

# Are community pharmacies the best purchasing channel for cosmetic products? Prioritization of consumer preferences via analytical hierarchy process

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#### ABSTRACT

**Background and Aims:** Many different purchasing channels play an essential role in meeting cosmetic product demand worldwide. These include supermarkets, cosmetic markets, community pharmacies, beauty salons, internet retailing, and shopping complexes. This study's main objective is to prioritize consumers' cosmetic product purchasing channel preferences. The originality of this study lies in being the first study that addressed customers' choice of cosmetic product purchasing channels via the Analytical Hierarchy Process (AHP).

**Methods:** Firstly, a questionnaire was conducted (n=287) to determine cosmetic product purchasing channel selection criteria. Cosmetic product purchasing channel alternatives were prioritized among the first questionnaire results via the AHP with 12 consumers who reside in the city center of Van, Turkey and buy at least two cosmetic products per year.

**Results:** As a result of the study, community pharmacies (46.9%) were found to be the best alternative among the cosmetic product purchasing channels, followed by cosmetics stores (24.1%). The most important criterion affecting the selection of cosmetic product purchasing channels is satisfaction with the consultancy (25.2%), followed by advice from health care providers (22.1%).

**Conclusion:** It has been observed that consumers prefer community pharmacies more than other purchasing channels when purchasing cosmetic products. Understanding customer needs, expectations, and experiences is vital for optimizing the quality of the offered service. Thus, pharmacies with a significant market share in the cosmetics sector can further their cosmetics services by considering the consumer demands highlighted in this study.

Keywords: Analytical hierarchy process, Community pharmacy, Cosmetics, Cosmetic product purchasing channel

#### INTRODUCTION

Nowadays, individuals who pay attention to their physical appearance take on certain costs in order to look more beautiful, be liked, and follow innovations. Recognizing this potential, the cosmetics sector is trying to respond to consumers' demands with different product types and innovations every day. Many purchasing channels, such as beauty centers, cosmetics stores, the internet, and community pharmacies, meet the demand for cosmetic products and services. Especially in today's market conditions, where a focus on the beneficiary is at the forefront, cosmetic products and service providers must manage the purchasing process to contribute to making a profit while responding to beneficiaries' demands.

Today, the cosmetics industry shows its presence worldwide. It continues to develop day by day due to positive developments in living conditions and increased interest in and awareness about using cosmetic products and appearance. Simultaneously, individu-

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als' desire to attain these products reliably, efficiently, comfortably, and quickly has led companies to develop new marketing methods to reach consumers quickly and effectively.

The increase in demand for cosmetics and personal care products has encouraged cosmetics companies to increase their meeting points with consumers. Accordingly, the multichannel retail environment has developed over the years in the cosmetics sector, as in most sectors. Many different purchasing channels, such as supermarkets, cosmetics markets, community pharmacies, beauty salons, internet retailing, and shopping centers play an essential role in meeting cosmetics demand worldwide. It is similar in Turkey, too. Especially in recent years, an increasing number of personal care stores are becoming points where consumers can buy these products in Turkey (Agcadağ, 2017; Durmaz & Bahar, 2011). In addition, virtual (electronic) shopping, which offers consumers a different shopping environment than traditional shopping habits, is a new purchasing channel selected by many consumers (Saydan, 2008). However, it is observed that consumers are hesitant to purchase some product groups using this purchasing channel. Consumers think it would be risky to buy perfumes and personal care products on the internet that they have not used before and have not had the opportunity to experience personally. Also, virtual shopping lacks factors such as obtaining information and advice from experts on the product, testing the product, and performing skin analysis, which reduces consumers' interest in purchasing these product groups online (Cosmetics Europe, 2016).

Faced with various stimulants, the consumer is influenced by personal and environmental factors and reacts to the stimulus (or stimulants). Veuphuteh (2018) defined the variables that affect the consumer's purchasing decision process as psychological variables, socio-cultural variables, demographic variables, effects of marketing efforts, and situational effects. This situation also affects the cosmetic product purchasing behavior of individuals.

