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# THE ROLE OF DERMOCOSMETIC PACKAGING IN CONSUMER **BUYING DECISIONS**

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#### ABSTRACT

The aim of this study is to identify the role of packaging as a determining factor in the purchase of dermocosmetic products, and to assess the impact of various elements and features of dermocosmetic packaging on product perception and buying decisions made by consumers. A direct personal interview survey covered a group of female consumers making regular purchases of dermocosmetic products in pharmacies. The survey revealed that although dermocosmetic packaging is not seen as one of the major determinants to purchase, its close connection to the perception of a dermocosmetic's safety cannot be ignored. While shopping, consumers tend to consider the following features of dermocosmetic packaging: its effectiveness in protecting the product; label information; and product security.

Key words: dermocosmetic products, packaging, buying decisions, consumers JEL codes: M30

# INTRODUCTION

Unit packaging plays an important role in managing consumer products and is used as a marketing tool, becoming the basic identifier and determinant of a product's competitiveness. Packaging involves a set of features that, when properly designed and selected, indicate the nature and attributes of the packaged product, which affects consumer purchasing behavior. Poorly designed packaging leads to consumer misinterpretation of a product's features and attributes, which reduces the effectiveness of a company's marketing strategy. It is therefore important to identify the elements affecting consumers' perceptions of a product and their purchasing decisions. The dynamically developing market of dermocosmetics, with a wide range of products on offer, has seen interesting developments in unit packaging.

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Dermocosmetics are cosmetics aimed at the care of specific skin types and skin problems, distributed only in pharmacies [Rzeźnik et al. 2012]. Much has changed since these types of cosmetics gained their own definition and category, and dermocosmetics have slowly begun to fill the shelves of the largest drugstore chains. However, consumers still mainly associate them with pharmacies and as having specialized properties, perhaps because pharmacies are places where prescription and non-prescription drugs (known as "over-the-counter" or OTC drugs) are available, along with dietary supplements and dermocosmetics [Mruk et al. 2014].

Given the wide variety of products, diversified unit packaging and sales methods, coupled with psychologically-conditioned behaviour patterns of individual consumers, it is impossible to definitively state that product packaging is one of the major factors determining buying decisions. However, as unit packaging is closely connected with the product itself, it plays a significant role in the buying patterns displayed by consumers [Ankiel-Homa 2012].

# FUNCTIONS OF THE PACKAGING OF DERMOCOSMETIC PRODUCTS

Product packaging is cross-functional and plays a fundamental role along the supply chain, fulfilling requirements placed on it from logistics, marketing and the environment. Figure 1 shows the main packaging interactions. Packaging satisfies certain functionality criteria which comprise the following: product protection, production process functionality, storage and transport chain functionality, product and producer presentation, provision of necessary information, usefulness, consumer acceptance, compliance with environmental protection requirements and conformance to applicable standards [Lisińska-Kuśnierz and Ucherek 2006].

Packaging requirements are enumerated in the applicable regulations. The form, structure and material of packaging should guarantee the following: its tightness, durability, functionality, adequate shape and size, barrier capacity, consumer acceptance and positive impression of the product, producer and brand. Often packaging details such as color, graphic design, manufacturing and finishing techniques, and the usage solutions (i.e. opening, closing and dispensing) are the only differences to be found [Walden-Kozłowska 2005]. Visual design of packaging is a set of messages which can be conveyed by the kind of materials, size, shape, color, graphic features (such as the position of text, images, symbols, drawings, etc.) and functional solutions (such as easy product dispensing) [Lisińska-Kuśnierz and Ucherek 2006].

Packaging color can attract a consumer's attention, as well as make it easier to recognize the product, create a positive image of the product, brand and producer, and give an accurate impression of a product's capacity. Moreover, well-matched colors may help distinguish a product be other similar-purpose products and inspire consumer trust. Graphic design, i.e. all kinds of text, colorful elements, symbols, photographs and drawings, should not only provide information, but also appeal to consumers, encouraging them to buy the product [Walden-Kozłowska 2005]. The colors of dermocosmetic packaging remain more ascetic in style than other cosmetics which are available in drugstores. Dermocosmetic packaging is usually done in cold colors (white, blue), which helps to associate them with the idea of purity, freshness and sterile preparation. Some packaging colors and symbols have come to be associated with a particular skin problem, e.g. green - with acne, red



**Fig. 1.** The packaging interactions Source: Saghir [2002].

- with vascular issues, orange - with sun protection. There is also a market trend among dermocosmetics producers to use practical packaging, e.g. airless packaging, tubes, and sprays that ensure more sterile and safe use of products.

