results were shown that total amount spent was below NT\$3000 and most of them were for apparel. Anniversary sales, promotion, recommendation from families and friends are three mains reasons to shop in a department store. The life styles were defined in six types and they are confidence, unique, self-oriented, well budgeted, limited budgeted and simple. There are five different life style groups after K-mean analysis. There are busy-confidence group, rational discrete group, urban-city group, easy-relax group, and fashion-shopping group. These five life style groups have significant differences in term of shopping behavior, individual social economic background and willingness for re-purchasing.

Keywords: Lifestyle; Department Store; Consumer Behavior

1. Introduction

Since Uon Malshei Department Store was founded in Paris in 1852, the department store has been playing as showcase of economy in the modern city. By providing comfortable shopping environment, popular goods and premium services, the department store is able to appeal more customers [1]. As consumer's demand for shopping and spending changed, either department stores or mega discount stores are directed to have huge shopping spaces (over thousands of square feet), diversity in goods (daily necessities, apparel, entertainment products, fitness, diet-related merchandise, etc.) and comfortable shopping space which has been designed to meet consumer's expectations. In recent years, in order to maintain the stable performance, department stores have launched a variety of promotional projects to encourage consumer's willingness to purchase which results in increase in sales and gross profits. The marketing mix could be any combinations of following marketing strategies: sales of off-season products, duration of promotions, combined goods, free gifts for accumulating sales points, merchandise discounts, cash back and joint activities with credit card company; Anniversary sales of the department stores which last longer and carry the various marketing tactics, and most of department stores have their anniversary sales during the end of the year so the competition is

keen and more than usual. To date, with fierce competition in this industry, if company wants to make profit it should be able to develop all kinds of marketing programs to attract customers in each different segment groups. One of important issues is that the department stores need to have a long-term strategy to maintain the flow of customers by grasping opportunities through anniversary sales or promotional programs to increase customer's satisfaction and loyalty. There are four purposes of study: 1) Will different consumer's individual socio-economic background results in different consumer's consumption behavior; 2) Has any significant difference exists between lifestyle and consumer's characteristics; 3) Has any significant difference exists between customer's characteristics and satisfaction; 4) By using different lifestyle as a factor to develop market segmentation of department stores and further differentiate different type of consumer.

2. Literature Review

2.1. Development of Department Store

In the early stage of development in Taiwan, the department store only played the role of selling imported high-end merchandises. "Department Store", the meaning of the word is to gather a huge volume of various merchandises and then to further divide them into groups by

product's characteristics in order for them to be sold in each individual department which has been managed and controlled under the same management company. In this way, it will be easier to satisfy different types of consumer and provide the convenience of "One-step shopping" [2,3]. Department stores now have brings in four new principals in its management: 1) Lower gross profit in order to speed up the turnover of merchandises; 2) Price of merchandises will be showed clearly; 3) Welcome customer to shop at will and feel free of pressure; 4) Established the policy and the system to receive comments and feedbacks from customers [4]. Liu, 2004 pointed out Western countries have been taking the lead of fashion industry and also bring in the new ideas to leisure and shopping. The first department store in Taiwan, Cheng-Shin Department Store, was opened by a Shaighai businessman in 1949 on Ren-Ai Road, the product that it carried at that tie were only the daily necessities not to mention the concept of product design and development. A research by [5-7] mentioned that different social-economic background will result in various demand in service level of department store and consumption characteristics.

2.2. Sales Promotion Theory

Marketing master [8] believed promotion is a short-term stimulation with a combination of all kinds of marketing elements; [8] once mentioned that promotion activities are not only to call customer' attentions but also salesmen's and sales agents', the purpose is to encourage their efforts in closing a deal ad to create immediate purchase intention [9]. Therefore, definition of sales promotion has enlarged and in order to maximize profits during limited time, more people involved with more efforts and services were added in. In general, economy-oriented promotion will be easier to attract rational customers and psychological promotion will be appropriated for perceptual customers [10]. In order to run a successful promotion, it is not enough to only encourage and persuade purchase from customers but also needs to put efforts to encourage salesman to sell. Chang *et al.*, 2006 also mentioned that when company determines which promotion method to use, they need to have theme of promotion, product level, product classification in order to run a successful promotion. This research is to study customer's shopping behaviors; the purpose of this research is to find an appropriate promotion for each different segment by adding extra values toward the purchase. Our study is focus on particular group of customers who will be incentivized or initiated with different kind of promotions.