Özden, Saygılı, & Sütütemiz (2019) revealed that health awareness is effective in consumers' cosmetic product preference by evaluating many issues, such as the frequency of cosmetic product use, health awareness level, place of purchase, information sources on product groups, and packaging preference. Chen & Chen (2011) put forth factors such as brand image, sellers' experiences, customer relations, and customer satisfaction that affect consumers' intention to buy cosmetic products. Dapiapis Toros (2016) investigated the factors that impact consumers' cosmetic products purchasing decisions. The finding was that brand recognition and friends' advice are the most effective and that magazine, newspaper, and radio advertisements are the least effective.

According to Villi & Kayabaşı (2013), the store atmosphere, friends, moods, and promotions affect women's cosmetic purchase behavior. Yalçın & Gülsün (2020) evaluated five main criteria and 15 sub-criteria related to cosmetic product purchasing behavior via multi-criteria decision-making methods. They put forth that price, promotion, and quality are critical factors for Turkish women purchasing a cosmetic product. Lu & Liu (2018) examined women's preferences for information channels about

cosmetic products. It was found that young women prefer online purchasing channels, and connected with this, they provide information about cosmetic products via social platforms and the internet. In contrast, older women choose physical stores more, and they prefer to get information face to face.

Kirby (2014) reported that the consumers make their choices considering reasons such as the store having too many brands together, relaxing atmosphere of the store, the store offering products with samples and gifts, and the store offering price discounts and installment opportunities. In the study conducted by Desai (2014), product quality was found to be more important than the product price on consumers' choice of cosmetic products. Accordingly, it was seen that the majority of the participants preferred to purchase products from stores that offer quality products at affordable prices. Also, medical and cosmetics stores were the purchasing channels that are mainly selected.

The fact that, pharmacists' consultancy services are not only pre-sales but also continue after-sales puts pharmacies ahead of other cosmetic product purchasing channels. Considering today's economic conditions, it should be noted that pharmacists' interest in the cosmetics sector is increasing. For pharmacists to protect their assets and improve their activities, issues such as selecting the products and services to be offered in the pharmacy, choosing the pharmacy location, and who the stakeholders are should be planned correctly. In this context, it is of great importance that pharmacists who decide to offer cosmetic product consultancy include more than one criteria in the decision process, taking into account the expectations of the beneficiaries as well as time, money, and similar criteria in light of reliable, scientific estimates. In summary, decision-making processes play a vital role in the pharmacy profession, as in every business field.

As can be seen from the studies mentioned above, factors affecting consumer preferences in cosmetic products and cosmetic product purchasing channels (CPPCs) have been evaluated. Still, to the best of the authors' knowledge, no study has addressed customers' choice of CPPC via the Analytical Hierarchy Process (AHP) approach. AHP is a well-known multi-criteria decision-making technique developed by Thomas L. Saaty in the 1970s to determine the relative weights of enabling factors via pair-wise comparisons.

In this context, the study's motivation comes from prioritizing customers' CPPC selection according to determined selection criteria. In addition, the study aims to guide pharmacists who provide or plan to provide cosmetic services by revealing what criteria the consumers of cosmetic products consider when choosing purchasing channels.

The remaining part of this paper discusses CPPC selection parameters based on questionnaire results and applies the AHP to the problem at hand, followed by the conclusion.

## MATERIAL AND METHODS

This study was carried out in two phases: (i) determination of CPPC selection criteria through a questionnaire, and (ii) prioritizing CPCC alternatives in line with the results of the first questionnaire via the AHP. According to Saaty (1980), the flow diagram followed in the application of this study is given in Figure 1.

#### Data collection and sample size

The study was conducted in accordance with the Turkish Republic Ministry of Health, Van Provincial Health Directorate's permission number 73040253-044-E.439, the Van-Bitlis-Hakkari Chamber of Pharmacists' decision number 2019/1626, and the World Medical Association (WMA) Declaration of Helsinki Ethical Principles in Medical Research on Human Volunteers.

