Differences in Customer Satisfaction and Repurchase Intention for Online and Offline Purchases about South Korean Cosmetics

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Abstract

Objectives: This research aims to analyze and compare the differences in the satisfaction that South Korean consumers gain from purchasing cosmetics online or offline and the effect that such satisfaction has on consumers’ repurchase intentions. Methods/Statistical Analysis: The questionnaire consists of questions regarding product attributes, service attributes; transaction attributes customer satisfaction and repurchases intention. The survey was administered to women in the Seoul metropolitan area who had purchased cosmetics both online and offline. A total of 200 questionnaires were distributed, 165 were collected, and 139 were used as the data for analysis. The main analysis was used as cronbach's alpha coefficient, one-sample t-tests, and regression analysis. Findings: The age distribution of the 139 respondents was as follows: 5.0% were in their teens, 45.3% were in their 20s, 21.6% were in their 30s, and 28.1% were in their 40s. Three factors—product, service, and transaction attributes—grouped as purchase determinants have an explanatory power of 61.2%. Reliability analysis shows that Cronbach’s α for all of those purchase determinants’ were greater than 0.6. The results of the testing of hypothesis 1, for all of the factors considered, including product attributes, service attributes, transaction, customer satisfaction with offline purchases was greater than that with online purchases. The result of testing the second hypothesis, the online channel for cosmetics needs to improve product selection, customer service, and product display and the offline channel, delivery time. The result of testing the third hypothesis, the models for both online purchase and offline purchase have p-values of less than 5%, the significance level; therefore, both models are valid. Improvements/Applications: Future research should conduct a deeper review of the existing literature, consider additional factors that may influence cosmetics purchases in both online and offline channels, and establish a more sophisticated model.

Keywords: Average Life Expectancy, Dental Care, Dental Health Conditions, Overall Health, Visually Impaired

1. Introduction

The spread of e-commerce has brought about innovative changes in traditional distribution channels. As online shopping malls, which emerged in the late 1990s, have become a key part of e-commerce thanks to advances in information technology, many online shopping malls have been launched. Interpark, which opened in 1996, was the first online shopping mall in South Korea. The Korean cosmetics market, which has grown all the way from door-to-door sales, has been no exception to the influence of e-commerce. By highlighting that consumers can purchase products anywhere at any time, conveniently and inexpensively, online cosmetics stores have been well-received by consumers.

More specifically, the volume of online cosmetics sales in Korea has increased 17.2% on average annually, from 1.41 trillion KRW in 2010 to 2.67 trillion KRW in 2014. In addition, online sales as a share of total retail sales increased from 11.6% in 2010 to 16.4% in 2014. In other words, online sales are becoming increasingly important in the cosmetics market. The cosmetics industry, which is characterized by regular consumption patterns, is well able to support online stores that serve the consumers who previously made their purchases at traditional department stores or other brick-and-mortar, or offline,
retail stores. Recently, consumers' use of both online and offline stores as sources for their cosmetics is becoming more prevalent. As the online market has grown rapidly, cosmetics retailers have been active in strengthening their mobile channels.

Despite the synergy between offline sales and online sales and the strength of the Koran online market for cosmetics, a delay in the online purchase decision can occur because consumers cannot touch the products online, consumers may be confused by the many products available online, consumers may not trust the online store, and the process for online exchanges and refunds may be difficult. However, many of these reasons also apply to offline purchases.

This research aims to analyze and compare the differences in the satisfaction that South Korean consumers gain from purchasing cosmetics online or offline, the correlations between such satisfaction and the effect that such satisfaction has on consumers' repurchase intentions. The findings are intended to help cosmetics shopping malls in developing strategies to enhance consumer loyalty and retain customers.

A successful online shopping mall must have an interface that enables users to easily and quickly search for product information and compare products. In addition, it must quickly process orders and react to post-purchase customer requests. In stated that the main characteristics of online shopping malls are security, information provision, convenience, and user-friendliness and argued that perceived security influences consumer trust.

In presented nine components of store image—product assortment, service, regular customers, physical facilities, convenience, facilitation, atmosphere, corporate factor (trust and reputation), and post-transaction satisfaction—and analyzed their effects on consumer perceptions of online shopping malls and consumers' online purchase behavior.

