

A Study on the Effects of Perceived Quality on Whitening Cosmetics' Satisfaction and Repurchase : Focused on University Students

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Received: March 12, 2016. Revised: March 29, 2016. Accepted: April 15, 2016.

Abstract

Purpose – The purpose of this study is to measure the characteristics of the perceived quality of college students of 20s which is the main customers of whitening, and to investigate the customer satisfaction and repurchase intentions according to the perceived quality of whitening.

Research design, data and methodology – The interviewees in the research are 300 college students in Seoul and the metropolitan area. They were collected from October 1 to October 24, 2013. 283 of collected questionnaires were used for the analysis. The analysis in the general characteristics of the subjects was analyzed by frequency analysis. With five-dimensional factor analysis, the perceived quality through reliability analysis was investigated and verified.

Results – The results from analysis of the standardized coefficient Beta value were performance(0.382), brand (0.339), and price (0.318) as a high level. On the other hand, services(0.172) and design factors (0.162) were relatively low.

Conclusion – Looking for these results, this study could reach the notion that a lot of consumers with whitening cosmetics highly recognized brand, performance, and price factors, but the service and design factors were relatively recognized low in customer satisfaction and repurchase intentions.

Keywords: Whitening Cosmetic, Perceived Quality, Customer Satisfaction, Repurchase Intentions.

JEL Classifications: L11, L15, L66, M11, N55.

1. Introduction

The women's cosmetic consumption has been rising owing to the improvement in living standards and income levels with increased interest for beauty. In particular, to meet the needs of consumers beyond mere diversification of the 21st century in modern society, the cosmetics has more emphasis on the 'functional' concept to make your own beauty and personality, and more importance to the efficacy and effectiveness on the concept of 'basis' in simple makeup products (Cho, 2013). Last year, the market of functional cosmetics increased to 1.5186 trillion won by 22.5%, and it is showing continued growth year-on-year over the past five years, regardless of the recession.

Functional cosmetics is the cosmetics which actively help solving problems such as the previous simple skin moisturizing, skin protection in dimension of skin wrinkles, melasma freckles, dead keratin and the skin dry.

According to cosmetics Act 2 Chapter 2 Section, functional

cosmetics are the cosmetics which are called under any of the following items. The related content is prescribed by the Ordinance of the Ministry of Health and Welfare.

- ① The products that help skin whitening
- ② The Products that help skin wrinkle
- ③ The Product that helps finely protect the skin from ultraviolet light or burned skin

Have enacted September 26, 2001 "regulations on the assessment of functional cosmetics", the functional cosmetics is accelerating and developing as the legal basis.

However, despite these upward trends, the launch indiscriminate functional cosmetics safety cannot be ensured due to the lack of consumers' awareness and knowledge for functional cosmetics. Because of such situation, it is expected that there is a difference between the desire to buy and satisfaction & repurchase intention despite expensive price and functional features compared to ordinary cosmetic. It should be intensively investigated for 'whitening cosmetics' because it gives consumers relatively low satisfaction in functional cosmetics and comfortable aspects (Kim, 2012). Especially the age in 20s is main consumers with high purchasing power, and

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in the future, they are considered to maintain the importance as a strategic customer base. It would be necessary to research for these issues more deeply. It is to target college students as an intensive research. Therefore, this study aims to identify the perceived qualities (price, performance, brand, design, service) affected in the aware process about whitening cosmetics, and then to evaluate that the perceived quality impacts satisfaction and repurchase of consumer.

It is systematically to verify the causal relationship between each factor to repurchase the consumer's purchase decision-making process through whitening characteristics, and to analyze and provide practical insights and strategies for the difference of purchase according to the perceived quality of the whitening agent in the development in the future.

2. Theoretical Background

2.1. The Concept of Perceived Quality and Previous Research

The perceived quality is invisible to the eye and the brand's overall feelings about one brand recognition is considered as overall dimension of reliability and quality characteristics. The consumers do not remember the details about a particular product, rather than perceive the overall comprehensive and quality of the specific product characteristics (Bettman & Park, 1980).

