

Paper:

The Analysis of Consumer Purchasing Behavior on Cosmetics

Ya-Ling Wu* and You-Shyang Chen**

*Department of Applied English, National Chin-Yi University of Technology
57 Zhongshan Rd. Sec. 2, Taiping District, Taichung 41170, Taiwan
E-mail: qtie5168@yahoo.com.tw

**Department of Information Management, Hwa Hsia Institute of Technology
111 Gong Jhuan Rd., Chung Ho District, New Taipei City 235, Taiwan
E-mail: ys_chen@cc.hwh.edu.tw (Corresponding author)

[Received October 20, 2011; accepted December 31, 2011]

Consumers have different purchasing behaviors. In order to understand their differences, the individual characters and background are the main factors to be analyzed. This study investigated the consumer purchasing behaviors on cosmetics in two different consumer groups: the counter cosmetic consumers and the open-stack cosmetic consumers. The participants were selected from a famous commercial district. The results revealed the differences on fashion, brand, service, quality and price between the two consumer groups. In addition, the demographic analysis was provided.

Keywords: consumer, consumer behavior, consumer purchasing behavior, cosmetics

1. Introduction

When people mentioned “cosmetics,” most females are very interested in it. In the earlier age, only people in a high stratum of society had the ability to buy cosmetics because the cosmetic was the luxury goods for the public. However, due to the development of society and the increase of the living level [1], cosmetics were no more viewed as the luxury goods. It has been gradually considered necessities for the majority of females in the modern society. Moreover, the number of cosmetic consumers in the male population is dramatically increasing. The Industrial Technology Research Institute (2006) indicated that the global cosmetic spending was 1,730 million dollars in 2001, and it steeply rose to 2,020 million dollars in 2006. This statistic information revealed that the cosmetic industry became more important, and its prospective opportunities were expanded. The change in consumers’ cognition for cosmetic brings the infinite business opportunities for cosmetic enterprises. Therefore, in 2003, the Industrial Development Bureau Ministry of Economic Affairs subsumed cosmetic industry into the National Development Importance Project “Challenging 2008.” Accordingly, the purpose of this study is to investigate the differences of consumer purchasing behav-

ior between the consumers buying cosmetics at different types of stores (counter and open-stack) and the factors affecting customers to purchase cosmetics from different channels, and to generalize the characters of customers from different cosmetic channels.

1.1. Research Questions and Hypotheses

The brands in the counter cosmetics and in the open-stack cosmetics are very different. Therefore, both of them have their particular consumers. Accordingly, this study probed the differences on consumer purchasing behavior between the two different cosmetic categories. In addition, this study investigated the characters of cosmetic consumers in demographics and psychographics. In demographics, this study analyzed the characters of cosmetic consumers in terms of five categories: age, gender, education level, occupation, income. On the other hand, in psychographics, this study organized the factors affecting cosmetic consumer purchasing behavior into five divisions including fashion, brand, service, price and quality. Consequently, this study addressed the following questions and hypotheses.

Question (1) to Question (5) dealt with the factors in demographics.

- (1) Is there any differences in age between consumers in counter and open-stack cosmetics?

H_{01} : There is no significant difference in age between consumers in counter and open-stack cosmetics.

- (2) Is there any differences in gender between consumers in counter and open-stack cosmetics?

H_{02} : There is no significant difference in gender between consumers in counter and open-stack cosmetics.

- (3) Is there any differences in education level between consumers in counter and open-stack cosmetics?

H_{03} : There is no significant difference in education level between consumers in counter and open-stack cosmetics.



- (4) Is there any differences in occupation between consumers in counter and open-stack cosmetics?

H_{04} : There is no significant difference in occupation between consumers in counter and open-stack cosmetics.

- (5) Is there any differences in monthly income between consumers in counter and open-stack cosmetics?

H_{05} : There is no significant difference in monthly income between consumers in counter and open-stack cosmetics.

From Question (6) to Question (10) are related to the elements in psychographics.