2.3. Theory of Consumption Behavior

Wilkie [11] defined consumption behavior as the process

and activities people engaged in searching, selecting, purchasing, using, evaluating, and disposing of products and services so as to satisfy their needs and desires. Kotler and Armstrong [12] thought that consumption behavior occurred when consumer is in the process of making purchase decisions which has been stimulated by marketing and environment elements [13]. Consumption behavior is sophisticated framework which contains aspects in psychology, society, economy and marketing. Consumption behavior theories now are mainly in purchasing model of decision-making process. Presently, there are lots of researches subjected in consumption behavior and EKB model is the one that has been used frequently.

2.4. Market Segmentation Theory

In order to reach the highest level of customer satisfaction we need to have market segmented and products should custom-made [14]. By dividing the market into groups will help company to analyze the needs of their target customers [15]. Thus the study in market segmentation and related subjects are really important for company to use their resources more effectively and to increase competitive capacity [16]. The term marketing segmentation was first introduced in marketing by Smith in 1956. Kotler [8] thought rather than offer same marketing mix to different customers, market segmentation makes it possible to tailor marketing mix for specific targeted customers, thus better satisfying customer's needs. The identified market segments are summarized by profiles, often given a descriptive name. From these profiles, the attractiveness of each segment can be evaluated and a target market will be selected and have their product positioned [17].

Customer's benefits seeking is one of the specific characteristics of customers, but Harley [18] also considered this benefits seeking factor as a variable. Haley also thought that the benefits segmentation will be more effective in evaluating customer's actual purchase behaviors; in 1968, Haley was successfully segmented market by testified the benefits segmentation [20,21]. Although bases of segmentation are various, however, the factors that the segmented market used could be overlap. Zeng [17] used consumer lifestyle as a factor in analyzing the market segmentation of when shopping on internet. In 1998 Kotler mentioned that "In fact, the variable of segmentation can be used one factor alone or combine with other factors [21]. In 2005, Kotler also pointed out that an effective market segmentation should have the following criteria: Measurable, Relevant, Accessible, Distinguishable and Feasible.

2.5. Lifestyle Theory

The lifestyle concept is mainly originated from psycho-

logy and sociology and the basis of foundation is from Theory of Personal Constructs of George Kelly [22], Kelly explained that everyone in his mind have constructed about the world as they experienced it. Everyone has his unique cognitive model which will be consistent modified with the change of outside environment and build up its special lifestyle. Our study focus on customers of department stores in Kaohsiung area, the result is not obvious by analyzing the variables of geographical segmentation, the demographic factor and factor of consumption behavior are both showed in this study. As to the value v.s. lifestyle, it's approachable and accessible have more benefits in developing marketing strategies. Therefore, in this study the lifestyle has become the factor in market segmentation.

3. Study Design

3.1. Research Framework and Hypothesis

The following chart has demonstrated how AIO lifestyle, consumer characteristics, satisfaction and willingness has been related to each other and are also under the influence of socio-economic background of individual. Concluded from the above mentioned observations we are able to develop the market segmentation of anniversary activities in department stores. The structure of research has showed as **Figure 1**.

The structure of research developed accordingly on the previously mentioned references and based on the structure, 11 hypotheses had been formed and described respectively as follows: [H1] Different consumption characteristics results from different socio-economic background; [H2] Different individual socio-economic background results in different AIO lifestyle; [H3] Different individual socio-economic background results in different level of satisfaction; [H4] Different individual consumption characteristics results in different AIO lifestyle; [H5] Different individual consumption characteristics results in different level of satisfaction; [H6] Different individual socio-economic background results in different willingness of repurchase; [H7] Different level of satisfaction results in different willingness of repurchase; [H8] Different segmented market results in different individual consumption characteristics, [H9] Different segmented market results in different individual satisfaction of consumption; [H10] Different segmented market results in different individual socio-economic background; [H11] Different segmented market results in different willingness of repurchase.