These perceived quality can be defined by comparing to other alternatives to suit the purpose of the use in products and services (Lee, 2005). Zeithaml (1988) defines broadly that perceived quality is the superiority or excellence, if perceived quality were defined by that, he said "Perceived quality is the judgment of products for consumers to recognize the overall excellence or superiority." The more upfront researches on the perceived quality are as follows. The perceived quality affects significantly the brand attitude, brand image and price. To improve the quality of a high reputation and trust through a decent brand image and reputation would be a good strategy for increasing brand affinity (Nam, 2002).

Lee (2005) claimed that perceived quality had the impact of the positive (+) on consumer value perception, the atmosphere of the store. The functional image has primarily affected on the perceived quality significantly, and the cause is environmental differentiation of the ultra low-cost brand. In addition, Kim (2013) argued that perceived quality is classified into five dimensions (price, performance, brand, design, service), and the perceived quality of cosmetics in skin care salons influences significantly on customer satisfaction and repurchase intention.

2.2. The Concept of Customer's Satisfaction and Previous Research

The customer satisfaction means management philosophy, the core of the corporate culture, to enhance the company's image, increase market share and expand market share

through the provision of a service and customer-oriented product development in the era of strategic marketing (Kim, 2013). Hunt (1977) said that the satisfaction of the customer is the state which was made of the re-purchase of goods and services as well as the needs and expectations of customers, customer satisfaction, and customer's trust in a row. In addition, Oliver (1980) said that customer satisfaction is overall the psychological state occurs combined with the customer's buying experience feelings caused by the emotions with mismatched expectations.

Looking whitening cosmetics and related study on customer satisfaction, Kim (2013) showed that most of the students who wanted to buy whitening cosmetics thought them as relatively inexpensive and safe in terms of skin fitness, had a tendency to prefer Korean products, and pointed out the high prices in multi-functional cosmetics as a problem. In addition, consumers were generally aware of the difference in general cosmetics, thus, they purchase mainly them in cosmetics shops. They experience functional cosmetics for skin problems, and their satisfaction for them is high. On the contrary, the salesman's problems are induced by selling high-priced products (Kim et al., 2012).

2.3. The Concept of Repurchase Intention and Previous Research

Repurchase intentions are to intend for customers using service repeatedly in the future based on past experience from the service providers (Oliver, 1999).

Cho (2011) said that the intention of consumers to repeated purchase is able to express with substantial revenue in order that customer satisfaction in a service environment contribute the company's long-term value creation.

Park et al. (2015) said that the causes that did not increase the corporate value in spite of High customer satisfaction index are overlook with the major marketing variables that appear in the formation process of repurchase and neglect in the effort associated after satisfaction.

Han & Kim (2015) said that affinity of functional cosmetics is high, especially the satisfaction of a 40-year appeared high, the most appropriate cost of purchasing was to less than 20 to 30 thousand won per piece, and high prices was pointed as a problem.

In the study of Kim (2013), the consumers' types are classified by seeking shopping type, brand loyalty information-dependent type and low involvement shopping. Whitening improvement products are brand loyal type of information-dependent, and using of department stores and duty free shops were higher. The anti-wrinkle products are information-dependent type of brand loyalty and relatively higher in department stores and duty-free shops use.

3. Research Models and Methods

3.1. Research

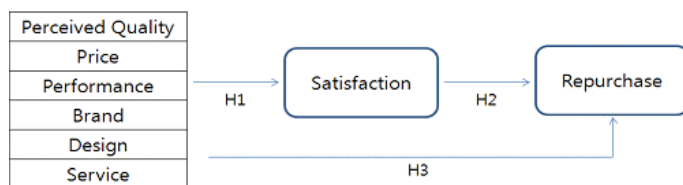
The purpose of this study is to draw strategies for marketing and sales management through identifying the perceived quality on customer satisfaction and repurchase intention in college students who have experiences buying whitening cosmetics. Therefore, it is dealt with the following detailed descriptions of the study to achieve this purpose.