- (6) Is there any differences in fashion preference between consumers in counter and open-stack cosmetics?

H_{06} : There is no significant difference in fashion preference between consumers in counter and open-stack cosmetics.

- (7) Is there any differences in brand preference between consumers in counter and open-stack cosmetics?

H_{07} : There is no significant difference in brand preference between consumers in counter and open-stack cosmetics.

- (8) Is there any differences in service preference between consumers in counter and open-stack cosmetics?

H_{08} : There is no significant difference in service preference between consumers in counter and open-stack cosmetics.

- (9) Is there any differences in price preference between consumers in counter and open-stack cosmetics?

H_{09} : There is no significant difference in price preference between consumers in counter and open-stack cosmetics.

- (10) Is there any differences in quality preference between consumers in counter and open-stack cosmetics?

H_{010} : There is no significant difference in quality preference between consumers in counter and open-stack cosmetics.

1.2. Limitation of the Study

Some limitation must be set on the findings of this study. This study is mainly an exploratory investigation into the factors in demographics and psychographics from the counter and open-stack cosmetic consumers in Yi-Chung Commercial District in Taichung City. Therefore, the findings obtained or conclusions reached may not be generalized to consumers in other areas or cities.

1.3. Definition of Terms

The following restricted definitions are used for the terms in this study.

Counter Cosmetics: cosmetics sold at particular places, for example, in department stores and chain stores with consultants.

Open-stack Cosmetics: cosmetics sold at cabinets to exhibit products in stores with no consultants.

2. Literature Review

This section includes five parts: (1) definition of cosmetics, (2) history of cosmetic industry, (3) types of cosmetics, (4) brands of cosmetics at counter and open-stack, (5) marketing channels.

2.1. Definition of Cosmetics

The US FDC Act defines that cosmetics are articles intended to be rubbed, poured, sprinkled, or sprayed on, introduced into, or applied to the human body for cleansing, beautifying, promoting attractiveness, or altering the appearance, but soaps are not included. Additionally, according to the regulation of commodity tax, cosmetic is something to improve the skin quality, to enhance the look and to please people's smell.

2.2. History of Cosmetic Industry

According to archaeology, Egyptian already used the skin care cosmetics several thousand years ago. However, cosmetics were considered luxury in the past. In contrary, people in modern society considered cosmetics as necessities in their daily life [1]. In addition, due to more and more females joining the job market, they need to dress up themselves to be more decent in the workplace. Gradually, using cosmetics is politeness in workplace. Therefore, the demands of cosmetics soared and the cosmetic industry is widely expanding [2]. In 2003, the Industrial Development Bureau Ministry of Economic Affairs provided one hundred million dollars for domestic manufacturers to develop and improve the techniques on cosmetics. Moreover, the output value of cosmetic was expected to rise from one hundred million to forty billion.

2.3. Types of Cosmetics

In general, cosmetics can be divided into six categories: basic cosmetics, color cosmetics, hair cosmetics, cleaning cosmetics, fragrant cosmetics, special purpose cosmetics [3]. On the other hand, manufacturers classified cosmetics into three kinds: color cosmetics – lipstick, blush, compact powder, eyebrow pencil, etc.; skin care – toning lotion, facial cream, lotion, etc.; perfume – cologne, essence, light essence, perfume, light perfume, etc. Furthermore, the functions of cosmetics are various. For example, the color cosmetics color the skin and improve the skin tone, and the skin care provides the function for cleaning, moisturizing and enhancing.

Table 1. Brands of counter cosmetic.

Brand	Country of Origin
BIO THERM	USA
CHANEL	France
Christian Dior	France
CLARINS	France
ELAUDER	USA
Elizabeth Arden	USA
GIVENCHY	France
LANCOME	France
KANEBO	Japan
KOSE	Japan
SHISEIDO (G)	Japan

Table 2. Brands of open-stack cosmetic.