3.2. Research Variables and Questionnaire Design

This research is to investigate consumer's behavior of

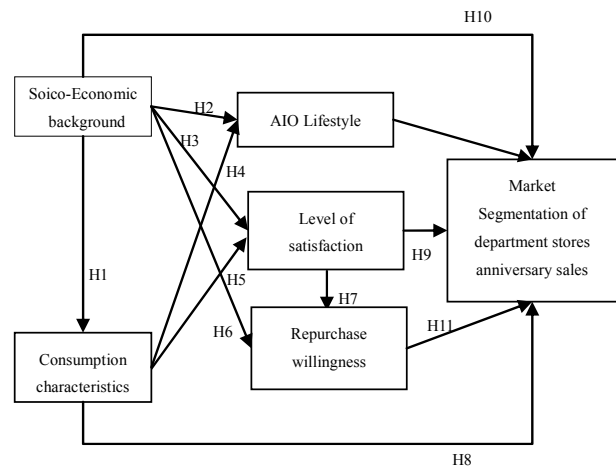


Figure 1. The structure of research.

department store in Kaohsiung, because data is not easy to gather, therefore, the survey was designed according to the study framework and has been sealed. The survey has five sections: 1) Variables of consumption decision making of customer in department stores: this section consists with fours parts, consumer motivation, information sources, consumption and the assessment criteria, twelve questionnaires were designed based on those variables; 2) Lifestyle of Consumer: this section was designed according to AIO scale-gram, total 21 questions were designed to discuss the lifestyle of consumer. Grading adopted Kurt Lee (Likert) five-point scales, divided into “Strongly disagree”, “Disagree”, “Normal”, “Agree”, “Strongly agree”; 3) Consumer satisfaction toward department stores: to measure and evaluate post-purchase during anniversary sales; the measurement has three dimensions of geographic, hardware and software, totaled 11 questions. Besides, another option, “not use”, was added in order for the people to choice when they did not have chance to use the facility of the department stores; 4) Overall satisfaction and willingness of repurchase; 5) Demographic data (individual sociocultural background): this section includes, gender, age, education level, marriage status, with or without child, occupation, monthly income and residence, total 8 questions.

3.3. Sampling Design

The sample customers were those who has finished shopping and about to leave. The method of sampling is convenience sampling and the sample size estimation method is based on the research of Rong [23], Huang [24] in determining effective number of sample (N is the effective number of samples taken, P is the probability value, α = accurate value for the standardized normal value, ϵ is permissible sampling error value), under 95% confidence interval the following formula was used:

$$N = P(1 - P) \left[\frac{Z_{(\alpha/2)}}{\varepsilon} \right]^2$$

Because the (estimated maternal ratio) probability P is unknown and unpredictable, assume conservative estimate value is 0.5 ($\varepsilon < 0.05$) and requires 95% confidence level and $\varepsilon < 0.05$. So suppose $\varepsilon = 0.05$, $\alpha = (1 - 0.95) = 0.05$, that $\alpha/2 = 0.025$, (by looking-up table), so we learned that t 384 valid survey out of 415 survey should be collected at least. There were 415 copies in this sample and sampling time was from October 1 to December 31. Response rate was 100%, net of incomplete or duplicate respondents of which 33 were out, valid survey was 382, and the effective rate of respondent sampling was 92.04%.

4. Analysis

In this study, descriptive statistics, chi-square test, factor analysis, cluster analysis, t-test and ANOVA statistical analysis has been used to analyze the difference of the respondents' consumption characteristics, lifestyle and satisfaction with different socio-economic backgrounds, and use those variables to segment markets. From the assessment of the measurement's reliability, we learned that the lifestyle of department store consumers in reliability analysis has Alpha = 0.7514; the reliability analysis of consumer's level of satisfaction toward department stores has Alpha = 0.744; the reliability analysis of consumer's overall shopping experience has Alpha = 0.767, which are all highly related.

4.1. Consumer Basic Data Analysis

Use descriptive statistics to analyze the variables such as socio-background, consumer characteristics, customer lifestyle and level of satisfaction, overall satisfaction and willingness of repurchase. Overall, the female respondents take the majority, age from 20 to 39, level of education are more at 5-year professional school or university, most of them are students or serve in the service industry and half of them are single, mostly without child and has monthly income from NT\$10,000 to NT\$30,000. Overall, most respondents are companies to shoppers or shop alone, and shopped for apparel, and spend about NT\$3000. The main transportation is car and scooter accounted for 77%. The average traveling time is 20 - 40 minutes. The main purpose to come in this particular department store is if they have promotions or not; most respondents come with friends or families. The majority numbers in group is two. Most respondents obtain promotional information from their friends and family and length of shopping time is about 1 - 3 hours. However, the free shuttle has not being used that much because the

station is far away from department store or has to wait for a long time. The main reason to shop at particular department store is because the discount offered. In this survey we learned, most respondents had grade overall satisfaction in high score and with high willingness of repurchase. By analyzing observations, our targeted customers will be those who come in to shop in group of two or more and obtained promotional information from friends and family and management has to enhance customer's satisfaction in order to have high willingness of repurchase. By means of effects on periodic advertisement on billboard or DM, department stores release information on various products and how and what promotion is running now.