First, it identifies the factors and characterization that affect the perceived quality in the process of consumers recognizing the goods. Second, it determines the impact on customer satisfaction and repurchase intentions by perceived quality of the whitening cosmetics. Third, it determines the impact of customer satisfaction according to the use whitening repurchase. Fourth, it presents the effective marketing method of whitening cosmetics based on the analysis results.

- <H1> Perceived quality of whitening cosmetics will have a significant impact on customer satisfaction.
- <H1-1> Brand of whitening cosmetics will have a significant impact on customer satisfaction.
- <H1-2> Performance of whitening cosmetics will have a significant impact on customer satisfaction.
- <H1-3> Service of whitening cosmetics will have a significant impact on customer satisfaction.
- <H1-4> Design of whitening cosmetics will have a significant impact on customer satisfaction.
- <H1-5> Price of whitening cosmetics will have a significant impact on customer satisfaction.

- <H2> Customer satisfaction of whitening cosmetics will have a significant impact on the repurchase intentions.

- <H3> Quality of whitening cosmetics will have a significant impact on the repurchase intentions.
- <H3-1> Brand of whitening cosmetics will have a significant impact on the repurchase intentions.
- <H3-2> Performance of whitening cosmetics will have a significant impact on the repurchase intentions.
- <H3-3> Service of whitening cosmetics will have a significant impact on the repurchase intentions.
- <H3-4> Design of whitening cosmetics will have a significant impact on the repurchase intentions.
- <H3-5> Price of whitening cosmetics will have a significant impact on the repurchase intentions.



<Figure 1> Research Model

The research model derives as in <Figure 1> on the basis of theoretical consideration the existing literature based on the study.

3.2. Methods

3.2.1. Measuring Variables

In this study, the collection of data for the survey used questionnaire method to identify the customer satisfaction and repurchase intention according to the perception quality of whitening cosmetics of college students in Seoul and Gyeonggi. Questionnaire survey tool was made in accordance with the previous studies on whitening cosmetics. The final questionnaire was completed through modifying and supplementing the contents of the pre-survey in the first questionnaire.

Survey questions are as follows.

3.2.2. Demographic Characteristics

In college students, it was measured as a nominal scale by three items such as gender, grade and monthly allowance.

3.2.3. Perceived Quality

3.2.3.1. Brand

Referring the papers of Kim (2012) and Kim & Park (2011), the brand of products was measured by five items such as "I have a crush on the brand image.", "Brand provides a variety of information to me.", "The evaluation of brand is good", "I can trust the brand." and "I have a good impression on the brand name."

3.2.3.2. Performance

Referring the papers of Jeong & Wang (2016) and Kim (2012), the performance was measured by three items such as "Pigmentation were removed after using the product.", "Skin tone has improved after using the product." and "Complex features has been improved after using the product."

3.2.3.3. Service

Referring the papers of Park (2014) and Kim (2012), the service was measured by three items such as "Salespeople friendly allows product consultation.", "The countenance of the salesperson is neat." and "Experience of the product before purchasing."

3.2.3.4. Design

Referring the papers of Park (2014) and Kim & Kim (2014), the design was measured by three items such as "Container design of product is more convenient to use.", "Marked points for product information is well marked." and "The material of the container is amazing."

3.2.3.5. Price

Referring the papers of Chun et al. (2014) and Hwang (2013), the design was measured by three items such as "The price of the product is suitable.", "It is similar to the price I

expected before purchase." and "The price of the product provides the value."