Brand	Country of Origin
BOURJOIS	France
Canmake	Japan
Fasio	Japan
Fiberwig	Japan
INTERGRATE	Japan
KATE	Japan
L'oreal Paris	France
MABERLIN	USA
MAJOLICA	Japan
Tiss	Japan
ZA	Japan

2.4. Brands of Cosmetics

In Taiwan, there are many brands of cosmetics available in marketplace. Most counter cosmetics in Taiwan are from USA, France and Japan. **Tables 1** and **2** revealed the brands and the country of origin for counter and open-stack cosmetics respectively. Most open-stack cosmetics are sold at the chain stores such as Watsons and Cosmed or stores alike.

2.5. Marketing Channels

Marketing channel is also called channel of distribution. **Table 3** listed the definition of marketing channel by three scholars. Although their definitions were described differently in words, its essence is identical.

Marketing channel can be divided into two types: direct and indirect. Direct channel is so called zero-level channel, that is, the manufacturers directly sell products to consumers. On the other hand, in an indirect channel, producers sell products to consumers via intermediary. Furthermore, indirect channels are classified into several levels based on the number of intermediary. The intermediary includes retailer, wholesaler and agency (see **Table 4**).

Table 3. Definition of marketing channel.

Scholar	Definition
Su (2005)	All organizations or individuals help producers transfer products to consumers (p. 8) [4].
Zheng (2003)	For consumers and enterprises, marketing channel is a benefit process that creates time, places and ownership via the network of organization (p. 15) [5].
Beardan, Ingram & LaForge (2001)	Marketing channel is a combination of channel members in order to connect producer and user (p. 27) [6].

Table 4. Marketing channel for consumer.

Channel	No. of Level
P → C	
P → R → C	1
P → W → R → C	2
P → A → W → R → C	3
P : producer C : consumer R : retailer W : wholesaler A : agency	

3. Methodology

This study was designed to determine: (1) the differences in demographic elements between consumers in counter and open-stack cosmetics, (2) the differences in psychographic factors between consumers in counter and open-stack cosmetics. They were graphed as follows.

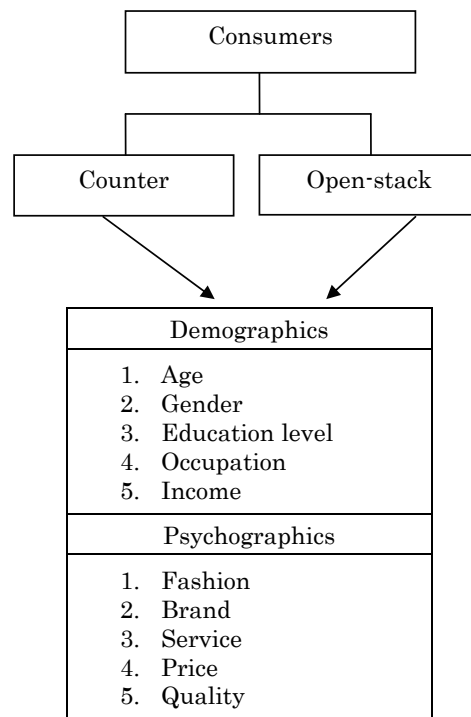


Table 5. Subjects.

Sex	Female	Male	Total
Counter	35	9	44
Open-stack	46	10	56

Table 6. Age.

Age	Counter	Open-stack	Total
under 20	1	1	2
21–30	29	45	74
31–40	9	6	15
41–50	4	3	7
over 50	1	1	2
total	44	56	100

3.1. Subjects

Totally 100 participants were randomly recruited from the cosmetic consumers in Yi-Zong Commercial District which was very famous and high density of population in Taichung City. They included 44 counter cosmetic consumers (9 males and 35 females) and 56 open-stack cosmetic consumers (10 males and 46 females), as shown in **Table 5**.