This study's population consists of male and female individuals over the age of 18 and under the age of 65 who reside in the city center of Van, in the eastern part of Turkey, and buy at least two cosmetic products per year. The sample size was calculated for the criteria determination questionnaire, taking the 95% confidence level and the sampling error as 0.1. The minimum sample size to be reached was calculated as 96. To increase the reliability of the results, the researchers tried to get the maximum number of individuals that could be achieved, and 287 individuals participated in the criteria determination questionnaire between 04.03.2020-15.06.2020. The guestionnaires were administered to randomly selected volunteers who wanted to participate in the study in the city center using the face-to-face questionnaire technique, after getting written consent. In addition, to increase the number of participants, the questionnaires were also administered via the internet using the snowball technique.

According to Schmidt, Aumann, Hollander, Damm & von der Schulenburg (2015) and Baby (2013), there is no precise method for determining sample size in AHP studies; large sample sizes are generally not needed. Therefore, 12 consumers shopping via determined alternative CPPC were selected as decision-makers to make pair-wise comparisons in the second phase. These comparisons were conducted face-to-face from 20.06.2020-30.06.2020.

#### **Determining the CPPC selection criteria**

Many factors are involved in the selection of a CPPC. Based on the researchers' experience and literature review (Villi &

Kayabaşı, 2013; Özden, Saygılı, & Sütütemiz, 2019), 22 criteria were determined. The criteria were divided into three groups: (i) 8 criteria related to the purchasing channel, (ii) 3 criteria related to consulting, and (iii) 11 criteria related to the promotion. Participants were asked to score these criteria from 1 (less important) to 5 (very important). The averages of the points given for each criterion were calculated, and criteria with an average score below 3.5 points were eliminated or combined.

#### **Determining the CPPC alternatives**

In light of the structure of the cosmetics market in Turkey and the relevant literature, CPPC alternatives were identified as (i) pharmacies, (ii) cosmetics stores, (iii) supermarkets, (iv) internet stores, and (v) others.

#### **Pair-wise comparisons**

To calculate relative importance values of the criteria and alternatives, participants were asked to evaluate criteria for the second phase of the study, i.e., how much a criterion is preferable to another criterion. Saaty's priority (importance) scale was used (Table 1) to conduct pair-wise comparisons.

| Table 1. Saaty's i | Table 1. Saaty's importance scale.         |  |  |  |  |  |
|--------------------|--|--|--|--|--|--|
| Importance level   | Definition                                 |  |  |  |  |  |
| 1                  | Equalimportance                            |  |  |  |  |  |
| 3                  | Moderately more important than one another |  |  |  |  |  |
| 5                  | Strong importance                          |  |  |  |  |  |
| 7                  | Very strong importance                     |  |  |  |  |  |
| 9                  | Extreme importance                         |  |  |  |  |  |
| 2,4,6,8            | Intermediate / average values              |  |  |  |  |  |

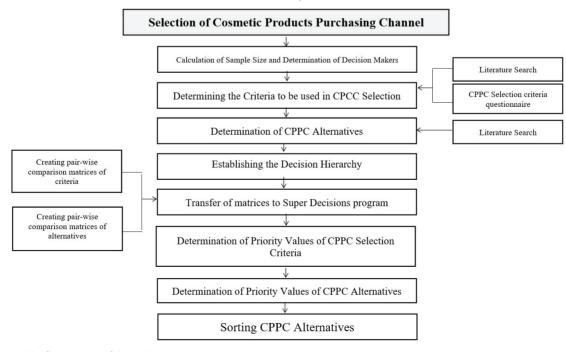


Figure 1. The flow diagram of the application.

## Data analysis

The data obtained from the criteria determination questionnaire were subjected to descriptive statistical analysis via the SPSS 22.0 (IBM Electronics, USA) package program. The Super Decisions 3.2.0 package program was used to analyze paired comparison matrices obtained in the second phase of the study to determine the relative weight of criteria, alternatives, and final weights. Finally, sensitivity analysis was performed to analyze the flexibility of the final decision.

# RESULTS

A total of 287 people participated in the criteria determination questionnaire applied within the scope of this study. 188 of them were women, and 99 of them were men. The average age of the participants was 25.44, and 82% of them were university graduates. Average points of the criteria are given in Table 2.