The main reason to evaluate respondents' satisfaction toward department store's anniversary events is to better understand the level of satisfaction. Based on the survey we learned that highest average score is above 3.7 and which were fell on the designed route and displayed method of department store during the special anniversary events, rest of options are all above 3.3 average. This survey also indicated that most respondents' overall satisfaction level are normal and above and most of options are close to satisfy. The top four options of customer's satisfaction factors are: accessibility, route design inside the department store, reputation of brand name products and sales person's attitude, the standard deviation accounts for 0.66, 0.67, 0.69 and 0.67, respectively. Besides, department store needs to maintain its advantage and to improve the rest facilities and the quality and quantity of free gift. How to increase the customer and the customer's satisfaction is also one of the main courses.

4.2. The Analysis of Customer's Background and Characteristics

Chi square analysis is used to analyze the difference between customer's characteristics and consumer demographic variables (including: gender, age, educational level, etc.). Data analysis showed that individual's socio-economic background and consumer characteristics are significant; therefore, the research hypothesis is established. Test results showed that main purpose to shop at department stores and their gender, age, education level, with or without child and monthly income were statically significant to each other. Further data analysis found that most respondents are to accompany another shopper or shop alone by themselves and mainly attracted by the promotional activities, and age from 20 to 29 and unmarried women. So the industry can strengthen the promotion for this age group and issue periodic DM to achieve publicity. In education level section, majority of respondents are college or university level followed by the high

school. In the monthly income section, NT\$10,000 below and \$10,001 - \$30,000 are majority.

4.3. The Factor Analysis of Lifestyle, Consumer Characteristic and Socio-Economic Background

The main focus is on the inductive analysis of lifestyle factors dimension of consumers. By using the "Factor Analysis" to gather factors that has high commonality to each other and to form the element. In this study we use Varimax of the orthogonal rotations in the component analysis model to subtract common factors of lifestyle and select eigenvalues which are greater than 1. The results showed that customer's lifestyle factors can be summarized in six dimensions, as illustrated in **Table 1**.

Based on the second hypothesis: Different socio-background of individuals has different lifestyle, our analysis took socio-background as the independent variable and the six dimensions of lifestyle as dependent variable to conduct one-way ANOVA analysis, if Value P reaches the significant level ($P < \alpha = 0.05$) then conduct the Duncan statistical test, but if the respondent's properties has only two levels, such as gender (male, female), marriage status (married, unmarried), etc. then the independent samples T-test will be used. The results showed that the factors of socio-background such as gender and monthly income were not reach the significant level, that means these two variables is not effected by the lifestyle; but other variables such as age, educational level, marriage status or with or without child and occupation reach significant level ($P < 0.05$), therefore, the second hypothesis has been established. As a result, different lifestyle showed different socio-economic background. Thus, it is particularly important for the department store to carefully classify their customers by their basic information to develop efficient marketing program to attract customers and maximize sales.

In order to better understand consumption traits on different lifestyle when purchase occurs, we reduced lifestyle factors to conduct analysis by using one-way ANOVA. The consumption traits include 12 items: purposes, amount, transportation, traveling time, whom to be with, numbers in group, time for promotion information to be showed, accessibility of shuttle bus and the reason of purchase. The result showed a significant difference and then to further conduct the Duncan statistical test to compare the result, therefore, the hypothesis was established. In analysis of lifestyle and consumption trait we found that type of "Fashion Leads" has showed a significant difference in purpose of purchase, purchase item, amount, whom to be with, numbers in group, time to stay for shopping, and accessibility of shuttle bus. For "Well budgeted" type it only showed significant difference in

whom to be with and accessibility of shuttle bus. For "Life-stressed type, it showed a significant difference in whom to be with, numbers in group, and accessibility of shuttle bus. For the "Conservative" type it showed the significant difference in purchase item, purchase amount, whom to be with and traveling time.