Product packaging is not one of the major factors determining the buying decision. However, since it is closely connected with the product itself, it plays a significant role in the buying patterns displayed by consumers [Ankiel-Homa 2012]. The significance of unit packaging in the buying process is conditioned, to a large extent, on the type of buying decision. In habitbased decisions, the packaging reminds the consumers of the product and brand, and strengthens their habitual behaviors. In such cases, the structural and visual elements are more important than information. In impulse--based decisions, the packaging serves as a means of advertising the product; it identifies both the brand and the product, invoking certain impressions regarding the product's value. In such cases, the structural and visual elements of unit packaging are considered the most significant. In prudent decisions, the packaging carries specific product information and influences the marketed product assessment [Ankiel-Homa 2012].

The unit packaging determines the consumer's perception of functionality, the ease of opening and closing, and environmental-friendly aspects. The features of the packed product, along with its quality and the benefits derived from its use, including the economic benefits, health-related benefits, natural character or environmental friendliness of the product are viewed by the consumer through the prism of its packaging [Ankiel-Homa 2012].

Cosmetics packaging has been studied by various authors. According to Topoyan and Bulut [2008], the packaging design of commonly marketed brands is associated with a higher precedence of purchase expectations. Packaging design becomes more significant when it is designed for aesthetics and to deliver specific information to consumers. Grundey [2010] confirmed that packaging plays an important role in the process of creating a product, promoting it and finally selling it. All functions of the packaging as protection, utility and communication are important, and have to be analyzed when creating a new product. If they are not judged correctly, the price of the product can be seen as too high or the product can be unattractive to consumers, and thus they will not be willing to purchase it. Grundey showed that cosmetic brands could be recognized by only the packaging, without knowing the brand. Cosmetic brands try to use neutral, earth, natural and recycled materials in their packaging design, which greatly appeals to consumers. Applying green and innovative technologies in packaging also plays as a strong positioning factor for cosmetic brands and their primary and secondary packaging to support transportation and prolong shelf-life.

Ezekiel et al. [2014] revealed that there are significant relationships between the packaging color, labeling and the quality of the packaging materials and consumer choice of cosmetic products. Packaging label, color and the quality of packaging material should create a favorable impression of the product for customers. Mohamed et al. [2018] showed that cosmetics consumer behavior was, in fact, affected by the visual elements of the cosmetics packaging designs and thus affected the consumers' purchase intentions. Moreover, material and color of hairstyle, skin care, and make-up product packaging were proved to be of high importance with respect to the level of attractiveness and effect on consumers' preferences. Adofo [2014] found that consumers consider the packaging of a beauty product before they make a purchase, and the level of influence that packaging has on the consumers' buying decision was high. However, most researchers said that packaging does not guarantee quality, but rather helps in catching consumers attention, defining the product identity, and protecting the product.

As mentioned above, cosmetics packaging has been studied by many authors, but there is little research on the packaging of dermocosmetics sold in pharmacies. Due to the fact that dermocosmetics are products intended for the care of skin problems, the author decided to check whether in this case packaging and its features also play an important role in consumer purchasing decisions.

The aim of this study was to identify the role of packaging as a factor determining the purchase of dermocosmetic products, and to assess the impact of various elements and features of dermocosmetic packaging on product perception and buying decisions made by consumers in pharmacies.

### MATERIAL AND METHODS

The material was the unit packaging of dermocosmetics intended for face care. This specific category was chosen because it is the largest category of dermocosmetic products available in the dermocosmetic market. Respondents were asked to assess the significance of dermocosmetic product packaging, and the specific elements and features taken into account in the buying process.

With a view to solving the research query and meeting the set objective, direct personal interview surveys were conducted over the course of July, August and September 2017, in the Wielkopolskie Province on a group of 553 female consumers aged 15 and older. A non-probability sampling method was employed to select the respondents, as a result of which only women declaring regular purchases of dermocosmetic products were surveyed. The research results indicate a high share of women in making buying decisions [Kieżel and Smyczek 2012], both regarding cosmetics [Jurowczyk 2013] and dermocosmetics [Baranowska-Skimina 2012], therefore the study sample were women declaring regular purchases of dermocosmetics in pharmacies.