3.2.4. Customer's Satisfaction

Referring the papers of Cho (2009) and Kim (2012), customer's satisfaction was measured as 5 points Likert scale five items such as "Satisfied with the price of the product", "Satisfied with the performance of the products", "Satisfied with the product's brand", "Satisfied with the design of the product", and "Satisfied with the service of the product".

3.2.5. Repurchase Intentions

Referring the papers of Hwang & Shin (2012) and Kim (2012), the repurchase intentions were measured as 5 points Likert scale three items such as "I will continue to purchase whitening cosmetics in the future", "I will try to buy a whitening cosmetics." and "I will recommended whitening cosmetics to friends and colleague".

3.3. Data Collection and Analytical Methods

3.3.1. Data Collection

The target of survey for this study was limited to male and female college students residing in Seoul and Kyunggi. It was conducted to investigate 300 people as selecting by convenience sampling method. The questionnaire survey was done through a four weeks from October 1 to October 24 in 2013. The respondents filled it out for themselves.

The questionnaires has deployed 300, and the collected were 300(return rate: 100%) in total, and 283 were used in the final analysis except 17 that cannot be used in the analysis through pre-review and editing process.

3.3.2. Analytical Methods

The data and analysis of the general characteristics of the subjects used in this study were analyzed by frequency analysis using the SPSS 18.0 program. Five-dimensional factor analysis, the perceived quality through reliability analysis were investigated and verified. The whitening customer satisfaction and repurchase intentions were also analyzed with simple and multiple regression analyzes.

4. Results and Consideration

4.1. The General Characteristics of the Respondents

The general characteristics of the subjects used in this study are shown in <Table 4>. First in gender women is more than men as 73.5%. In academic year, the order was a freshman in college (33.2%), Senior(24.4%), Junior(21.6%), sophomore (20.8%). The order of allowance was the group of more than 300 thousand won ~ 400 thousand won less than the average monthly allowance (30.7), over 200 thousand won ~ 300,000 won less than collective

group (27.2%), 400 thousand won (24.7%), over 100 thousand won ~ 200 thousand won less than group (9.9%) populations less than 100 thousand won (7.4 percent).

<Table 4> The General Characteristics of the Respondents

Variables		N	%
Gender	Men	75	26.5
	Women	208	73.5
Academic year	Freshman	94	33.2
	Sophomore	59	20.8
	Junior	61	21.6
	Senior	69	24.4
Allowance	Less than 100 thousand won	21	7.4
	100 to 200 thousand won less than	28	9.9
	200 to 300 thousand won less than	77	27.2
	300 to 400 thousand won less than	87	30.7
	More than 400 won	70	24.7
Total		283	100.0

4.2. Reliability and Validation Results

To identify the factors structure of the perceived quality affected on consumer satisfaction and repurchase intentions of whitening cosmetics customers, the result of factor analysis is shown in <Table 5>. At this point, the principal component analysis and orthogonal rotation were done. Factors specific questions and factor loadings more than 0.5, the unique value were limited to 1.0 or higher. The 17 items in total were consisted. There were not questions less than 0.5 in factor loadings.

The results of factor analysis, five factors were extracted, and factor 2, factor 1 was named 'brand' has been named the 'performance'. Factor 3 was named 'services' factor 4 'design', 'price' factor 5 was named. That five factors explain 62.126% of the total variance, cumulative variance were identified.

The reliability verification was conducted for 5 factors from the configuration items about the perceived quality. As a result, reliability coefficients(α) appeared all more than 0.63, the reliability of all scales was secured. Whitening purchase satisfaction and re-purchase of the results to verify the reliability of configuration items appear above the 0.62 reliability of all scales was secured. The results were below <Table 6>.

4.3. Hypothesis Verification

<Hypothesis 1> Perceived quality of whitening cosmetics will have a significant impact on customer satisfaction.

To verify <Hypothesis 1> that is 'The perceived quality of whitening cosmetics will have a significant impact on customer satisfaction.' The multiple regression analysis was performed through setting customer satisfaction as the dependent variable and the 5 factors of the perceived quality (brand, performance, service, design, and price) as the independent variables. The result shows below <Table 7>.