From Table 2, it is seen that the average of 13 criteria is above 3.5. In the AHP, the number of pair-wise comparisons increases with the number of criteria/alternatives (Ishizaka, Pearman & Nemery, 2012), and a higher number of them can cause complexity. Saaty (1980) recommends choosing a maximum of  $7\pm$ 

|   | Average points |
|---|----------------|
| Criteria related to the purchasing chann  | el             |
| The reliability of the products sold      | 4.293          |
| The quality of the products sold          | 4.328          |
| Brand diversity                           | 3.565          |
| Wide product range                        | 3.575          |
| Selling organic/natural products          | 3.930          |
| Selling magistral products                | 2.794          |
| The design of the store                   | 2.923          |
| Accessibility of the store                | 3.631          |
| Criteria related to consulting            |                |
| Providing additional services             | 3.450          |
| Satisfaction from consulting              | 3.721          |
| Providing free skin/hair care             | 3.370          |
| Criteria related to promotion             |                |
| TV commercials                            | 2.686          |
| Advice from others                        | 3.317          |
| Advice from health care providers         | 3.830          |
| Social media promotions                   | 2.826          |
| Price                                     | 3.770          |
| Promotions provided                       | 3.875          |
| Presentation of giveaways                 | 3.540          |
| Possibility of shopping over the Internet | 3.289          |
| Conditioned promotions                    | 2.878          |
| Possibility ofexchanging the product      | 3.819          |
| Opportunity totry the product             | 3.794          |

2 criteria/alternatives to avoid this situation. These 13 criteria were considered for pair-wise comparisons, and some of them were combined with decreasing the number.

It is seen that the criterion with the highest average is "The quality of the products sold," followed by "The reliability of the products sold." These two criteria are combined into "The quality and reliability of the products sold," because the mean of these two criteria are very close to each other and the criteria are related. The average value for the criteria for brand diversity, wide product range, and presentation of natural/organic products is higher than 3.5, and the values are close to each other, too. For the second phase of the study, these three criteria were combined and named "Product diversity (brand diversity, organic/natural product presentation, etc.)." Lastly, among the criteria related to the purchasing channel, the average of the "The accessibility of the store" criterion was above 3.5, and this criterion took place in the second phase.

According to Table 5, as the average of the "Satisfaction from consulting" criterion is above 3.5, this criterion was considered in the second phase.

The averages of price, discounts, and giveaways criteria, under the criteria for promotion, are above 3.5. Hence, for the second phase of the study, these criteria were combined into "price/promotions" to decrease the number of the criteria. The product trial and product exchange criteria averages were also high, and were incorporated into "Opportunity to try and exchange products." Additionally, the "Advice from health care providers" criterion was included in the second phase due to its average. As a result, seven criteria were determined for the paired comparison questionnaire.

The paired comparison questionnaire will be evaluated in the study's second phase. Firstly, the hierarchical structure with seven criteria and five alternatives was created (Figure 2).

After the hierarchical structure was created, the geometric averages of the responses of the 12 participants for the criteria comparison matrix were taken and rounded to the nearest integer before being transferred to the Super Decisions 3.2.0 Program (Table 3).

To make the matrix given in Table 3 more understandable, "The quality and reliability of the products sold" is six times more preferable than "Price/promotions." "Advice from health care providers" is two times more preferable than "The quality and reliability of the products sold." In addition, "The quality and reliability of the products sold" and "Satisfaction from consulting" have the same preference level.