In adapted factors such as product perception, shopping experience, customer service, and customer risk to the Internet environment and classified them as tangibles, reliability, responsiveness, assurance, and empathy. Price can have a direct effect on purchase behavior. In verified that regret about offline purchases, caused by price differences visible online, is likely to cause consumers to delay offline purchase and to expend effort searching for additional information, which is likely to reduce offline purchases.

used the following four variables as factors that influence consumer satisfaction associated with online purchases: competitiveness (price, quality, and selection), physiological (entertainment, certainty and lifestyle), convenience (diversity, responsiveness, and search effort) and risk.

The conceptual model proposes that basically 5 factors namely Motivation, Perception, Attitude, Integration and Learning affecting online purchase decisions of consumers. In argues that online shopping mall and service quality elements was set up as customer service, price, product quality, service stability, and service diversity.

Among the existing studies of the effect of customer satisfaction on not only post-purchase attitude but also repurchase intention and brand switching, studies stated that customer satisfaction can have a positive influence on repurchase intention. In argued that the post-purchase stage is when consumers use a product or service in person and experience a wide range of emotional reactions and those reactions can serve as a connection between consumers and the product or service. This connection can have a dramatic influence on customer immersion, brand loyalty, and repeated purchase. He added that maintaining a relationship with customers can be an effective way for online shopping malls to encourage repeat purchase and word of mouth and that mutual trust and satisfaction are important determinants of such a relationship. In showed that customer satisfaction affects attitude and continues to influence repurchase intention.

2. Modeling and Sampling

To examine satisfaction differences between online and offline purchases as well as repurchase intention, the research model and hypotheses used in this study are based on previous studies.

The following determinants of online and offline cosmetics purchases were chosen: product attributes (price, quality, and selection), service attributes (customer service, events and promotions, product display, and product information), transaction attributes (payment method, delivery time, exchanges, and refunds).

The questionnaire consists of questions regarding product attributes, service attributes, and transaction attributes as well as customer satisfaction and repurchase intention, for both online and offline cosmetics purchases.
Information about the demographic characteristics of the respondents also was gathered from the questionnaire. The survey was administered to women in the Seoul metropolitan area who had purchased cosmetics both online and offline. A total of 200 questionnaires were distributed, and 165 were collected. After excluding those questionnaires that were deemed incomplete, 139 were used in the analysis. The social science statistical package PASW Statistics 18 was used to perform major analytical methods, including factor analysis, Cronbach’s α for reliability analysis, one-sample t-tests, and regression analysis.

3. Results of the Analysis

3.1 General Characteristic of Research Subjects

The general characteristics of the research subjects are summarized in Table 1. The age distribution of the 139 respondents was as follows: 5.0% were in their teens, 45.3% were in their 20s, 21.6% were in their 30s, and 28.1% were in their 40s. In terms of their methods of purchasing cosmetics, in-person visits to stores accounted for 62.6% of purchases, Internet and mobile shopping accounted for 20.1%, home shopping accounted for 4.3%.

### Table 1. General characteristics of the research subjects

| Demographic Characteristics       | Number of People | Percentage (%) |
|-----------------------------------|------------------|----------------|
| **Age (years)**                   |                  |                |
| Teens                             | 7                | 5.0            |
| 20s                               | 63               | 45.3           |
| 30s                               | 30               | 21.6           |
| 40s                               | 39               | 28.1           |
| **Monthly Income (KRW)**          |                  |                |
| Less than 1 million               | -                | -              |
| 1 to 2 million                    | 64               | 46.0           |
| 2 to 3 million                    | 39               | 28.1           |
| More than 3 million               | 36               | 25.9           |
| **Location for Purchasing Cosmetics** |               |                |
| In-person visit to store          | 87               | 62.6           |
| Internet or mobile shopping       | 28               | 20.1           |
| Door-to-door sales                | 3                | 2.2            |
| Home shopping                     | 6                | 4.3            |
| Others                            | 15               | 10.8           |
| **Frequency of Purchasing Cosmetics** |             |                |
| More than once per week           | 12               | 8.6            |
| More than once per month          | 12               | 8.6            |
| More than once every six months   | 43               | 30.9           |
| More than once per year           | 69               | 49.6           |
| More than once per year           | 3                | 2.2            |
| **Total**                         | 139              | 100.0          |
Furthermore, the p-value of the tested statistics was 0.000, confirming a statistically significant difference in price satisfaction at the 0.05 level of significance. In other words, offline purchases provided greater price satisfaction than did online purchases.