The sample selection process also took into account such demographic features as age, education, monthly net income per family member, subjective assessment of one's own financial position and place of residence. Those criteria were considered significant as they differentiate the buying styles of individual consumers. The structure of respondents included in the survey is presented in Table 1. This structure, according to the age criterion, corresponded to the distribution of the population of inhabitants of Wielkopolska [GUS 2015]. Women aged 20-29 accounted for 29.7% of all respondents while women aged 15-19 constituted only 7.0% of the surveyed group. Most respondents had attained the higher (54.8%) or secondary educational level (35.8%) and resided in cities of more than 101,000 inhabitants (37.8%) or 51,000-100,000 inhabitants (21.9%). Most respondents declared monthly net income for one family member above PLN 2,001 (75.6%) and assessed their own financial position as average or above average (85.2%).

Specification		Sample size	Percentage (%)
Sex	women	553	100.0
	15–19	39	7.0
<b>A</b> and (1100mg)	20–29	164	29.7
	30–39	125	22.6
Age (years)	40–49	79	14.3
	50–59	89	16.1
	60+	57	10.3
	primary	12	2.2
Education	vocational secondary	40	7.2
	secondary	198	35.8
	higher	303	54.8
	up to 1 000	10	1.8
Monthly net income	1 001–1 500	31	5.6
for 1 family	1 501-2 000	94	17.0
member (PLN)	2 001-2 500	150	27.1
()	2 500+	268	48.5
of own financial position ab	very bad	4	0.7
	below average	43	7.8
	average	309	55.9
	above average	162	29.3
	very good	35	6.3
	rural area	76	13.7
	town up to 20,000 inhabitants	67	12.1
Place of residence	town of 21,000–50,000 inhabitants	80	14.5
	city of 51,000–100,000 inhabitants	121	21.9
	city of more than 101,000 inhabitants	209	37.8

#### Table 1. The survey sample structure

Source: Author's own compilation based on the surveys conducted (N = 553).

#### **RESULTS AND DISCUSSION**

In the conducted survey, the impact of unit packaging of dermocosmetic products on consumer buying decisions was analyzed. Surveys conducted by the Centre for Public Opinion Research TNS OBOP in 2007 for the cosmetic market [Urząd Ochrony Konkurecji i Konsumentów 2007] indicated that only 7% of the respondents admitted to paying attention to the visual aspects and packaging. The preliminary research, carried out by the author on a group of 150 female respondents in 2015 [Malinowska 2015], also revealed that dermocosmetic packaging was not an important purchase determinant (an average of 2.87). In the current 2017 study, the respondents also stated that the packaging was not an important purchase determinant (an average of 2.80). The survey results are shown in Table 2. However, it should be noted that the packaging of a dermocosmetic product is closely connected to its brand. In consequence, while searching for a given product, the consumer looks for a specific packaging.

Spearman's rank-order correlation was used to identify statistically significant relationships between socio-demographic factors and the significance of the product packaging for choosing dermocosmetics when shopping in pharmacies. The age of the respondents, their education, place of residence, monthly income per family member, or the assessment of their own financial situation did not have an essential influence on the differences in their declared importance of the dermocosmetic packaging in the product purchase process (p > 0.05). The assessments of importance of the packaging (on a scale from one to five, where 1 - the least important factor and 5 - the most important one) were similar to one another in individual groups.

As part of the personal interview, respondents were asked to assess the significance of specific dermocosmetic packaging features that they take into account in the buying process. These included: type of packaging material,