<Table 5> Validity of Items on Perceived Quality Measurement

Name of factor	Item content	① factor witty	② Unique value	③ The variance% ④ (Accumulated variance)	Cronbach'α
Factor 1 : Brand	I have a good impression on the brand name.	.780	4.900	17.200	.821
	I have a crush on the brand image.	.734			
	The evaluation of brand is good	.723			
	I can trust the brand.	.723			
	Brand provides a variety of information to me.	.614			
Factor 2 : Performance	Pigmentation (liver spots, freckles, etc.) were removed.	.819	1.882	12.021 (29.222)	.713
	Skin tone has improved.	.775			
	Complex features (UV protection, elastic) have been improved.	.684			
Factor 3 : Service	The countenance of the salesperson is neat.	.809	1.376	11.239 (40.461)	.668
	Salespeople friendly allow product consultation.	.790			
	Experience of the product before purchasing.	.630			
Factor 4 : Design	Marked points (product information) are well marked.	.764	1.217	11.039 (51.500)	.637
	The material of the container is amazing.	.685			
	Container design is more convenient to use.	.678			
Factor 5 : Price	The price of the product is suitable.	.834	1.186	10.626 (62.126)	.666
	It is similar to the price I expected before purchase.	.730			
	The price of the product provides the value.	.640			

<Table 6> Reliability of the measurement items on customer satisfaction and repurchase intentions

	Item content	Cronbach'α
customer satisfaction	I am satisfied with the product brand.	.620
	I am satisfied with the performance of the product.	
	I am satisfied with the product service.	
	I am satisfied with the product design.	
	I am satisfied with the product price.	
Repurchase Intentions	I will continue to purchase whitening in the future.	.769
	I will try to buy the whitening.	
	I will recommend whitening cosmetics to your friends or colleagues	

<Table 7> Impact of perceived quality on customer satisfaction

The dependent variable	Model The independent variable	Coefficient ^a						
		Non-standardized coefficients		Standardized coefficients	t	F	R ² (R ² adj)	Significant probability
		B	Standard error	Beta				
Customer satisfaction	(Constant)	3.127	0.20		158.409	108.837 (P=.000)	.663 (.657)	.000
	Brand	.236	0.20	.413	11.826			.000
	Performance	.211	0.20	.373	10.694			.000
	Service	.196	0.20	.343	9.838			.000
	Design	.169	0.20	.300	8.602			.000
	Price	.206	0.20	.361	10.345			.000

Looking for the relationship between perceived quality of whitening cosmetics and customer satisfaction, R² value, the basis of the estimates that the regression model is how well it will meet in a population, is 0.663, F value is 108.837. At this time significant probability was 0.000. Therefore, it can be interpreted as a significant regression model.

In addition, looking for significant t values for significant probability value from a level of 0.05 in multiple regression analysis, <Hypothesis 1> that brand <H1-1>, performance <H1-2>, service <H1-3>, design <H1-4>, and the price <H1-5> have a significant impact on customer satisfaction was adopted.

Summarizing this, the 5 factors of perceived quality such as the brand, performance, service, design, and price influenced

on customer satisfaction in the consumers to purchase the whitening cosmetics.

<Hypothesis 2> Customer satisfaction of whitening cosmetics will have a significant impact on the repurchase intentions.

To verify <Hypothesis 2> that is 'The customer satisfaction of whitening cosmetics will have a significant impact on the repurchase intentions.' The simple regression analysis was conducted through setting the repurchase intentions as the dependent variable and the 5 factors of the perceived quality (brand, performance, service, design, and price) as the independent variables. The result shows below <Table 8>.

