

AGRICULTURAL ECONOMICS

Market sustainability analysis of jenny milk cosmetics

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Abstract

A quantitative market analysis was carried out to deepen the knowledge on some qualitative and quantitative aspects of jenny milk and cosmetics and, successively, a survey was carried out to study the influence of packaging on consumer liking. The first analysis was conducted using the quantitative method by interviews with a one to one questionnaire, consisting of 18 questions. In the second survey were interviewed 300 people with a questionnaire divided into two perception areas: of packaging paper, and of packaging communication. Results showed that 67.8% of consumers had familiarity with jenny milk, but only 19.5% knew cosmetic properties of this product. The panel expressed a low expenditure propensity toward the proposed cosmetics. For these products, the study on packaging identified a type of matte paper as the favorite by consumer. Moreover, panel judged the icon of donkey and naming Asinella as the most persuasive.

Key words: Cosmetics survey, Jenny milk, Matte packaging, Exalt cosmetics

Introduction

During the nineteenth century, chemicals were used to replace more expensive natural ingredients making the cosmetics more widely used. Nevertheless, the growing interest in health of consumers is nowadays reversing this trend involving an increased interest related to natural ingredients. Even more, the 21st agenda item of World Summit carried out in Rio in 1992 emphasized the importance of the sustainability of industrial production. In recent years, the cosmetic industry is mainly focused towards products made with natural ingredients, and it is oriented to a sustainable consumption. Many cosmetics industries developed publicity campaigns with images of an eco-friendly company to promote their cosmetics. In addition, the marketing becomes attentive to sustainability increasingly in the creation and production of the packaging product by the study of consumer behavior.

To increase sustainable patterns of consumption, it is important to understand more on purchasing

decision of consumers. Despite the consolidated positive trend of natural cosmetics, there are few reports on the qualitative and quantitative market analyses for jenny milk cosmetics. These studies regard principally their moisturizing and rebalancing properties on the membranes of skin cells. It is known that these properties are principally due to the high lysozyme and to the antioxidant action of fatty acids contained in jenny milk (Herrouin et al., 2000; Polidori et al., 2009; Restani et al., 2009; Tesse et al., 2009; Simos et al., 2011; Al-Saiady et al., 2012; Cosentino et al., 2012a,b). Few reports demonstrated that jenny milk prevents skin-aging process hydrating and restructuring the dermal intercellular substance (Guo et al., 2007; Orsingher, 2011; Paolino et al., 2011).

The willingness of consumers to purchase such products is usually influenced by cosmetic composition and ingredients (Kuznesof et al., 1997; Power, 2010; Khraim, 2011). The quality cannot be experienced before the consumer purchase, but it is possible to communicate it thanks to extrinsic indicators (brand, origin, nutritional information, composition, label, price) (Grunert et al., 2000). In this contest, the functions of packaging are to enhance and to transmit the information of product, facilitating use and transport (Qing et al., 2012). Currently, packaging heavily impacts the perceived quality of products, and is often considered to be as important as the product (Raheem, 2013). However,

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few studies have been conducted on the sensory properties of packages (Lefebvre et al., 2010). The measurement of packaging attributes is very difficult because a package generally induces a wide variety of stimuli: visual, tactile, and even olfactory. For example, visual and tactile stimuli, affect the consumer choices at time of purchase. The communicative function of packaging is supported by iconic and textual elements represented by brand and naming (Topoyan et al., 2008). Moreover, the marketing of these products could help to preserve, at the same time, local donkey genotypes and the marginal areas in which they are reared. This study was conducted to provide preliminary data from Basilicata, a region of South Italy, related to consumer knowledge on jenny milk cosmetics. The objectives of this study were to evaluate the consumer knowledge on some qualitative and quantitative aspects of jenny milk cosmetics, and to identify some packaging factors that influence consumer liking.

Materials and Methods

Experiment 1: Market survey

This descriptive study was conducted using the quantitative method by interviews with a *one to one* questionnaire that has been randomly administered to 450 people residing in the test area; of these, only 392 people have correctly completed the questionnaire. Therefore, the sample was composed by 181 men and 211 women, ageing, in mean, 40.04 ± 11.30 s.d. years. Since people in this age range are the most strongly concerned to counteract skin-aging process and the appearance of wrinkles, in this preliminary test, we did not consider other age groups. A questionnaire consisting of 18 questions was utilized (Table 1).