4.4. Analysis of Consumer's Socio-Economic Background, Consumer's Characteristics and Satisfaction

We conducted component analysis on 10 factors of satisfaction which was gathered in the third part of the survey questionnaire and also implemented Varimax of the orthogonal rotations in analysis and named eigenvalue for the value greater than 1. Then took results with the department store's accessibility and overall satisfaction level totaled 5 items and further conducted one-way ANOVA with individual socio-economic background. However, the option for "other" under the occupation item is less than 2; therefore, it can not be analyzed by one-way ANOVA. Because Taiwan already changed its status from developing country to developed countries, and move from secondary industry into tertiary industry, so the majority of productivity are derived from service industry, so the "other" option from the occupation has been incorporated into "service industry" and the results also showed in **Table 2**.

In this study, One-way ANOVA was conducted to analyze the difference between satisfaction of department store and respondents' socio-economic background. Factors of satisfaction include the followings: accessibility, service quality, additional facilities, internal planning and overall satisfaction. After analyzed, if results showed significant difference then Duncan statistical test will be conducted for further analysis. We observed that respondents' socio-economic background have significant difference in satisfaction level; therefore, the third hypothesis was established. Different age range also showed significant difference in accessibility, service and overall satisfaction; different educational level also showed significant difference in service quality; different occupation also showed significant difference in additional service, internal planning and overall satisfaction. However, when taking respondent's gender, status of marriage, with or without child and satisfaction to do T-test examination, we found that only marriage status and with or without child showed significant difference in satisfaction, married greater than unmarried, no child reater than with child.

One-way ANOVA was conducted to analyze the difference between satisfaction of department store and respondents' purchase traits. Factors of satisfaction of department stores include the followings: accessibility, service quality, additional facilities, internal planning and overall satisfaction. After analyzed, if results showed

Table 1. Factor analysis of lifestyle $N = 382$.

Lifestyle	Factors	Fashion lead	Unique tease	Strong personality	Careful planning	Life stressed	Conservative	Commonality
Look up fashion trends		0.848						0.563
It's important to seek for trends		0.765						0.674
It's joyful to become leading		0.758						0.733
Use to buy things on current season		0.681						0.491
Plan to purchase in advance		0.633						0.646
Pay attention to the fashion news		0.523						0.492
Believe in professional sales			0.578					0.506
Dislike clerk pursuit to purchase			0.553					0.644
More relax when companied by friends			0.510					0.533
Shows personality on tease			0.494					0.738
Like to go the store familiar with				0.808				0.573
Like to shop in the familiar store				0.696				0.531
Trust his unique tease				0.455				0.676
Have purchase budget plan					0.679			0.613
Plan to purchase before purchase					0.609			0.531
Compare price					0.594			0.632
Feel pressure on daily life						0.809		0.498
Feel time is not enough to use						0.692		0.515
Satisfy with current living conditions							0.728	0.389
Emphasis on the relationship between families							0.658	0.618
Eigenvalue	3.563	1.810	1.663	1.645	1.481	1.436		
Explained variance (%)	17.815	9.050	8.315	8.226	7.405	7.178		
Total explained variance (%)				57.988				
KMO Value					0.810			
Bartlett's ball-type test of χ^2					1791.274			

Note: The scores were given 1-5 points; "1" represents "Strongly disagree"; "5" represents "Strongly agree".

significant difference then Duncan statistical test will be conducted for further analysis. Therefore, fifth hypothesis was established. Different type of purchase, traveling time and numbers in group showed a significant difference in accessibility; the purposes showed a significant difference in service quality; whom to be with while shopping, sources of promotion information, how

much time to stay and shuttle bus all showed a significant difference in additional service; purchase amount and numbers in group showed significant difference in the internal planning of department stores; item of purchase, amount, type of transportation, sources of sales information and shuttle bus showed a significant difference in overall satisfaction.

Table 2. Results of factor analysis of respondents to factors of satisfaction in department store.

Item	Service Quality	Additional Service	Internal Planning	Commonality
Facilities Quality	0.850			0.752
Numbers of Facilities	0.827			0.732
Service	0.467			0.397
Professional Knowledge	0.373			0.369
Quality of Free Gift		0.806		0.678
Supporting Plan		0.747		0.666
Additional Service		0.626		0.558
Brand Name Shop			0.745	0.602
Number of Brand Name Shop			0.714	0.629
Route Planning			0.606	0.453
Eigenvalue after rotations	3.464	1.282	1.089	
Explained variance (%)	20.914%	18.938%	18.505%	
Total explained variance (%)			58.357%	
KMO Value			0.773	
Bartlett's ball-type test of x^2			928.929	