	1 5		
Specification		Value	Spearman rank order correlation results
Sex	women	$2.80 \pm 1.19$	_
	15–19	$3.13 \pm 1.32$	
	20–29	$2.82 \pm 1.18$	
	30–39	$2.79 \pm 1.21$	R = -0.078;
Age (years)	40–49	$2.85\pm\!\!1.18$	t(N-2) = -1.83; p = 0.068
	50-59	$2.76 \pm 1.19$	r
	60+	$2.53 \pm 1.14$	
	primary	$3.50\pm1.31$	
Education	vocational secondary	$2.63 \pm 1.27$	R = -0.03; t (N-2) = -0.698;
	secondary	$2.84 \pm 1.20$	p = 0.486
	higher	$2.77\pm\!\!1.17$	
Manthla	up to 1 000	$3.40 \pm 1.07$	
Monthly net income	1 001-1 500	$2.61 \pm 1.26$	R = 0.022;
for 1 family	1 501-2 000	$2.59 \pm 1.16$	t(N-2) = 0.506;
member (PLN)	2 001-2 500	$2.94 \pm 1.28$	p = 0.613
	2 500+	$2.80 \pm 1.15$	
	very bad	$2.25\pm\!\!0.96$	
Assessment	below average	$3.28 \pm 1.28$	R = -0.001;
of own financial	average	$2.72\pm\!\!1.20$	t(N-2) = -0.025;
situation	above average	$2.77\pm\!\!1.15$	p = 0.98
	very good	$3.17\pm\!\!1.15$	
	rural area	$2.70 \pm \! 1.20$	
Place of residence	town up to 20,000 inhabitants	$2.93 \pm 1.18$	
	town of 21,000–50,000 inhabitants	2.60 ±1.09	R = 0.053; t(N-2) = 1.234;
	city of 51,000–100,000 inhabitants	2.74 ±1.18	<i>p</i> = 0.218
	city of more than 101,000 inhabitants	2.91 ±1.24	

Table 2.	The packaging as a determinant of buying a dermocosmetic
	product in the pharmacy

p – significance level for the test value; R – Spearman's R-value; t – value of t statistics checking the significance of Spearman's R factor Source: Author's own compilation based on the surveys conducted (N = 553).

structural form of the packaging, packaging shape, packaging color, graphic design (i.e. the placement of text, drawings, symbols, etc.), environmental-friendly aspects, packaging functionality (i.e. easy opening, closing and dispensing, as well as durability), quality of workmanship/aesthetic aspects, product security – the safety of the packaging compared to the product (e.g. the lack of negative interactions), effective protection of the product in use, and label information. The obtained results are shown in Table 3.