The result of the criteria comparison is that the most crucial criterion affecting the selection of CPPC of the participants is "satisfaction with the consultancy" (25.2%); this criterion is followed by "advice from health care providers" (22.1%), "quality and reliability of the products sold" (18.3%), and "opportunity to try and exchange the products" (15.4%). The minor effective criteria are found to be price/promotions (8.1%), product diversity (6.4%), and accessibility of the store (4.5%). The inconsistency ratio of the analysis was calculated as 0.084. This value

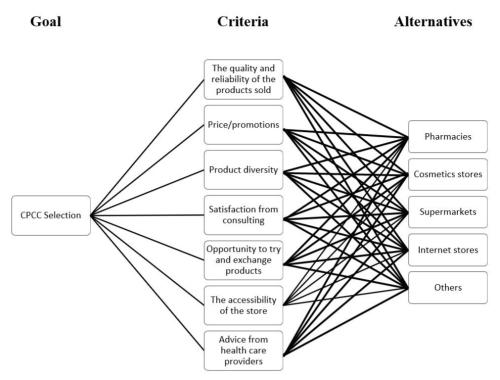


Figure 2. AHP hierarchy framework.

| Criteria   | The quality<br>and reli-<br>ability of<br>the prod-<br>ucts sold | Price/promo-<br>tions | Product<br>diversity | Satisfaction<br>from con-<br>sulting | Opportunity<br>to try and<br>exchange<br>products | The acces-<br>sibility of<br>the store | Advice<br>from<br>health<br>care pro-<br>viders |
|--|--|-----------------------|----------------------|--------------------------------------|---|--|---|
| The quality and<br>reliability of the<br>products sold | 1  | 6                     | 2                    | 1                                    | 1   | 2                                      | 1/2   |
| Price/promo-<br>tions                                  | 1/6  | 1                     | 2                    | 1/5                                  | 1/2   | 4                                      | 1/3   |
| Product diver-<br>sity                                 | 1/2  | 1/2                   | 1                    | 1/5                                  | 1/3   | 3                                      | 1/4   |
| Satisfaction<br>from consulting                        | 1  | 1/5                   | 5                    | 1                                    | 1   | 4                                      | 2   |
| Opportu-<br>nity to try and<br>exchange<br>products    | 1  | 2                     | 3                    | 1                                    | 1   | 3                                      | 1/2   |
| The accessibil-<br>ty of the store                     | 1/2  | 1/4                   | 1/3                  | 1/4                                  | 1/3   | 1                                      | 1/4   |
| Advice from<br>health care<br>providers                | 2  | 3                     | 4                    | 1/2                                  | 2   | 4                                      | 1   |

being below 0.1 shows that the comparisons made by the participants are consistent (Saaty, 1980).

In the last analysis stage, the alternatives were evaluated concerning each criterion, similar to the paired comparison of criteria. Firstly, prioritization between alternatives concerning the "The quality and reliability of the products sold" criterion was done (Table 4).

The inconsistency ratio of the analysis was calculated as 0.09265. According to calculated relative weights (0.618, 0.223, 0.037, 0.073, 0.049) based on Table 4, pharmacies were deter-

mined to be the best alternative for this criterion. A pair-wise comparison of alternatives based on the "Price/promotions" criterion is given in Table 5.

The inconsistency ratio of the analysis was calculated as 0.01656. According to calculated relative weights (0.056, 0.340, 0.110, 0.319, 0.176) based on Table 5, cosmetics stores were determined to be the best alternative for this criterion. A result of prioritization between alternatives concerning the "Product diversity" criterion is presented in Table 6.

The inconsistency ratio of the analysis was calculated as 0.09275. Due to the calculated relative weights (0.463, 0.128, 0.032, 0.244, 0.176) based on Table 6, cosmetics stores were determined to be the best alternative for this criterion. A pair-

wise comparison of alternatives based on the "Satisfaction from consulting" criterion is presented in Table 7.

The inconsistency ratio of the analysis was calculated as 0.08414. According to calculated relative weights (0.617, 0.221, 0.062, 0.039, 0.062) based on Table 7, pharmacies were determined to be the best alternative for this criterion. The pair-wise comparison of alternatives based on the "Opportunity to try and exchange products" criterion is shown in Table 8.

The inconsistency ratio of the analysis was calculated as 0.0492. Relative weights of criteria are 0.122, 0.416, 0.171, 0.169, and 0.122. Accordingly, cosmetics stores were found to be the best. A pair-wise comparison of alternatives based on the "Advice from health care providers" criterion is presented in Table 9.

