

# CONSUMERS BEHAVIOR AND PERCEPTIONS REGARDING NATURAL COSMETIC PRODUCTS

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## Abstract

In the last decades, the increasing concerns related with sustainability and the emergence of ethical concerns related to the production and consumption of cosmetics, as well as, the verification of the adverse effects of chemical additives present in cosmetics for human health and the environment, have driven the growth of green cosmetics. Natural substances, derived from plants, animals or other organisms are increasingly popular as ingredients in cosmetics for being considered by consumers as safety alternatives to synthetic cosmetics. This work aims to analyze the habits and perceptions of consumers regarding natural cosmetics products. A cross-sectional study was carried out based on a sample of 224 individuals between 18 and 74 years old. Respondents were mainly female (75%), young urban adults, employed, with higher education. Most of the respondents use cosmetics daily, and considers them important (48%) or essential (34%), particularly the hygiene and skin care products. The median amount of monthly spend on cosmetic products are of 20 €. Super and hypermarkets (34.5%), and pharmacies and parapharmacies (31%) are the most relevant places for buying cosmetic products although the internet (8%) and catalogues sales (7%) are also significant. The importance of internet is also present as source of information about the products (40%), seconded by beauty professionals (27%). The great majority of the respondents uses natural cosmetic products, although not often organic ones. Despite the respondents' considerable familiarity with natural cosmetic products, results display some misconceptions about these products is still present in consumers' minds.

## Methodology

The study was carried out through a self-administered questionnaire, previously structured according to the objectives of this study. The study was made with the informed consent of the respondents, ensuring all the constitutional values and rights of the individuals. Respondents were previously informed about the voluntary nature of their participation, about the research objectives. The information collected was treated in order to guarantee confidentiality and anonymity and the data exclusively used for the scope of this investigation. The questionnaire consists of four sections, the first section contains sociodemographic questions to obtain general information and lifestyles of the respondent, in the second section it is intended to evaluate skin care, the third section is facial self-assessment of the respondent, while the fourth - determine the level of knowledge of natural cosmetic products. Data collection was carried out online, during the month of November, 2020.

## Materials

The cross-sectional study was carried out based on a sample of 224 individuals between 18 and 74 years old. Respondents were mainly female (75%), young urban adults, employed, with higher education (Table 1)

Table 1: Sample Description

Variable	Category	Frequencies		
		N	%	
Age	<25 years old	36	16.1%	
	25-35 years old	111	49.6%	
	35-45 years old	45	20.1%	
	45-55 years old	17	7.6%	
	>=55 years old	14	6.3%	
	Non response	1	0.4%	
Gender	Male	55	24.6%	
	Female	168	75.0%	
	Non response	1	0.4%	
Schooling	3rd Cycle of Basic Education or lower	8	3.6%	
	Secondary School	36	16.1%	
	Post-secondary technological course or Bachelor	2	0.9%	
	Degree or higher	176	78.6%	
	Non response	2	0.9%	
	Single	148	66.1%	
Marital Status	Married or cohabiting	59	26.3%	
	Separated / divorced	8	3.6%	
	Widow	6	2.7%	
	Non response	3	1.3%	
Professional Status	Unemployed	7	3.1%	
	Student	64	28.6%	
	Employed	120	53.6%	
	Self-employed	32	14.3%	
	Retired / Pensioner	1	0.4%	
	1 or 2 persons	136	60.7%	
Household Size	3 or 4 persons	77	34.4%	
	5 or more persons	9	4.0%	
	Non response	2	0.9%	
	Any less de 500 €	10	3.7%	
	500 to 1000 €	33	12.4%	
Monthly Household Income	1000 to 3000 €	119	44.6%	
	3000€ or higher	22	8.2%	
	Non response	40	15.0%	
	Place of residence	Portugal	Urban area	159
Rural area			29	12.9%
Other country		Urban area	23	10.3%
		Rural area	3	1.3%
Non response		10	4.5%	

## Introduction

Since ancient times, Man has drawn on nature in search of ingredients that he can use to maintain his body hygiene and his good appearance, hence the evolution of cosmetics to the point where analogues to bioactive molecules was chemically synthesized. According to archeological studies, the use of cosmetics dates back to ancient mankind, since the early Stone Age (Joshi & Pawar, 2015). Over the years, natural products became a modern trend in the field of beauty since consumers have shown preference for natural products and more awareness of chemicals. Unlike traditional synthetic products, different plant parts and plant extracts are used in these products such as Aloe vera gel or coconut oil. Compared to chemically synthesized beauty products, natural cosmetics are estimated safe to use (Mitsui, 1997). Dermatologists tested them and proved their hypoallergenic criteria. Therefore, consumers of such products have less risk of getting skin rashes or experience skin itches. In the last decades, the increasing concerns related with sustainability and the emergence of ethical concerns related to the production and consumption of cosmetics, as well as, the verification of the adverse effects of chemical additives present in cosmetics for human health and the environment, have driven the growth of green cosmetics. Natural substances, derived from plants, animals or other organisms are increasingly popular as ingredients in cosmetics for being considered by consumers as safety alternatives to synthetic cosmetics. This work aims to analyze the habits and perceptions of consumers regarding natural cosmetics products.