In order to test the questionnaire, a previous validation was effected utilizing 30 persons, recruited in a supermarket of Potenza (55% women, and 45% men, with a age range of 18-60 years).

Experiment 2: Packaging survey

The consumers involved in this study were selected from 3,400 people that, within a year, purchased at least 2 packages of all the following products: face cream, body lotion, hand cream, moisturizer, and lip cream after sun or sunscreen. In particular, the average number of product/year purchased by the selected consumers was: 3.21 face cream, 2.9 bodies cream, 3.29 hand creams, 2.76 lips moisturizer, 2.83 sunscreen. The selected consumers, 300 people, (48% men and 52% women) aged, in mean, 33 years ± 11.14 years.

The naming has been developed starting from the concepts of "delicacy" of "naturalness".

Therefore was preferred the direct representation of the product source: the donkey, giving it a specific soft brown tone coat. A jury of 50 habitual cosmetic consumers (78% women, and 22% men, aged range 18-54 years) interviewed in 3 perfumeries of Potenza preferred the naming "Asinella" to the naming "Asinus" and "Donkey"; even the farmers identified it as the best choice (Figure 1).



Figure 1. Naming Asinella.

The questionnaire of packaging survey was divided into two analysis areas: 1) liking of the type of packing paper (matte; glossy; glossy embossed with texture), and 2) communication aspect of packaging (A, "Asinella"; B, "Asinella" + "Natural product"; C, "Asinella" + "Natural product" + "Made in Basilicata") (Figure 2). The questionnaire was tested and validated with a pilot test employing 15 people, recruited from University staff (58% women, and 42% men, age range 30-61 years). To evaluate the preferences of consumers we used a scale of values from 1 to 5. Comparisons between types of paper and between types of communication aspect were tested by Tukey's test (SAS, 1999).

Results

Experiment 1: Market survey

This study was conducted for evaluating the degree of knowledge of 392 consumers towards the jenny milk cosmetics. Of these 265 (67.8%) knew jenny milk, and only 52 (19.5%) were already familiar with jenny milk cosmetics. Only 36 (9.2%) of surveyed customers had already bought this product; nevertheless, 247 of them (63%) expressed willingness to buy jenny milk cosmetics in the future. In particular, the most common buying motivation was "curiosity toward product" (in 214 consumers, 54.6%) followed "personal use" (in 151 consumers, 38.6%) and "to utilize as gift" (in 27 consumers, 6.8%).

Table 1. Questionnaire of market survey.