For all of the factors considered, including product attributes (price, quality, and selection), service attributes (customer service, events and promotions, product display, and product information), transaction attributes (payment method, delivery time, and exchanges and refunds), customer satisfaction with offline purchases was greater than that with online purchases. The difference was greatest for delivery time (0.849), followed by customer service (0.820), product information (0.769), exchanges and refunds (0.647), and payment method (0.504). Events and promotions as well as price, which are regarded as the main strengths of online shopping, provided advantages of 0.043 and 0.209, respectively, for offline stores. In this regard, although events and promotions are important, stores must improve customer service, product information, and exchanges and refunds, which are seen as weaknesses of online shopping malls, to increase online purchases of cosmetics.

The results of the testing of hypothesis 2 ("The determinants of online and offline cosmetics purchases (product attributes, service attributes, and transaction attributes) influence customer satisfaction") are shown in Table 4. Regression analysis of customer satisfaction as the dependent variable influenced by product attributes, service attributes, and transaction attributes finds p-values of 0.000, less than the statistical significance level of 5%, and therefore all of the regression equations are valid.

In terms of product attributes for online purchases, although customer satisfaction has a statistically significant relationship with price and quality, it does not have a statistically significant relationship with selection. For offline purchases, however, customer satisfaction has a statistically significant relationship with all three product attributes.

With regard to service attributes for online purchases, although customer satisfaction has a statistically significant relationship with events and promotions and product information, it does not have a statistically significant relationship with customer service or product display. For offline purchases, customer satisfaction does not have a statistically significant relationship with product display.

### Table 2. Verification of reliability and feasibility

| Factor                  | Number of Factors | Cronbach’s α | Eigenvalue | Dispersion |
|-------------------------|-------------------|--------------|------------|------------|
| Purchase Determinants   |                   |              |            |            |
| Product attributes      | 3                 | .702         | 2.398      | 23.983     |
| Service attributes      | 4                 | .690         | 2.163      | 21.629     |
| Transaction attributes  | 3                 | .719         | 1.554      | 15.543     |
| Customer Satisfaction   |                   |              |            |            |
| Customer satisfaction   | 3                 | .713         | 3.399      | 32.149     |
| Repurchase Intention    |                   |              |            |            |
| Repurchase intention    | 3                 | .670         | 3.113      | 29.950     |

### Table 3. Testing of Hypothesis 1

| Category                | Factor                  | Channel | Mean   | Std. Deviation | t-statistic | Sig. (two-tailed) |
|-------------------------|-------------------------|---------|--------|----------------|-------------|-------------------|
| Product Attributes      | Price                   | Online  | 3.4388 | .87737         | 46.210      | .000              |
|                         |                         | Offline | 3.6475 | .96206         | 44.699      | .000              |
|                         | Quality                 | Online  | 3.3669 | .60366         | 65.758      | .000              |
|                         |                         | Offline | 3.7698 | .62920         | 70.638      | .000              |
|                         | Selection               | Online  | 3.4892 | .54330         | 75.718      | .000              |
|                         |                         | Offline | 3.8345 | .55947         | 80.807      | .000              |
| Service Attributes      | Customer service        | Online  | 3.2806 | .57771         | 66.949      | .000              |
|                         |                         | Offline | 4.1007 | .76419         | 63.265      | .000              |
|                         | Events and promotions   | Online  | 3.8058 | .69028         | 65.001      | .000              |
|                         |                         | Offline | 3.8489 | .70107         | 64.727      | .000              |
|                         | Product display         | Online  | 3.5899 | .61164         | 69.199      | .000              |
|                         |                         | Offline | 3.9712 | .57663         | 81.196      | .000              |
|                         | Product information     | Online  | 3.2446 | .63522         | 60.221      | .000              |
|                         |                         | Offline | 4.0144 | .87630         | 54.010      | .000              |
| Transaction Attributes  | Payment method          | Online  | 3.7554 | .56262         | 78.694      | .000              |
|                         |                         | Offline | 4.2590 | .67393         | 74.508      | .000              |
|                         | Delivery time           | Online  | 3.4460 | .71397         | 56.905      | .000              |
|                         |                         | Offline | 4.2950 | .63077         | 80.278      | .000              |
|                         | Exchanges and refunds   | Online  | 3.2734 | .84960         | 45.424      | .000              |
|                         |                         | Offline | 3.9209 | .75243         | 61.436      | .000              |
With regard to transaction attributes for online purchases, customer satisfaction has statistically significant relationships with payment method, delivery time, and exchanges and refunds. For offline purchases, customer satisfaction does not have a statistically significant relationship with delivery time.