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## Results

Most of the respondents use cosmetics daily (68%) (Figure 1). The median amount of monthly spend on cosmetic products is 20 €, distributed as shown in Figure 2. For most of the respondents cosmetic products are important (48%) or essential (34%) (Figure 3), particularly hygiene and skincare products (Figure 4).

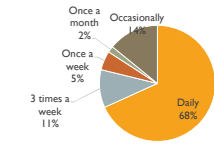


Figure 1: Frequency of use of cosmetic products (N=181)

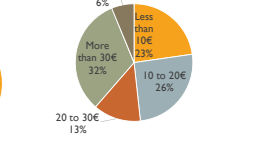


Figure 2: Average monthly expenses on cosmetic products (N=111)

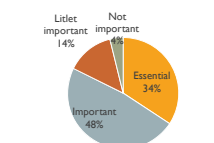


Figure 3: Importance of cosmetic products (N=181)

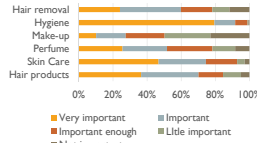


Figure 4: Importance of some specific cosmetic products (N=180)

Super and hypermarkets (34.5%), and pharmacies and para pharmacies (31%) are the most relevant places for buying cosmetic products although the internet (8%) and catalogues sales (7%) are also significant. The importance of the internet is also present as a source of information about the products (40%), seconded by beauty professionals (27%). The great majority of the respondents use natural cosmetic products, although not often organic ones (Figure 5). Despite the respondents' considerable familiarity with natural cosmetic products (only 4% of the respondents never use natural or organic cosmetic products), results display some misconceptions about these products are still present in consumers' minds (Figure 6).



Figure 5: Habits of using natural and/or organic cosmetic products (N=177)

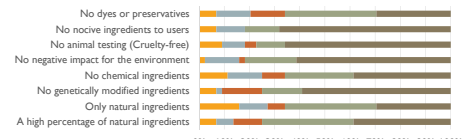


Figure 6: Perceptions of about natural cosmetic products attributes (N=44)

The main motivation for buy/use natural cosmetic products is health and environmental concerns (Figure 7). It should be also noted the role of social media (bloggers and YouTubers in influencing respondents' decisions.



Figure 7: Main reasons for buy/use natural cosmetic products

## Conclusion

Consumers' interest in health and environmental issues is increasing, providing a huge opportunity for the natural and organic personal care industry to create a strategy that could motivate many consumers to purchase organic or natural personal care products. This study has made a contribution to existing knowledge about the industry of natural products by indicating the habits and perceptions of consumers regarding natural cosmetics products, that impact consumers' purchase intentions towards natural cosmetic products. The study exposed the importance of cosmetic products for the consumers, has most of the respondents use cosmetics daily, and considers them important or essential, investing a significant part of the monthly budget to these expenses. Despite a traditional market places still prevailing (Super and hypermarkets, and pharmacies), the results highlighted the increasing importance of e-commerce and social media as influencers in consumers' decisions. The study also demonstrates the popularity of natural cosmetics, as most of the respondents use natural cosmetic products, although not often organic ones. However, despite the respondents' considerable familiarity with natural cosmetic products, results display some misconceptions about these products still present in consumers' minds, particularly, regarding the composition of natural cosmetic products and their effect on the environment.

## Recommendations

Regardless of the positive growth trend in the world, the natural cosmetics market, particularly in Portugal, is still an under-researched area. Future investigation is still required to determine which variables influence consumer purchase intentions towards natural cosmetics. Additionally, the misconceptions still prevailing on consumers about natural cosmetic products are an important issue that must be addressed by industry stakeholders has health and environment are the main reasons for consumers' choice of natural products.

## Bibliography

Joshi, L. S., & Pawar, H. A. (2015). Natural Products Chemistry & Research Herbal Cosmetics and Cosmeceuticals: An Overview. *3(2)*. <https://doi.org/10.4172/2329-6836.1000170>

Mitsui, T. (1997). *New Cosmetic Science*. In Amsterdam : Elsevier Science. B.V.

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