# Table 4. Pair-wise comparison matrix for the "The quality and reliability of the products sold" criterion.

| The quality and reliability of the<br>products sold | Pharmacies | Cosmetics stores | Supermarkets | Internet stores | Others |
|---|------------|------------------|--------------|-----------------|--------|
| Pharmacies  | 1          | 6                | 8            | 9               | 9      |
| Cosmetics stores                                    | 1/6        | 1                | 6            | 5               | 6      |
| Supermarkets  | 1/8        | 1/6              | 1            | 1/3             | 1/2    |
| Internet stores                                     | 1/9        | 1/5              | 3            | 1               | 2      |

| Price/promotions Pharmacies Cosmetics stores Supermarkets Internet stores Othe |   |     |     |     |     |  |
|--|---|-----|-----|-----|-----|--|
| Pharmacies   | 1 | 1/5 | 1/3 | 1/5 | 1/3 |  |
| Cosmetics stores   | 5 | 1   | 4   | 1   | 2   |  |
| Supermarkets   | 3 | 1/4 | 1   | 1/3 | 1/2 |  |
| Internet stores  | 5 | 1   | 3   | 1   | 2   |  |
| Others   | 3 | 1/2 | 2   | 1/2 | 1   |  |

| Table 6. Pair-wise comparison matrix for the "Product diversity" criterion. |            |                  |              |                 |        |  |
|---|------------|------------------|--------------|-----------------|--------|--|
| Product diversity   | Pharmacies | Cosmetics stores | Supermarkets | Internet stores | Others |  |
| Pharmacies  | 1          | 5                | 8            | 2               | 5      |  |
| Cosmetics stores  | 1/5        | 1                | 9            | 1/2             | 1/2    |  |
| Supermarkets  | 1/8        | 1/9              | 1            | 1/6             | 1/5    |  |
| Internet stores   | 1/2        | 2                | 6            | 1               | 3      |  |
| Others  | 1/5        | 2                | 5            | 1/3             | 1      |  |

| Table 7. Pair-wise comparison matrix for the "Satisfaction from consulting" criterion. |            |                  |              |                 |        |  |
|--|------------|------------------|--------------|-----------------|--------|--|
| Satisfaction from consulting   | Pharmacies | Cosmetics stores | Supermarkets | Internet stores | Others |  |
| Pharmacies   | 1          | 7                | 7            | 8               | 7      |  |
| Cosmetics stores   | 1/7        | 1                | 5            | 7               | 5      |  |
| Supermarkets   | 1/7        | 1/5              | 1            | 2               | 1      |  |
| Internet stores  | 1/8        | 1/7              | 1/2          | 1               | 1/2    |  |
| Others   | 1/7        | 1/5              | 1            | 2               | 1      |  |

The inconsistency ratio of the analysis was calculated as 0.07267. According to calculated relative weights (0.638, 0.184 0.092, 0.044, 0.042) based on Table 9, pharmacies were determined to be the best alternative.

Lastly, the final weight was obtained by combining relative weights via Super Decisions 3.2.0. The program output, including priority values obtained from the analysis, is given in Figure 3.

In light of the data presented in Figure 3, it was determined that pharmacies (46.9%) were the best alternative among the cosmetic product purchasing channels, in line with the criteria discussed in the study, followed by cosmetics stores (24.1%). It was determined that the importance of supermarkets, internet stores, and other alternatives (beauty centers, herbalists, etc.) is around 10%.

In AHP, a sensitivity analysis should be done to see how the changes in the criteria weights will affect the results. There-

fore, sensitivity analyses were performed for each criterion by changing criteria weights via Super Decisions 3.2.0. It was determined that prioritization of purchasing channel alternatives does not affect the change in criterion weights in general.

## DISCUSSION

Within the scope of this study, the cosmetic product purchasing channel preferences of cosmetic consumers in the province of Van were discussed. In this context, the AHP method, which is frequently used in such real-life problems where more than one decision variable is involved, was used. Although there are many studies in the literature on consumers' choice of cosmetic products, the number of studies dealing with the choice of cosmetic product purchasing channel is quite limited.