In summary, the online channel for cosmetics needs to improve product selection, customer service, and product display and the offline channel, delivery time.

The results of the testing of hypothesis 3 ("Customer satisfaction with the determinants of online and offline cosmetics purchases (product attributes, service attributes, and transaction attributes) influences repurchase intention") are shown in Table 5. The models

Table 4. Testing of Hypothesis 2 (dependent variable: customer satisfaction)

| Model                  | Beta  | Std. Error | t-statistic | Sig. | Result    |
|------------------------|-------|------------|-------------|------|-----------|
| Product Attributes     |       |            |             |      |           |
| Online                 |       |            |             |      |           |
| Constant               | 3.690 | .386       | 9.572       | .000 | Accepted  |
| Price                  | .146  | .055       | 2.652       | .009 | Accepted  |
| Quality                | -.301 | .077       | -3.914      | .000 | Accepted  |
| Selection              | .136  | .086       | 1.592       | .114 | Rejected  |
| R²: .391               | Adjusted R²: .134 | F: 8.122   | p-value: .000 |
| Offline                |       |            |             |      |           |
| Constant               | 3.147 | .370       | 8.499       | .000 | Accepted  |
| Price                  | .099  | .048       | 2.060       | .041 | Accepted  |
| Quality                | -.259 | .070       | -3.712      | .000 | Accepted  |
| Selection              | .293  | .084       | 3.481       | .001 | Accepted  |
| R²: .445               | Adjusted R²: .180 | F: 11.086  | p-value: .000 |
| Service Attributes     |       |            |             |      |           |
| Online                 |       |            |             |      |           |
| Constant               | 1.917 | .496       | 3.863       | .000 | Accepted  |
| Customer service       | -.068 | .106       | -.639       | .524 | Rejected  |
| Events and promotions  | .281  | .088       | 3.189       | .002 | Accepted  |
| Product display        | -.158 | .093       | -1.699      | .092 | Rejected  |
| Product information    | .390  | .090       | 4.350       | .000 | Accepted  |
| R²: .404               | Adjusted R²: .138 | F: 6.541   | p-value: .000 |
| Offline                |       |            |             |      |           |
| Constant               | 2.218 | .449       | 4.943       | .000 | Accepted  |
| Customer service       | -.203 | .064       | -3.163      | .002 | Accepted  |
| Events and promotions  | .341  | .064       | 5.333       | .000 | Accepted  |
| Product display        | -.002 | .079       | -0.28       | .978 | Rejected  |
| Product information    | .298  | .053       | 5.581       | .000 | Accepted  |
| R²: .539               | Adjusted R²: .270 | F: 13.739  | p-value: .000 |
| Transaction Attributes |       |            |             |      |           |
| Online                 |       |            |             |      |           |
| Constant               | 1.050 | .413       | 2.542       | .012 |Accepted   |
| Payment method         | .296  | .084       | 3.549       | .001 | Accepted  |
| Delivery time          | .278  | .077       | 3.594       | .000 | Accepted  |
| Exchanges and refunds  | .135  | .063       | 2.128       | .035 | Accepted  |
| R²: .523               | Adjusted R²: .259 | F: 17.117  | p-value: .000 |
| Offline                |       |            |             |      |           |
| Constant               | 1.985 | .420       | 4.723       | .000 | Accepted  |
| Payment method         | .150  | .075       | 1.986       | .049 | Accepted  |
| Delivery time          | -.133 | .080       | -1.668      | .098 | Rejected  |
| Exchanges and refunds  | .478  | .068       | 7.013       | .000 | Accepted  |
| R²: .324               | Adjusted R²: .309 | F: 21.601  | p-value: .000 |