Specification		Type of packaging material	Structural form of packaging	Packaging shape	Packaging color	Graphic design	Environmen- tal-friendly aspects
Sex	women	$2.55 \pm 1.16$	$2.73 \pm 1.13$	$2.63 \pm 1.14$	$2.59 \pm 1.18$	$2.66 \pm 1.18$	$2.85 \pm 1.21$
Age (years)	15–19	2.51 ±1.25	$2.67 \pm 1.26$	$2.74 \pm 1.25$	$2.77 \pm 1.27$	2.79 ±1.26	$2.74 \pm 1.29$
	20–29	$2.46 \pm 1.11$	$2.74\pm1.16$	$2.64 \pm 1.12$	$2.67 \pm 1.12$	$2.79 \pm 1.09$	$2.76 \pm 1.17$
	30–39	$2.62 \pm 1.14$	$2.74\pm\!\!1.02$	$2.62 \pm 1.05$	$2.54 \pm 1.09$	$2.69 \pm 1.12$	$2.92 \pm 1.15$
	40–49	2.51 ±1.15	$2.73 \pm 1.17$	2.63 ±1.19	$2.56 \pm 1.26$	$2.48 \pm 1.21$	$2.77 \pm 1.28$
	50-59	$2.73 \pm 1.26$	$2.69 \pm 1.21$	$2.57 \pm 1.26$	$2.53 \pm 1.32$	2.63 ±1.27	$3.09 \pm 1.24$
	60+	$2.47 \pm 1.12$	$2.72\pm\!\!1.08$	$2.63 \pm 1.08$	$2.44 \pm 1.13$	$2.40 \pm 1.28$	$2.77 \pm 1.27$
	primary	$3.08 \pm 1.56$	$2.92\pm\!\!1.38$	$2.92\pm\!\!1.38$	$2.92 \pm 1.31$	$3.08 \pm 1.31$	$3.08 \pm 1.38$
	vocational secondary	$2.43 \pm 1.11$	$2.63 \pm 1.15$	$2.80 \pm 1.09$	$2.73 \pm 1.38$	$2.53 \pm 1.38$	$2.78\pm\!\!1.42$
Education	secondary	$2.44 \pm 1.11$	$2.67 \pm 1.11$	$2.64 \pm 1.15$	$2.63 \pm 1.16$	$2.70 \pm 1.16$	$2.78\pm1.14$
	higher	$2.62 \pm 1.17$	$2.77 \pm 1.14$	$2.59 \pm 1.13$	$2.53 \pm 1.16$	2.63 ±1.16	$2.90 \pm 1.22$
	up to 1 000	$2.40 \pm 1.35$	$2.40 \pm 1.17$	$2.40 \pm 1.17$	$2.20 \pm 1.23$	$2.00\pm\!\!0.94$	$2.70 \pm 1.42$
Monthly net income	1 001–1 500	2.71 ±1.24	$2.48 \pm 1.09$	$2.71 \pm 1.10$	$2.42 \pm 1.20$	$2.65 \pm 1.14$	$3.03 \pm 1.20$
for 1 family	1 501-2 000	$2.36\pm\!\!1.22$	$2.73 \pm 1.23$	$2.59 \pm 1.13$	$2.57 \pm 1.22$	$2.49 \pm 1.18$	$2.78\pm\!\!1.35$
member (PLN)	2 001-2 500	$2.59 \pm 1.11$	$2.69 \pm 1.09$	$2.68 \pm 1.09$	$2.77 \pm 1.18$	$2.77 \pm 1.20$	$2.90 \pm 1.24$
(I LIV)	2 500+	$2.58\pm\!\!1.15$	$3.50\pm0.97$	$3.70\pm0.95$	$3.30\pm0.97$	$3.70\pm0.95$	$4.00\pm1.05$
	very bad	$2.00 \pm 0.82$	1.75 ±0.96	$2.00\pm0.82$	1.75 ±0.96	$2.25\pm\!\!0.96$	$2.25 \pm 0.96$
Assessment	below average	$2.72 \pm 1.08$	$2.77 \pm 1.04$	$2.95\pm\!\!0.97$	$2.84 \pm 1.19$	2.95 ±1.21	$2.95 \pm 1.19$
of own financial	average	$2.58 \pm 1.19$	$2.73 \pm 1.14$	$2.67 \pm 1.17$	$2.64 \pm 1.18$	2.61 ±1.17	$2.86 \pm 1.27$
situation	above average	$2.43 \pm 1.10$	$2.67 \pm 1.11$	$2.49 \pm 1.10$	$2.43 \pm 1.15$	$2.62 \pm 1.17$	$2.72\pm1.08$
	very good	$2.69 \pm 1.28$	$3.25\pm1.50$	$3.00 \pm 1.41$	$2.75 \pm 1.26$	$3.25 \pm 1.71$	$3.00 \pm 1.41$
	rural area	$2.26 \pm 1.16$	$2.62 \pm 1.22$	$2.59 \pm 1.18$	$2.42 \pm 1.25$	$2.37 \pm 1.21$	$2.62 \pm 1.21$
Place of residence	town up to 20,000 inhabitants	$2.54 \pm 1.17$	$2.79 \pm 1.08$	2.66 ±1.20	$2.55 \pm 1.28$	$2.60 \pm 1.14$	2.78 ±1.25
	town of 21,000–50,000 inhabitants	2.63 ±1.19	$2.60 \pm 1.03$	$2.68 \pm 1.10$	$2.69 \pm 1.09$	$2.88 \pm 1.13$	$2.90 \pm 1.18$
	city of 51,000–100,000 inhabitants	$2.73 \pm 1.08$	$2.74 \pm 1.09$	$2.58 \pm 1.14$	$2.61 \pm 1.23$	$2.73\pm\!\!1.22$	3.13 ±1.13
	city of more than 101,000 inhabitants	2.53 ±1.17	$3.00 \pm 1.45$	$3.84 \pm 1.12$	$3.84 \pm 1.05$	$4.25\pm\!\!0.88$	$4.00 \pm 1.06$

**Table 3.** The features of packaging taken into account in the buying process of dermocosmetic products

Malinowska, P. (2020). The role of dermocosmetic packaging in consumer buying decisions. Acta Sci. Pol. Oeconomia 19 (3), 39–47, DOI: 10.22630/ASPE.2020.19.3.26