4.5. Cluster Analysis

The main purpose of this section is to use what we observed from the lifestyle dimensions in the factor analysis as a basis for effective market segmentation. We used scores that we obtained from lifestyle dimensions in factor analysis and preceded two-stage cluster analysis methods to analyze and classify department store's customers in different lifestyle characteristics. First, we took the scores that we obtained from each lifestyle factor dimension to do the Ward hierarchical cluster analysis, and based on the results from aggregated chart of sample we divided samples into five groups. Followed by K-mean cluster analysis and then separated these 382 valid samples into five lifestyle segmentations. The reason for separating these samples into five market segments is because the F value of five groups is the best. This method can make the biggest variation between variables. By using the K-mean cluster analysis the market was derived into five segments and was analyzed by one-way ANOVA and Duncan multiple comparison analysis, thereafter, to test the content and difference of each lifestyle segment and based on the results to name each segment groups, as shown in **Table 3**: Segment 1, Busy independent group: the tension factor and self-conscious factor have positive average value in this segment; Segment 2: Rational group, self-conscious factor and well-budgeted factor have positive average value in this segment; Segment 3: Modern Style, the self-confident factor and unique taste factor have higher average value in this segment; Segment 4: Casual and relaxation group, simple conservative factor and unique taste factor have positive average value in this segment; Segment 5: Economic shopping group, self-confident factor and well budgeted factor has positive average value in this seg-

ment. The analysis of each market segment vs lifestyle: The main purpose of this part is to illustrate the difference between each market segment based on the lifestyle factors. Our study proceed the test on difference of six dimensions in lifestyle factor and five market segments, and we found that market segment in six different lifestyle factors has significant difference.

The Chi-Square analysis of segmentations and consumer characteristics: To proceed Chi-Square analysis on above mentioned five market segments and consumer's characteristics in order to understand the distribution situation of significant difference in each cluster's while shopping in the department store. Results showed: the cluster analysis and the main purpose, item of purchase, transportation, considerations, whom to be with, numbers in group, time to stay, the usage of shuttle bus all have significant difference, therefore, hypothesis 8 was established. In this study the analysis of satisfaction in One-way AOVA analysis of lifestyle segmentation in each segment has been proceeded, the main purpose of this section is to determine the satisfaction of department store which included: accessibility, quality of service, additional service, supporting plan and level of satisfaction and then to further explained the difference between each lifestyle market segment. We conducted analysis of One-way ANOVA in the satisfaction of lifestyle segmentation, and we found out that each segment has significant difference in accessibility and service quality. The modern taste group showed higher satisfaction then rational groups in accessibility. Results also showed that casual relaxation group has highest satisfaction in the service quality; therefore, hypothesis 9 was established.

The Chi-Square analysis of each segment group and socio-economic background of individual: The main

Table 3. The variable analysis between lifestyle segments and factors.

Segments Lifestyle Factors	Busy Independent Group	Rational Group	Modern Style Group	Casual Relaxa- tion Group	Fashion Economic- Shopping Group	F Value	P Value
Self-Confident	-0.34976	-0.12435	1.12171	-1.15559	0.27153	101.088	0.000**
Unique Taste	-0.19516	-0.31029	0.83800	0.53483	-0.59589	41.187	0.000**
Self-Conscious	0.17673	0.72540	0.34940	-0.00913	-0.87038	46.425	0.000**
Well-Planned	-0.32528	0.32963	0.18280	-0.31844	0.06901	6.545	0.000**
Life Stress	1.20797	-0.69659	0.23376	-0.33995	-.29145	65.970	0.000**
Simple Conservative	-0.49375	-0.58114	0.37001	0.75782	-.01180	28.708	0.000**

Note: *represented P Value < 0.05; **represented P Value < 0.001 (Sources: This study).

purpose of this section is to determine the factor of socio-economic background of respondents and further explained the difference between lifestyle segment.

In this study, we tested the difference between five segment groups and socio-economic background and found that the lifestyle showed no significant difference in age, gender, educational level, with or without child and monthly income, however, showed significant difference in marriage status and occupation.