<Table 8> Impact of customer satisfaction on repurchase intention

Model		Non-standardized coefficients		Standardized coefficients	t	F	R ² (R ² adj)	Significant probability
The dependent variable	The independent variable	B	Standard error	Beta				
repurchase intention	(Constant)	.012	.202		.060	238.556	.459	.952
	customer satisfaction	.981	.064	.678	15.445	(P=.000)	(.457)	.000

<Table 9> Impact of the repurchase intention on perceived quality

Model		Non-standardized coefficients		Standardized coefficients	t	F	R ² (R ² adj)	Significant probability
The dependent variable	The independent variable	B	Standard error	Beta				
The repurchase intention	(Constant)	3.078	0.37		82.755	41.570 (P=.000)	.429 (.418)	.000
	Brand	.281	0.38	.339	7.457			.000
	Performance	.312	0.37	.382	8.413			.000
	Service	.142	0.37	.172	3.797			.000
	Design	.132	0.37	.162	3.558			.000
	Price	.263	0.37	.318	7.010			.000

<Table 10> Summaries for the results of the verification of the hypotheses

Hypothesis	contents	Relationship	채택 여부
[H1]	The perceived quality of whitening cosmetics will have a significant impact on customer satisfaction.	정(+)	acceptance
H1-1	The brand of whitening cosmetics will have a significant impact on customer satisfaction.		acceptance
H1-2	The Performance of whitening cosmetics will have a significant impact on customer satisfaction.		acceptance
H1-3	The service of whitening cosmetics will have a significant impact on customer satisfaction.		acceptance
H1-4	The design of whitening cosmetics will have a significant impact on customer satisfaction.		acceptance
H1-5	The price of whitening cosmetics will have a significant impact on customer satisfaction.		acceptance
[H2]	The customer satisfaction of whitening cosmetics will have a significant impact on the repurchase intentions.		acceptance
[H3]	The quality of whitening cosmetics will have a significant impact on the repurchase intentions.		acceptance
H3-1	The brand of whitening cosmetics will have a significant impact on the repurchase intentions.		acceptance
H3-2	The Performance of whitening cosmetics will have a significant impact on the repurchase intentions.		acceptance
H3-3	The service of whitening cosmetics will have a significant impact on the repurchase intentions.		acceptance
H3-4	The design of whitening cosmetics will have a significant impact on the repurchase intentions.		acceptance
H3-5	The price of whitening cosmetics will have a significant impact on the repurchase intentions.		acceptance

Looking for the relationship between customer satisfaction of whitening cosmetics and repurchase intentions, R² value, the basis of the estimates that the regression model is how well it will meet in a population, is 0.459, F value is 238.556. At this time significant probability was 0.000. Therefore, it can be interpreted as a significant regression model.

In addition, looking for significant t values for significant probability value from a level of 0.05 in simple regression analysis, <Hypothesis 2> that customer satisfaction have a significant impact on repurchase intentions was adopted.

<Hypothesis 3> Quality of whitening cosmetics will have a significant impact on the repurchase intentions.

To verify <Hypothesis 3> that is 'The quality of whitening cosmetics will have a significant impact on the repurchase intentions.' The multiple regression analysis was performed through setting the repurchase intentions as the dependent variable and customer satisfaction as the independent

variables. The result shows below <Table 9>.

Looking for the relationship between perceived quality of whitening cosmetics and repurchase intentions, R² value, the basis of the estimates that the regression model is how well it will meet in a population, is 0.429, F value is 41.570. At this time significant probability was 0.000. Therefore, it can be interpreted as a significant regression model.

In addition, looking for significant t values for significant probability value from a level of 0.05 in multiple regression analysis, <Hypothesis 3> that the 5 factors of the perceived quality (brand, performance, service, design, and price) have a significant impact on customer satisfaction was adopted.

Summarizing this, the 5 factors of perceived quality such as the brand, performance, service, design, and price influenced on repurchase intentions in the consumers to purchase the whitening cosmetics until now, the summary of the research results of hypothesis verification is below <Table 10>.