Specification		Packaging functionality	Quality of workmanship	Product security	Effective protection of the product in use	Label information
Sex	women	3.72 ±1.11	$3.49 \pm 1.11$	3.91 ±1.13	$4.05 \pm 1.04$	$3.98\pm0.99$
Age (years)	15–19	$3.49 \pm 1.21$	3.41 ±1.33	$3.64 \pm 1.37$	$3.97 \pm 1.20$	$3.79 \pm 1.28$
	20–29	$3.68 \pm 1.06$	$3.43 \pm 1.06$	$3.82 \pm 1.18$	$3.97 \pm 1.12$	$4.02\pm\!\!0.96$
	30–39	$3.62 \pm 1.11$	$3.53 \pm 1.11$	$3.99 \pm 1.05$	$4.15 \pm 0.86$	$3.96\pm0.95$
	40–49	$3.92 \pm 1.14$	$3.38 \pm 1.10$	$4.15 \pm 1.08$	$4.19 \pm 0.96$	$4.10\pm0.83$
	50–59	$3.80 \pm 1.10$	$3.62 \pm 1.08$	$4.01 \pm 1.05$	$4.06 \pm 1.04$	$3.98 \pm 1.07$
	60+	$3.84 \pm 1.10$	$3.56 \pm 1.10$	$3.68 \pm 1.15$	$3.95 \pm 1.10$	$3.84 \pm 1.01$
	primary	$3.92 \pm 1.16$	$4.17 \pm 1.03$	$3.92\pm1.00$	$4.00\pm0.95$	$3.58 \pm 1.00$
	vocational secondary	$3.93 \pm 1.05$	$3.63 \pm 1.15$	$3.75 \pm 1.26$	$4.15 \pm 1.14$	$3.98 \pm 1.05$
Education	secondary	3.61 ±1.10	$3.40 \pm 1.11$	$3.85 \pm 1.13$	$3.93 \pm 1.11$	$3.92 \pm 1.02$
	higher	3.76 ±1.11	$3.50 \pm 1.09$	$3.97 \pm 1.13$	4.13 ±0.97	$4.03 \pm 0.96$
	up to 1 000	$2.70 \pm 1.49$	2.50 ±1.27	3.10 ±0.99	3.80 ±1.23	$3.40 \pm 1.65$
Monthly net income	1 001–1 500	$3.39 \pm 1.15$	$3.03 \pm 1.14$	$3.29\pm1.35$	$3.55 \pm 1.34$	$3.16 \pm 1.37$
for 1 family	1 501-2 000	$3.77 \pm 1.08$	3.41 ±1.20	$3.80 \pm 1.21$	$4.02 \pm 1.16$	$4.00 \pm 1.06$
member (PLN)	2 001-2 500	3.87 ±1.11	3.61±1.06	$4.05 \pm 1.04$	4.16 ±0.96	$4.02 \pm 0.99$
(ILN)	2 500+	$3.50 \pm 1.08$	$3.60 \pm 1.17$	$2.80\pm1.23$	$2.90 \pm 1.29$	$2.90 \pm 1.45$
Assessment of own financial	very bad	3.25 ±1.71	2.75 ±0.96	3.50 ±1.29	3.50 ±1.29	1.75 ±0.96
	below average	3.53 ±1.22	$3.14 \pm 1.19$	3.51 ±1.22	3.88 ±1.29	$3.63 \pm 1.22$
	average	3.76 ±1.12	3.53 ±1.13	$3.90 \pm 1.15$	$4.04 \pm 1.05$	$3.95 \pm 1.00$
situation	above average	$3.74 \pm 1.02$	$3.51 \pm 1.00$	$3.99 \pm 1.08$	$4.10 \pm 0.97$	$4.18\pm0.81$
	very good	$3.00 \pm 1.63$	$3.00 \pm 1.41$	$3.25 \pm 1.71$	$2.75 \pm 1.06$	$3.00 \pm 1.31$
Place of residence	rural area	3.61±1.20	$3.46 \pm 1.00$	3.71 ±1.21	$4.01 \pm 1.06$	$3.92 \pm 1.04$
	town up to 20,000 inhabitants	$3.64 \pm 1.00$	3.52 ±1.06	3.79 ±1.24	4.10 ±1.02	3.91 ±1.22
	town of 21,000–50,000 inhabitants	$3.74 \pm 1.09$	3.56 ±1.08	4.13 ±0.93	4.04 ±0.97	$4.06 \pm 0.83$
	city of 51,000–100,000 inhabitants	3.83 ±1.03	3.54 ±1.11	4.11 ±0.99	4.17 ±0.97	$4.00\pm\!\!0.96$
	city of more than 101,000 inhabitants	$4.12 \pm 1.14$	3.41 ±1.05	3.28 ±1.11	2.83 ±1.32	$2.75\pm\!\!1.27$

#### Table 3, cont.

Source: Author's own compilation based on the surveys conducted (N = 553).