In the Rational segment, women with age of 20 - 39 years old and unmarried, childless, college or university level of education are majority, followed by high school and most of respondents are students followed by those serve in the service industry with monthly income from \$10,001 - \$30,000. In the Modern Taste segment, results showed that more than half of respondents are woman with age from 20 - 29, level of education are mostly college or university, married and childless, work in service industry and followed by students, the monthly income is from \$10,001 - \$50,000. In the Casual Relaxation segment, the proportion of women are higher than man, the age is from 20 - 39 years old, married without child, with monthly income of \$10,000 - \$30,000, most of respondents are students, workers in the service industry, housewives and self employed. In Fashion-economic Shopping Group, the majority is from 20 - 29 years old, college or university educational level, unmarried with no child, most of respondents are student with monthly income of \$10,000 - \$30,000. Chi-Square test has been further conducted and found out that unmarried respondents are the majority in groups of Busy-Independent, Rational, Modern Style, Fashion-Economic Shopping, however, the married respondents are the majority in the Casual-Relaxation Group. We learned that different marital status has different lifestyle and result in different segmentation, so we can recommend department stores management to do a well segmentation on their target customers and they should further position themselves to make corrections and targeted their cus-

tomers. Occupation of respondents showed that students are majority in Busy-Independent Group and Casual Relaxation Group, followed by servers in the service industry; students also took the majority in the group of Rational while housewives took the second place; students are also the majority in the Fashion Economic Shopping group and followed by self-employed; people works in the service industry are the majority in the group of Modern Style; therefore, hypotheses 10 was established. The Chi-Square test analysis of segment groups and the willingness of repurchase: in this section in order to understand the shopping behaviors of each five segment groups the willingness of repurchase, thus, we conducted Chi-Square test. The results of cluster analysis showed significant during the anniversary sales and no significant during the period of non-anniversary; therefore, hypothesis 11 was established.

4.6. The Analysis of Customer's Background and Characteristics

In this section, Chi-Square test analysis has been conducted to analyze the difference in repurchase willingness and demographic variables (including: gender, age, education level, etc.). Data analysis showed significant in socio-economic background and repurchase willingness; therefore, hypothesis 6 was established. It also showed a significant in respondent's gender and repurchase willingness during the anniversary sales. Results found that female respondents have higher proportion than male respondents in repurchase willingness during anniversary sales. The analysis of repurchase willingness and satisfaction of department stores: One-way ANOVA analysis has been conducted to analyze the difference between these two factors. Satisfaction factor which includes: accessibility, quality of service, additional facilities, internal planning and overall satisfaction. Data analysis showed significant difference between repurchase willingness and satisfaction; therefore, hypothesis 7 was established. The test results showed that during anniversary

sales, the consumption has significant difference in additional service and internal planning, further data analysis found that respondents with higher satisfaction in additional services are more willing to come during anniversary sales. Consumers with higher satisfaction in internal planning are more willing to come back and purchase during the anniversary sales; during non-anniversary period, the repeat customers have a significant difference in accessibility of department; further analysis found customers who wants to come back have higher proportion.

5. Conclusion and Recommendations

5.1. Recommendations on Management Plan

1) Numbers in group of shoppers and information sources can develop marketing approach to their targeted customer for group of 2 persons and above, and use word-of-mouth marketing approach to promote, enhance consumer's satisfaction, repurchase willingness and satisfaction, besides using the big billboard and period member's DM to reach the effectiveness that the advertising can bring. Content emphasizes the diversity of goods in department stores, as well as the special discounts or promotion of merchandise during anniversary sales. In addition to continue to maintain its own advantages, they need to increase the quality and quantity of free gift and also strengthen the rest facility and one of main courses is to increase the customers and satisfaction as well.

2) The management of department store should further enhance the convenience of parking and association with surrounding parking facilities in order to provide customers with preferential parking. In addition to dedicate promotion activities, management should also be careful with the specialty of department stores and status of merchandise. The issue of safety of elder person in shopping is also worth to pay attention to. Besides, by encouraging brand name sales to have more promotion strategy or activity such as buy one get one free or buy more get more discounts in order to attract customers. The department stores should develop different marketing strategies to different market segments. Accordance with the findings, different segment contains different main type of customers; in our study we proposed some marketing methods for their considerations.

3) In summary, although promotional activity is only one of the effective ways to attract customer's attention, it is not appropriate to cut down the price and ignore the neat appearance of the display of goods. Through the study of the different market segments for marketing with the advantages of department stores, when during the promotion sales, managers can also increase accessibility by providing more shuttles and cooperate with

nearby parking lots to provide parking discounts while customer spending certain amount of money in shopping.

5.2. Recommendations of the Follow-Up Study

1) Except the sealed questionnaires, we can also choose the way of interview to create the scenarios questionnaires for the research. Because while choose options of each question in the sealed questionnaires the option "others" appeared so often, therefore, by change the way of doing the survey, we probably can better understand what's customer's real thoughts.