1. In which of the commercial sites listed below do you shop? (one answer)	
<input type="checkbox"/> small businesses <input type="checkbox"/> supermarket <input type="checkbox"/> shopping center <input type="checkbox"/> directly from the producer	
2. Are you an habitual cosmetic consumer? <input type="checkbox"/> Yes <input type="checkbox"/> No	
3. Would you like to buy an innovative cosmetics? <input type="checkbox"/> Yes <input type="checkbox"/> No	
4. The signature "only with natural ingredients" on a packaging for a body care cosmetic at what expression listed below make you think of? (one answer)	
5. Could positively influence your choice the signature "only with natural ingredients" on a packaging for a body care	
6. Do you usually buy only famous brands cosmetic? <input type="checkbox"/> Yes <input type="checkbox"/> No	
7. Usually, where do you buy cosmetics? (one answer)	
<input type="checkbox"/> pharmacy <input type="checkbox"/> herbalist's shop <input type="checkbox"/> supermarket <input type="checkbox"/> perfumery <input type="checkbox"/> beauty farm <input type="checkbox"/> hairdresser	
8. Do you know donkey's milk?	
<input type="checkbox"/> Yes: <input type="checkbox"/> in alimentary use <input type="checkbox"/> in cosmetic use <input type="checkbox"/> in alimentary and in cosmetic use <input type="checkbox"/> No: If NO then go to question 14.	
9. Have you ever bought any food made with donkey's milk? <input type="checkbox"/> Yes <input type="checkbox"/> No	
10. Have you ever bought any jenny milk cosmetics?	
<input type="checkbox"/> Yes, because: (one answer) <input type="checkbox"/> I know its properties <input type="checkbox"/> for curiosity toward product <input type="checkbox"/> I consider it like a natural product <input type="checkbox"/> I consider it like an innovative product	<input type="checkbox"/> No, because: (one answer) <input type="checkbox"/> I'm not really interesting in this product <input type="checkbox"/> It's not readily available <input type="checkbox"/> It's too expensive <input type="checkbox"/> I'm wary about its effectiveness
10. How satisfied are you in purchase of jenny milk cosmetics? <input type="checkbox"/> really not <input type="checkbox"/> not much <input type="checkbox"/>	
12. Recently, which kind of jenny milk cosmetics did you buy? (one answer) <input type="checkbox"/> face cream <input type="checkbox"/> bubble bath <input type="checkbox"/> body	
13. Of this product do you remember brand, quantity, and price?	
Brands _____ Price _____ Quantity _____	
14. Would you buy again jenny milk cosmetics?	
<input type="checkbox"/> YES: <input type="checkbox"/> NO: If NO then go to question 14 <input type="checkbox"/> for my personal care; <input type="checkbox"/> as gift;	
15. Indicate two products that you would routinely buy <input type="checkbox"/> body cream <input type="checkbox"/> face cream <input type="checkbox"/> hand cream <input type="checkbox"/> shower cream	
16. How much would you spend for jenny milk cosmetics?	
<input type="checkbox"/> body cream, 200 ml <input type="checkbox"/> 15 – 25 euro <input type="checkbox"/> 25 - 35 euro <input type="checkbox"/> over 35 euro <input type="checkbox"/> face cream, 50 ml <input type="checkbox"/> 20 - 30 euro <input type="checkbox"/> 30 - 40 euro <input type="checkbox"/> over 40 euro <input type="checkbox"/> hand cream, 100 ml <input type="checkbox"/> 8 – 15 euro <input type="checkbox"/> 15 - 22 euro <input type="checkbox"/> over 22 euro <input type="checkbox"/> bubble bath, 200 ml <input type="checkbox"/> 8 – 13 euro <input type="checkbox"/> 13 - 18 euro <input type="checkbox"/> over 18 euro	
17. Would you be willing to pay an higher cost for a cosmetic produced with milk from jennies reared in Basilicata? <input type="checkbox"/> Yes <input type="checkbox"/> No	
18. Would you be willing to try jenny milk cosmetics? <input type="checkbox"/> Yes <input type="checkbox"/> No	



Figure 2. Packaging text labels.

The buying preferences for cosmetics were, in decreasing order: body cream (32%), bubble bath (30%), face cream (23%), and hand cream (15%). Even if the surveyed group showed a willingness to buy cosmetics in low price classes (hand cream, 8-15 euro, 81%; body cream, 15-25 euro, 76%; bubble bath, 8-13 euro, face cream, 20-30 euro, 69%) about 68% of them would have purchased jenny milk cosmetics at a higher price if produced in sustainable rearing system in the respect of animal welfare (Figure 3).

The consumers expressed their preference for the following distribution channel: perfume shop (48%), pharmacy (40%), and supermarket (12%).

Experiment 2: Packaging survey

Perception of the paper

The "matte paper" resulted the most appreciated (4.03, $P < 0.05$). In fact, according to the surveyed consumers, "matte paper" evoked the perception of natural more than to the "glossy

paper" (2.17), used by Asilac, Milk drops, and Dahl (italian competitors), and more than to the "glossy paper embossed with texture" (2.36). Consequently, the willingness to buy cosmetics packaged with "matte paper" was significantly the highest (4.1, $P < 0.05$; 2.56 in "glossy paper" and 2.94 in "glossy paper with embossed texture") (Figure 4).

Perception of packaging

In this section, in question "Do packaging information induce to purchase?" the consumers judged the message of type B more 'persuasive' (4.09, $P < 0.05$) than the other two communication forms of packaging (3.31 and 3.9, in packaging A and in packaging C, respectively). In the question "Do packaging information include elements of reliability?" the surveyed consumers judged the type B the most persuasive for the reliability of the product (3.89, $P < 0.05$; 2.8 in packaging A and 3.84 in packaging C) (Figure 5).