Based on the 2017 survey results, it can be inferred that the effective protection of the product in use, label information and product security are the most important packaging elements taken into consideration while purchasing a dermocosmetic product. These three are followed by packaging functionality and quality of workmanship/aesthetic aspects. Less attention is paid to the environmental-friendly aspects, structural form, graphic design, packaging shape, color and type of the packaging material. The preliminary research, carried out by the author on a group of 150 female respondents in 2015 [Malinowska 2016], also revealed that the most important packaging features were effective protection of the product, the packaging functionality, label information, product security and quality of workmanship/aesthetic aspects. Less attention was also paid to the environmental-friendly aspects, form and shape of the packaging and packaging material.

The age of the respondents had a statistically significant influence on the importance of such features of the dermocosmetic packaging as the structural form and functionality of the packaging. When buying dermocosmetics, younger consumers (under 40) paid more attention to the structural form of the packaging, whereas older consumers (over 40) were more interested in the functionality of the packaging. Monthly net income per family member in the families of the respondents had a statistically significant influence on how important the safety of the packaging was to them, compared to the product (product security). An increase in the level of the income meant that respondents paid more attention to product security. However, for respondents with the highest level of income, this feature was less important when buying the dermocosmetic. The financial situation of the surveyed consumers had an essential influence on their different assessments of the importance of the shape of the dermocosmetic packaging, product security and information included on it. For respondents who assessed their financial situation as very bad, the shape of the packaging and information included on it were less important, whereas consumers who assessed their financial situation as average and above average paid more attention to the product security (safety of the packaging compared to the product). Education and place of residence did not have an essential influence on the declared importance of the individual features of product packaging in the buying process for a specific dermocosmetic. The assessments of the significance of the packaging features were similar to one another in individual groups differing in education levels and places of residence.

Both surveys from 2015 and 2017, confirmed that dermocosmetics packaging is not an important purchase determinant for female respondents, but it is closely connected to the safety of dermocosmetics. The respondents pay attention to product security – the safety of the packaging compared to the product (i.e. the lack of negative interactions), effective protection of the product in use, and label information. On the other hand, although eco trends in the market are observed, the consumers of dermocosmetics do not pay attention to environmental-friendly aspects or type of packaging material.

# CONCLUSION

Although dermocosmetic packaging is not one of the major purchase determinants, its close connection to the perception of a dermocosmetic's safety cannot be ignored. While searching for a specific product, the consumer looks for a characteristic packaging which, in the case of dermocosmetic products, carries a number of significant messages. The consumer pays attention to the effective protection of the dermocosmetic in use, label information and product security (like the lack of negative interactions). These are important elements, as women with skin problems want to feel safe while using dermocosmetics. They want also to be informed about uses and properties of a product that they apply to their skin. This kind of information is included in the dermocosmetic product packaging, influencing its perception and the attitude taken by consumers with respect to the packed product, and hence their buying decisions.

The conducted survey allowed to obtain data on the importance of particular features of dermocosmetic packaging. Summarizing the analysis of the conducted study, there is a need for finding and designing new forms of marking, together with graphic solutions adjusted to consumers' expectations. Packaging of dermocosmetics can be an effective tool of market communications only if quickly-changing needs and expectations of consumers regarding its functions are met. The results of the research can be used by cosmetic companies, especially marketing departments, in designing and introducing new products to the market that meet consumers' expectations. Correct adjustment of markings placed by the manufacturers is necessary if they want to effectively use dermocosmetic packaging as a medium of information in marketing communications.