As a result of the criterion determination survey, it was determined that the factors that most affect the choice of cosmetic product purchasing channel are the reliability and quality of

Table 8. Pair-wise comparison matrix for the "Opportunity to try and exchange products" criterion.

| Opportunity to try and ex-<br>change products | Pharmacies | Cosmetics stores | Supermarkets | Internet stores | Others |
|---|------------|------------------|--------------|-----------------|--------|
| Pharmacies                                    | 1          | 1/3              | 1            | 1/2             | 1      |
| Cosmetics stores                              | 3          | 1                | 3            | 3               | 3      |
| Supermarkets                                  | 1          | 1/3              | 1            | 2               | 1      |
| Internet stores                               | 2          | 1/3              | 1/2          | 1               | 2      |
| Others  | 1          | 1/3              | 1            | 1/2             | 1      |

| I | Table 9. | Pair-wise com | narison matrix fo | r the "Advice f | from health care | providers" criterion. |
|---|----------|---------------|-------------------|-----------------|------------------|-----------------------|
|   | 1000071  |               |                   | I the Autice    |                  |                       |

| Advice from health care pro-<br>viders | Pharmacies | Cosmetics stores | Supermarkets | Internet stores | Others |
|--|------------|------------------|--------------|-----------------|--------|
| Pharmacies                             | 1          | 7                | 8            | 8               | 9      |
| Cosmetics stores                       | 1/7        | 1                | 3            | 5               | 5      |
| Supermarkets                           | 1/8        | 1/3              | 1            | 3               | 3      |
| Internet stores                        | 1/8        | 1/5              | 1/3          | 1               | 1      |
| Others                                 | 1/9        | 1/5              | 1/3          | 1               | 1      |

| Name   | Normalized<br>by cluster | Limiting |
|--|--------------------------|----------|
| The quality and reliability of the products sold | 0.18257                  | 0.091284 |
| Price/promotions                                 | 0.08084                  | 0.040418 |
| Product diversity                                | 0.06357                  | 0.031786 |
| Satisfaction from consulting                     | 0.25186                  | 0.125931 |
| Opportunity to try and exchange products         | 0.15464                  | 0.077322 |
| The accessibility of the store                   | 0.04527                  | 0.022637 |
| Advice from health care providers                | 0.22124                  | 0.110621 |
| Pharmacies                                       | 0.46982                  | 0.234908 |
| Cosmetics stores                                 | 0.24121                  | 0.120607 |
| Supermarkets                                     | 0.09131                  | 0.045653 |
| Internet stores                                  | 0.11862                  | 0.059310 |
| Others   | 0.07905                  | 0.039523 |

the products sold. As with many products, the product's quality and reliability are fundamental reasons for the preference for cosmetic products (Huang & Foosiri, 2017, Desai, 2014). Because cosmetic products are widely used worldwide and are generally applied directly to human skin, it is essential to evaluate their safety (Loretz et al., 2005). In this context, it is expected that the quality and reliability of the products sold will affect the choice of the cosmetic product purchasing channel of the individuals. Furthermore, parallel to Chan & Tran (2016) and Desai (2014), pharmacies have been identified as the most preferred CPPC by participants in terms of product quality and reliability.

It has been determined that the criteria of brand diversity, wide product range, and presentation of natural/organic products are guite effective in choosing a cosmetic product sales channel, and these three factors were combined into "Product diversity (brand diversity, organic/natural product presentation, etc.)." Meydan (2017) revealed that although the price of an organic cosmetic product known worldwide is high compared to other cosmetic products, it is preferred over others. The study also draws attention to the fact that the products chosen in the top ranks are herbal ingredients. Zengin (2019) found that female consumers generally pay attention to the content of cosmetic products, and this affects their cosmetic product purchasing decisions. Accordingly, the findings obtained within the scope of the current study are in line with the literature. It is thought that product ingredients and diversity are important for consumers in cosmetic products because users want to protect their existing skin health while using cosmetic products. However, considering this criterion in terms of factors affecting the choice of cosmetic product purchasing channel, it is seen that the effect of product diversity is not very high.