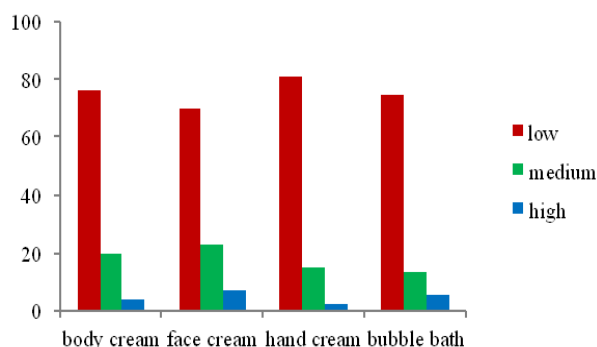


Figure 3. Willingness to pay: Frequency in three price classes (%).

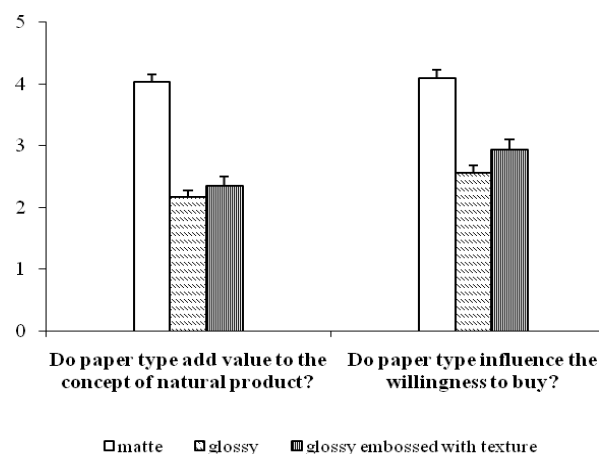


Figure 4. Perception of paper type.

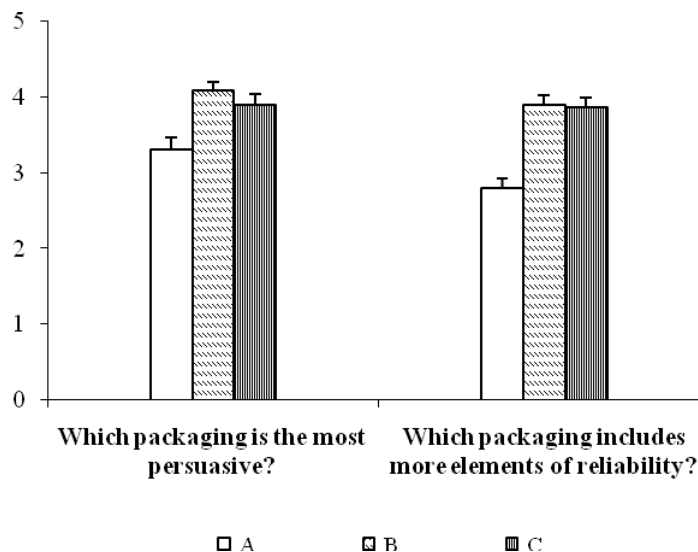


Figure 5. Perception of packaging.

The surveyed consumers considered the most persuasive combination in purchase the naming “Asinella”, with the text label “Natural product”. The text label “Made in Basilicata” did not significantly affect the acceptability of the sample survey. Probably, “Made in Basilicata” is not yet perceived as representative of an uncontaminated and natural region, directly linked to the health and naturalness of a product. From the consumer perspective, naming is an important quality cues and makes it easier to infer quality. In addition to this parameter, traceability systems, branding, and labeling can help consumer’s choice (Grunert, 2002).

Conclusion

Our results showed that over 66% of the surveyed consumers are willing to purchase ‘new generation’ cosmetics, probably because the term refers to innovation and modernity in their imagination. These cosmetics could absorb a significant portion of the market for natural cosmetics based on milk. The results of descriptive survey put in evidence that customers knew jenny milk and expressed willingness to buy jenny milk cosmetics in the future. Survey consumers preferred the type of packaging most closely to the concept of “natural”. Probably, the expansion of jenny rearing for milk production can increase the availability of milk for making innovative cosmetics. These products can take a placement in the market for natural cosmetics made with low-impact processes

in a rural region like Basilicata, in which is widespread the extensive rearing system. Further tests about paper packaging considering different paper colors and text label will be taken into account in order to know the consumer acceptability.

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