# REFERENCES

- Adofo, A.O. (2014). The effect of beauty product packaging on consumer buying decision (A case of selected shops in the New Juabeng Municipality, Ghana). Business and Management Review, 5 (3), 14–21.
- Ankiel-Homa, M. (2012). Wartość komunikacyjna opakowań jednostkowych. Wydawnictwo Uniwersytetu Ekonomicznego w Poznaniu, Poznań.
- Baranowska-Skimina, A. (2012). Polscy konsumenci a dermokosmetyki. Retrieved from: http://www.egospodarka.pl/77907,Polscy-konsumenci-a-dermokosmetyki,1,39,1.html [accessed: 28.04.2020].
- Ezekiel, M.S., Anyadighibe, J., Samuel, E.N. (2014). The effects of packaging on consumer choice of cosmetic products: a case of University of Calabar Community. International Journal of Economics, Commerce and Management, 2 (4), 1–11.
- Grundey, D. (2010). Functionality of product packaging: surveying consumers' attitude towards selected cosmetic brands. Economics and Sociology, 3 (1), 87–103.
- GUS (2015). Ludność według płci i wieku. Stan w dniu 31.12.2015, Warszawa.
- Jurowczyk, P. (2013). Płeć a proces podejmowania decyzji w miejscu zakupu. Handel Wewnętrzny, 2 (343), 83–94.
- Kieżel, E., Smyczek, S. (2012). Zachowania rynkowe kobiet. Wybory i determinanty. Placet, Warszawa.
- Lisińska-Kuśnierz, K., Ucherek, M. (2006). Opakowania w ochronie konsumenta. Wydawnictwo Akademii Ekonomicznej w Krakowie, Kraków.
- Malinowska, P. (2015). The impact of selected elements and features of unit packages of dermocosmetic products on

product perception and buying decisions taken by consumers. Intercathedra, 31 (2), 35–42.

- Malinowska, P. (2016). Informational function of dermocosmetics' packaging. Towaroznawcze Problemy Jakości, 2 (47), 94–103.
- Mohamed, N.B.A., Medina, I.G., Romo, Z.G. (2018). The effect of cosmetics packaging design on consumers' purchase decisions. Indian Journal of Marketing, 48 (12), 50–61.
- Mruk, H., Pilarczyk, B., Michalik, M. (2014). Marketing strategiczny na rynku farmaceutycznym. Wolters Kluwer S.A., Warszawa.
- Rzeźnik, S.Z., Kordus, K., Śpiewak, R. (2012). Kosmeceutyki i dermokosmetyki – unikalna kategoria produktów do pielęgnacji skóry czy zwykły chwyt marketingowy? Estetologia Medyczna i Kosmetologia, 2 (4), 101–103.
- Saghir, M. (2002). Packaging information needed for evaluation in the supply chain: the case of the Swedish grocery retail industry. Packaging Technology and Science, 14, 37–46.
- Topoyan, M., Bulut, Z.A. (2008). Packaging value of cosmetics products: an insight from the view point of consumers. ICOVACS, 183–190. Retrieved from: www. kisi.deu.edu.tr/mert.topoyan/dosyalar/topoyan-bulut. pdf [accessed: 28.04.2020].
- Urząd Ochrony Konkurencji i Konsumentów (2007). Konsumentów portret własny – raport badawczy. Warszawa.
- Walden-Kozłowska, A. (2005). Towaroznawcze aspekty badania i oceny wartości promocyjnej opakowań jednostkowych towarów powszechnego użytku. Wydawnictwo Akademii Ekonomicznej w Krakowie, Kraków.

# ROLA OPAKOWANIA DERMOKOSMETYKU W DECYZJACH ZAKUPOWYCH KONSUMENTÓW

#### STRESZCZENIE

Celem pracy była identyfikacja roli opakowania jednostkowego jako determinanty zakupu dermokosmetyków oraz ocena wpływu poszczególnych jego elementów oraz cech na postrzeganie produktów i decyzje nabywcze konsumentów. Przeprowadzono wywiady indywidualne kwestionariuszowe bezpośrednie wśród konsumentek deklarujących regularne zakupy dermokosmetyków w aptekach. Badanie wykazało, że chociaż opakowanie dermokosmetyku nie jest główną determinantą zakupową, nie można lekceważyć jego ścisłego związku z postrzeganiem bezpieczeństwa dermokosmetyku. W trakcie zakupów konsumentki postrzegają i analizują takie główne elementy składowe i cechy opakowań jednostkowych dermokosmetyków, jak: możliwość skutecznego zabezpieczenia produktu podczas jego użytkowania, informacje na opakowaniu oraz bezpieczeństwo opakowania względem produktu.

Słowa kluczowe: dermokosmetyki, opakowania, decyzje zakupowe, konsumenci