Table 5. Testing of Hypothesis 3 (dependent variable: repurchase intention)

| Model                  | B     | Std. Error | t-statistic | Sig. | Result    |
|------------------------|-------|------------|-------------|------|-----------|
| Online                 |       |            |             |      |           |
| Constant               | 2.409 | .496       | 4.853       | .000 | Accepted  |
| Product attributes     | .046  | .074       | .618        | .538 | Rejected  |
| Service attributes     | .189  | .060       | 3.158       | .002 | Accepted  |
| Transaction attributes | .207  | .072       | 2.899       | .004 | Accepted  |
| R²: .109               | Adjusted R²: .089 | F: 5.517   | p-value: .001 |
| Offline                |       |            |             |      |           |
| Constant               | 1.541 | .363       | 4.244       | .000 | Accepted  |
| Product attributes     | .074  | .060       | 1.233       | .220 | Rejected  |
| Service attributes     | .152  | .059       | 2.561       | .012 | Accepted  |
| Transaction attributes | .399  | .053       | 7.469       | .000 | Accepted  |
| R²: .393               | Adjusted R²: .380 | F: 29.135  | p-value: .000 |
Differences in Customer Satisfaction and Repurchase Intention for Online and Offline Purchases about South Korean Cosmetics

for both online purchase and offline purchase have p-values of less than 5%, the significance level; therefore, both models are valid. For both online purchase and offline purchase, repurchase intention has no statistically significant relationship with customer satisfaction in terms of product attributes but does have statistically significant relationships with customer satisfaction in terms of service and transaction attributes.

4. Conclusion

This study analyzed the difference in customer satisfaction for cosmetics purchases made online and offline purchase as well as customer repurchases intention. Hypotheses 1, 2, and 3, which were established for this purpose, all were tested and accepted. These results provide the following implications:

First, this research started with a hypothesis that compares online and offline cosmetics purchases. Cosmetics consumption patterns have become increasingly flexible as the perception of cosmetics has evolved from luxury to staple and preference for accessible channels has grown. However, although the growth of the online cosmetics market has boosted online purchase experience, most cosmetics purchases are still made offline, or in person. An example of how even consumers who have purchased cosmetics online are substantially less interested in the online channel than in the offline channel is that that 62.9% of the respondents to the questionnaire in this study said they would visit a store in person to make a purchase.

Second, as demonstrated through testing of hypothesis 1, although online cosmetics sales are on the rise, customers are more satisfied with offline cosmetics purchases than with online cosmetics purchases. Overall, online sales strategies need improvement. In particular, there is a need for continuous improvements in those attributes for which customer satisfaction differed significantly between offline and online sales channels: delivery time, customer service, product information, exchanges and refunds, and payment methods.

Third, testing of hypothesis 2 found that online cosmetics stores need to improve product selection, customer service, and product display. They should determine which cosmetics items are most appropriate for online distribution and perhaps develop new products for that channel. Offline cosmetics stores should rationalize delivery time.

Fourth, testing of hypothesis 3 found that both service attributes and transaction attributes had significant influence on repurchase intention. To increase cosmetics purchases, neither the online channel nor the offline channel should be neglected, and both channels should contribute to increasing customers’ satisfaction and therefore loyalty.

However, this study has the following limitations:

First, customer satisfaction for offline purchases was much greater than for online purchases. This difference could be real or the small sample size may have obscured the real trend. Future research should select and analyze a sample more systematically.

Second, the survey was administered only to women. In today’s world, men also pay attention to their grooming; therefore, this study’s focus on women is a limitation. Although the male cosmetics market is smaller than the female one, it is growing.

Third, this study targeted mainly high-end cosmetics brands in online and offline channel. The inclusion of additional market segments would have resulted in a much larger sample.

Fourth, some stores operate in both the offline and online channel, but this study did not make a distinction regarding whether an online store and an offline store represented the same brand.

Future research should conduct a deeper review of the existing literature, consider additional factors that may influence cosmetics purchases in both online and offline channels, and establish a more sophisticated model.

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