It is known that modern-day customers are more demanding and information-seeking, especially when selecting healthcare products and healthcare product purchasing channels. According to Chan & Tran (2016), consumers accepted pharmacies as trustworthy purchasing channels for healthcare products regarding information and product. Yıldırım (2016) revealed that the sources from whom consumers get the most information and most trust are doctors, pharmacists, and their relatives, while advertising is in the last place. Görkemli, Matır, Seki, & Çelik (2016) emphasized the importance of the store's advertising, promotion, and accessibility in purchasing cosmetic products. Özden et al. (2019) stated that individuals consider friends' advice about cosmetic products, in particular; in contrast, beauticians and sales consultants are the least preferred source of information. As a result of this study, advice from health care providers and others and satisfaction in consultancy were influential factors in selecting cosmetic product purchasing channels, and price/promotions were relatively less important. Farrag, El Sayed, & Belk (2010) revealed that the shopping center's features, the discounts/promotions offered in the store, accessibility, and security factors affect consumers' decisions to go to shopping malls. In the study conducted by Kabadayı & Paksoy (2016), it was observed that, among the individual's various purposes in going to the shopping mall, finding the cheapest product attracted attention. Görkemli et

al. (2016) emphasized the importance of accessibility of the store in purchasing cosmetic products. Also, Kawa, Rahmadiani & Kumar (2013) found the store's location to be a significant factor affecting consumers' imported cosmetics purchasing behavior. In contrast, the price/promotions and accessibility of the purchasing channel discussed in this study are the minor effective criteria in choosing a cosmetic product purchasing channel.

Balkan & Nardalı (2019) stated that consumers are more inclined to buy cosmetic products by trying them. Individuals prefer not to buy make-up products advertised by various famous people or internet phenomena on online platforms without trying them. Accordingly, within the scope of the current research, it is seen that the probability of participants buying a make-up product that is sold in advertisements, internet sales, supermarkets, and other purchasing channels that they have not tried is very low. In this context, pharmacies that offer the opportunity to try products are at the forefront.

Wu & Chan (2011) revealed that physical stores are more preferred than internet stores when purchasing cosmetic products. The satisfaction with the service offered is particularly effective in this preference. Özden et al. (2019) determined that women prefer cosmetics chain markets and men prefer markets, and found that men prefer pharmacies more than women. Similarly, this study has shown that pharmacies are the best alternative among the cosmetic product purchasing channels, followed by cosmetic markets. Furthermore the importance levels of other CPPS (supermarkets, the internet, and others) are very close to each other.

# CONCLUSION

In this study, through the AHP, the relationship between the criteria for the evaluation of the consumer was found, their weights were determined, and the results were evaluated by ranking the criteria according to their importance. It has been observed that consumers prefer pharmacies more than other purchasing channels when purchasing cosmetic products in Van. The quality and reliability of the products offered in pharmacies, the ability to obtain information about the product via experts, the opportunity to compare different brands, and the possibility of trying and exchanging the products are the reasons for the preference for pharmacies. It should be noted that the dynamics of the province of Van were also influential in determining that pharmacies are the most preferred CPPC in this study. The number of shopping centers and cosmetic markets located in Van's city center is relatively low compared to other metropolises in Turkey. This may also have caused the study results to favor the pharmacy.

Although the number and efficiency of information sources has increased in all fields, consumers take into account health care providers' recommendations in particular when shopping for cosmetic products. This result can be seen as a sign that consumers do not sufficiently trust communication and information tools in an environment where they encounter hundreds of advertisements every day. Therefore, it would be more appropriate for cosmetic companies to set up their marketing

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efforts to support pharmacies' services, which society accepts as high quality and reliable. Understanding customer needs, expectations, and experiences is vital for optimizing the quality of services offered. Thus, pharmacies with a significant market share in the cosmetics sector can further their cosmetics services by considering the consumer demands highlighted in this study.

The fact that Van is a province with high tourism potential, especially from neighboring countries, is also thought to impact the study results. Therefore, in future studies, the study criteria can be increased and the study can be expanded with participation from consumers from different cultures. In addition, future studies can be designed for other OTC product groups, such as immune enhancers, nutritional supplements, baby products, etc., via a similar approach.

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