5. Conclusion and Suggestion

The purpose of this study was to measure the characteristics of the perceived quality in college students at the age of 20s which are the main customers of whitening, and to investigate the customer satisfaction and repurchase intentions according to the perceived quality of whitening. The interviewees in this research are 300 college students in Seoul and the metropolitan area. They were collected from October 1, in 2012 to May 10, in 2014. 283 of collected questionnaires were used for the analysis. The results of this study are as follows.

First, in the analysis result of the demographic characteristics of cosmetic whitening, the use of women is 73.5%, about twice than men in the gender of the sample. In ages a freshman in college is 33.2% as a large part, and 30.7% of respondents are less than 300~400 thousand won as the average monthly budget.

Second, measuring customer satisfaction by extracting the perceived quality attribute for five dimensions (brand, performance, service, design, and price) on based the existing whitening cosmetics paper, the brand factor (Beta = .413, $p < 0.05$) in the results of each of the factors had been recognized as the highest level. Analysis result of the standardized coefficient Beta value is brand(0.413), performance(0.373), price(0.36), services(0.343), design(0.300) in high level order, and all of them was seen as a significant impact on customer satisfaction because of less than 0.05 in significant probability. Also showed that customer satisfaction (Beta = .678, $p < 0.05$) by the five dimensions of perceived quality have the high-impact repurchase intentions.

Third, the repurchase intentions of whitening cosmetics also increased, if consumers have a positive perception in perceived quality of the five dimensions such as brand, performance, service, design and price. Performance factors (Beta = .382, $p < 0.05$) of each of the factors had been recognized with the highest level. The results of the analysis of the standardized coefficient Beta value were performance(0.382), brand (0.339), price (0.318) in order of recognition as a high level. On the other hand, services (0.172), design factors (0.162) were aware relatively low. According to the results of regression analysis, it showed that the consumer repurchase intentions of whitening cosmetics by the perceived quality significantly affected by the performance, brand, price, service, and design factors.

We can get the following implications in seeing more comprehensive analysis.

First, marketers of whitening cosmetics need to improve customer satisfaction through positive awareness of brand as well as the realization of tangible performance, quality of service, and a durable design, and performance compared to low-cost whitening cosmetics. In order to induce them to repurchase behavior of consumers from the high levels of customer satisfaction, the company's honesty, fast response and information, novel event and the formation of communication for consumer demand can be effective.

Second, the brand, performance and price factors have been recognized as a high level, but the service and design

factors have been recognized as a low-level relative on the perceived quality of whitening cosmetics. Therefore, in order to improve customer satisfaction and the repurchase, it would be useful to provide consumers with the positive and friendly oriented brand image, visible performance, the development in containers which can increase the durability and aesthetic design at the same time. Also, experiential opportunities strongly before purchasing and providing innovative vessel design can be utilized as a method to increase the relatively low service and the satisfaction of the design factors. Therefore, the marketers of whitening cosmetics needs to improve customer satisfaction and to encourage repurchase by considering practical value and economic value through the consumer's perceived quality, quickly and accurately identification.

This study has significance to provide the type present in the consumer's decision-making process that can affect the perceived quality and customer satisfaction, and repurchase future whitening successful marketing strategies that can provide the basic data by identifying the factors affecting the intention through intensively examining whitening cosmetics relatively low satisfaction at the time of steadily increasing in functional cosmetics market. However, this study has some limitations.

First, there is a need to focus on the sex ratio of male and female and to consider determinants other than the existing 5 factors (brand, performance, service, design, and price) of the preceding paper.

Second, it may have been the bias in a certain age because of limited survey with college students and the lack of inclusion and comparison of various ages.

Finally, this study needs to further investigation in the comparison and analysis of whitening consumer buying behavior differences. If compared with different kinds of non-whitening functional cosmetics consumers, many objective and accurate characteristics in whitening cosmetics could be made.

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