2) In addition to this study, we are looking forward to having more studies in the management of department stores in order to be better understand the reason of their success.

REFERENCES

- [1] L. C. Chiang, "An Empirical Study of Customer Complaint Behavior for Domestic Department Stores," Master's Thesis, Providence University, Providence, 2000.
- [2] Z. P. Liu, "Department Store Discount Activities Influence Consumer Purchase Intention: The Application of Consumer Decision Making Model," Master's Thesis, National Taiwan University, Taipei, 1995.
- [3] M. T. Shen, "A Study of Department Stores Management—Take Department Stores in Taipei City as an Example," Master's Thesis, National Chengchi University, Taipei, 1995.
- [4] R. H. Huang, "Department Store Marketing Mix Strategy," *Journal of Management Technology*, Vol. 17, No. 1, 1985, pp. 165-173.
- [5] C. C. Chen, "An Empirical Study on the Relationship of Sales Promotion and Service Innovation with the Customer Satisfaction in Freeway Schedule Bus Service," *Journal of Data Analysis*, Vol. 4, No. 2, 2009, pp. 13-43.
- [6] C. M. Ku, H. E. Lin and W. C. Chen, "Tainan University Students Recreational Areas of the Image Positioning Take Department Store in Tainan as an Example," *Journal of Sport Health and Leisure*, No. 11, 2009, pp. 79-95.
- [7] H. M. Lin, "Impact of Country of Origin Image on Brand Positioning—The Research of Undergraduate's Consume Behavior of Mobile Phone in Taipei," Master's Thesis, Ming Chuan University, Taipei, 2001.
- [8] P. Kotler, "Marketing Management: Analysis, Planning Implementing and Control," 8th Edition, Prentice-Hall, Englewood Cliffs, 1994.
- [9] L. S. Huang, "The Effects of Premium Promotion Types on Consumer's Perceived values and Purchase Intentions," Ph.D. Thesis, National Taiwan University, Taipei, 2002.
- [10] C. H. Chu, "The Influences of Promotional Advertising, Brand Image and Consumer's Shopping Orientation on Advertising Effect," Master's Thesis, Soochow University, Taipei, 2000.
- [11] Wilkie, "Consumer Behavior," 3rd Edition, John Wiley and Sons Inc., New York, 1994.

- [12] P. Kotler, "Marketing Management Analysis, Planning, Implementation and Control," Prentice-Hall, Englewood Cliffs, 2001, p. 172.
- [13] H. C. Liu, "A Study on Consumer Behavior Model for Organic Agricultural Products," Master's Thesis, Chao Yang University of Technology, Taichung City, 2009.
- [14] H. T. Chen, "The Study on Tourist Consuming Behavior of the Resort Hotels in Taiwan," Master's Thesis, Shin Hsin University, Taipei, 2002.
- [15] C. C. Hsu, "The Study on Market Segmentation of Air-line Cargo in Taiwan," Master's Thesis, National Kaohsiung Marine University, Kaohsiung, 2008.
- [16] P. Y. Lee, "The Image Positioning and Performance Analysis of Department Stores in Kaohsiung City," Master's Thesis, National Sun Yat-sen University, Taipei, 1995.
- [17] Y. H. Zeng, "The Lifestyle Analysis for Market Segmentation of Internet Shopping," Master's Thesis, Chung Hua University, Hsinchu, 2007.
- [18] R. I. Haley, "Developing Effective Communications Strategy: A Benefit Segmentation Approach," John Wiley & Sons, New York, 1998.
- [19] C. C. Tsai, "Application of Decision Tree Induction in Taiwan Mobile Phone Market Segment," Master's Thesis, National Taipei University, Taipei, 2002.
- [20] S. Y. Wang, "A Study of Market Segmentation and Consumer Behavior in Coffee Chain Shops," Master's Thesis, National Dong-Hwa University, Hualien County, 2000.
- [21] P. Y. Lee, "The Image Positioning and Performance Analysis of Department Stores in Kaohsiung City," Master's Thesis, National Sun Yat-sen University, Taipei, 1995.
- [22] G. A. Kelly, "The Psychology of Personal Constructs," N.W. North & Co., New York, 1975, p. 15.
- [23] T. S. Rong, "Business Research," Wu-Nan Book Inc., Taipei, 1999.
- [24] J. Y. Huang, "Multivariate Analysis," 7th Edition, China Enterprise Institute, Taipei, 2000.