3.2. Instrument

The instrument used in this study was a questionnaire including 20 questions: 15 questions using 5-point Likert scale to investigate consumer preferences in fashion (Q1, Q6, Q11), brand (Q2, Q7, Q12), service (Q3, Q8, Q13), price (Q4, Q9, Q14) and quality (Q5, Q10, Q15); 5 questions (Q16–Q20) referred to the cosmetic consumers' individual information containing age, gender, education level, occupation, monthly income.

3.3. Procedure

The questionnaire was randomly distributed to the cosmetic consumers in Yi-Zong Commercial District. In order to ensure the reliability and validity of the questionnaire, two experts reviewed the questionnaire and the questionnaire was revised after a pilot test.

3.4. Data Analysis

The data analysis consisted of two parts. One was the matrix tables to reveal the demographic analysis. The other part provided independent samples *t*-test to examine the differences in the preference of fashion, brand, service, quality and price.

4. Results

The demographic analysis was presented as follows:

In **Table 6**, most cosmetic consumers are young people aged from 21 to 30.

Table 7. Gender.

Sex	Counter	Open-stack	Total
Male	9	10	19
Female	35	46	81
total	44	56	100

Table 8. Education level.

Level	Counter	Open-stack	Total
under Junior High	1	1	2
Senior High	14	12	26
Bachelor	28	42	70
Master or above	1	1	2
total	44	56	100

Table 9. Occupation.

Occupation	Counter	Open-stack	Total
student	7	22	29
Information Industry		1	1
Technological Industry	3	3	6
Service Industry	11	13	24
Housekeeper	2	4	6
Financial Industry	10	8	18
Teaching	1	2	3
Others	10	3	13
total	44	56	100

Table 10. Monthly income.

Income (NT\$)	Counter	Open-stack	Total
under 10,000	9	15	24
10,001–20,000	7	15	22
20,001–30,000	14	13	27
30,001–40,000	6	6	12
40,001–50,000	1	2	3
above 50,000	7	5	12
total	44	56	100

In **Table 7**, most cosmetic consumers were female. However, almost 20% of cosmetic consumers were male (19 males).

In **Table 8**, most cosmetic consumers hold bachelor degree. In addition, they prefer to buy cosmetic at open-stack.

According to **Table 9**, it was obvious that most students prefer to buy cosmetic at open-stack. Besides students, people who work in service industry use cosmetic a lot.

In **Table 10**, most cosmetic consumers have monthly income between 20,000 and 30,000. In addition, people with lower income level (under 30,000) prefer to buy cosmetic at open-stack.

In **Table 11**, it indicated that there was significant difference in service and brand preference between counter and open-stack cosmetic consumers. The *p*-value were .014 and .052 respectively. Therefore, H_{07} and H_{08} were rejected. This indicated that there were differences in brand and service preference between consumers in counter and open-stack cosmetics.

Table 11. *t*-test for analysis of psychographics.

Q	factor	Group	N	Mean	SD	<i>p</i> -value
1	fashion	Counter	44	3.30	1.069	.928
		Open-stack	56	3.29	1.074	
2	brand	Counter	44	3.23	1.075	.595
		Open-stack	56	2.80	1.119	
3	service	Counter	44	4.09	0.802	.014*
		Open-stack	56	3.34	0.978	
4	price	Counter	44	2.75	0.781	.182
		Open-stack	56	2.86	0.943	
5	quality	Counter	44	4.41	0.693	.555
		Open-stack	56	3.86	0.848	
6	fashion	Counter	44	3.66	0.987	.861
		Open-stack	56	3.11	0.985	
7	brand	Counter	44	3.66	0.914	.210
		Open-stack	56	3.13	1.096	
8	service	Counter	44	4.32	0.674	.812
		Open-stack	56	3.95	0.883	
9	price	Counter	44	3.75	0.651	.625
		Open-stack	56	3.73	0.700	
10	quality	Counter	44	3.73	1.020	.304
		Open-stack	56	3.43	1.126	
11	fashion	Counter	44	2.61	0.970	.663
		Open-stack	56	2.52	0.853	
12	brand	Counter	44	3.05	1.160	.052*
		Open-stack	56	2.38	0.906	
13	service	Counter	44	4.48	0.628	.310
		Open-stack	56	4.11	0.908	
14	price	Counter	44	2.98	0.792	.155
		Open-stack	56	3.14	0.862	
15	quality	Counter	44	4.32	0.708	.506
		Open-stack	56	3.82	0.917	

5. Conclusion

According to the above data analysis, it can be concluded into several results. First, most cosmetic consumers are young people aged from 21 to 30. This was likely because people shopping in Yi-Zong Commercial District were mostly students. Second, brand and service are factors to affect consumers purchasing cosmetic at the counter or open-stack. The result is consistent with the research conducted by Zhang [7]. Consumers who are not sociable purchase cosmetic at the open-stack because they like to decide by themselves. Finally, most students buy cosmetic at open-stack. This is maybe students cannot afford high priced cosmetic at counter. Furthermore, compared to other occupations, people working in service industry use cosmetic more. The reason might be that they need to contact people often. The look may affect their impression to people. Human have a basic need to change their appearance. The need for cosmetic arises because cosmetic allow us to make ourselves unique for ritual or social reasons [8]. In summary, the majority of cosmetic consumers preferred the famous brand and nice service when they purchased cosmetic. In addition, the factors affecting consumers to buy cosmetics at counter or open-stack include age, gender, level of education, occupation and monthly income.

References:

- [1] C.-C. Lin, "The development and future trends for cosmetic industry in Taiwan," Chem. Industry Information, Vol.4, pp. 16-32, 2003.
- [2] Y.-J. Dai, "The Study of Female Cosmetic Purchasing Behavior – an example of female college students in Taipei," unpublished dissertation, Institute of Business and Management, National Chiao Tung University, 1998.
- [3] L.-C. Chang, "The Introduction to Modern Cosmetics," Gau Lih Book Co. Ltd., 2002.
- [4] Y.-H. Su, "Marketing management," Tsan-Hai Publisher, 2005.
- [5] H.-W. Zheng, "Marketing channel management," Hsien-Yie Administration, 2003.
- [6] W. O. Bearden, T. N. Ingram, and R. W. LaForge, "Marketing: principles & perspectives," Chien-Chen Business, 2001.
- [7] C.-W. Zhang, "a study of consumer characteristic in different cosmetic marketing channels," unpublished master thesis, 1990.
- [8] P. A. Geis, "Cosmetic microbiology: a practical approach," Taylor&Francis: LCC Press of Taylor & Francis, 2006.



Name:
Ya-Ling Wu

Affiliation:
Associate Professor, Department of Applied English, National Chin-Yi University of Technology

Address:
57 Zhongshan Rd. Sec. 2, Taiping District, Taichung 41170, Taiwan

Brief Biographical History:
1991 B.B.A., Department of International Trade, Providence University
1993 M.A., Department of Administration, Leadership and Technology, New York University
2003 Ph.D., Department Curriculum and Instruction, University of Mississippi
2006- Associate Professor, Department of Applied English, National Chin-Yi University of Technology

Main Works:
• "Language Learning Strategy Used by Students at Different Proficiency Levels," Asian EFL J., Vol.10, No.4, pp. 75-95, 2008.



Name:
You-Shyang Chen

Affiliation:
Assistant Professor, Department of Information Management, Hwa Hsia Institute of Technology

Address:
111 Gong Huan Rd., Chung Ho District, New Taipei City 235, Taiwan

Brief Biographical History:
1988 Bachelor's degree in Industry Management from National Taiwan University of Science and Technology
2006 Master's degree in Information Management from National Yunlin University of Science & Technology
2009 Ph.D. degree in Information Management from National Yunlin University of Science & Technology
2009- Assistant Professor, Department of Information Management, Hwa Hsia Institute of Technology

Main Works:
• "Forecasting PGR of the financial industry using a rough sets classifier based on attribute-granularity," Knowledge and Information Systems, Vol.25, No.1, pp. 57-79, Oct. 2010.