



Factors affecting on consumer purchasing behavior of *Ayurvedic* skin care products: A study of female consumers in Colombo District of Sri Lanka

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Abstract

The incessant demand for cosmetic products is quite visible by captivating the attention of consumers worldwide. The flourishing cosmetics industry with its lush and extravagant growth has ensured a colossal amount of money is penetrated to economy. This study examines the factors that would effect on female consumers' purchasing behavior of skin care products containing Ayurvedic ingredients. The study was ground on the Theory of Reasoned Action which was originally developed by Fishbein and Ajzen in 1975. A survey was conducted by distributing questionnaires to 150 female consumers in Colombo District of Sri Lanka. The sample was chosen through a multi-stage sampling. Data were analyzed by using uni-variate, bi-variate and multivariate analysis ingrained with mediation effect. The result demonstrates that beliefs and attitudes have a positive effect on purchasing intention and behavior of the consumers. The result leads for significant managerial implications to the sector.

Keywords: *Ayurvedic ingredients, consumer purchasing behaviour, skin care products.*

1. Introduction

The unparalleled growth of the cosmetics industry has ensured that the global playing field is being levelled that people's needs for appearances and materialism is increasing significantly with the change of beauty consciousness and wellbeing (Vigneron, Jhonson, & Franck, 1999). Therefore, behavior towards purchasing skin care products had drastically changed over the past few decades. While females tend to be the highly interested in purchasing skin care products skin care product category seems to be ranked ahead in terms of retail sales generation worldwide ((Dutton & Barbalova, 2011). Particularly in Sri Lanka, a keen interest in skin care products manufactured locally had captured the attention of many female consumers causing the demand to rise gradually. The current market value of Cosmetics and Toiletries (C&T) market in Sri Lanka is

estimated to be US \$ 150mn and has an average annual growth rate of 11percent. Moreover, it is quite visible that there is a definite linkage between beliefs – attitudes of female consumers with their purchase intention towards skin care products and the relationship between purchase intention and purchasing behaviour observed when acquiring such beautification items. Such purchasing behavior can be defined as the decision process and physical activity individuals engage in when evaluating, acquiring, using or disposing of goods and services (Loudan & Bitta, 1986). Further, purchase intention can be defined as a measure of the strength of an individual's intention to perform a specified behavior (Fishbein & Ajzen, 1975).

With comparison to other Asian countries such as Japan, China, South Korea, India, Bangladesh and Thailand, Sri Lanka seems to be lagging behind with regard to recognition, profitability and sales generation of cosmetics market. Furthermore various trends such as decline the value in local market, fierce competition with international key players let the industry lag behind. Low motivation and incentives for the domestic producers are also the reasons for this position. Thus, this study aims to explore the factors that effect on female consumers' purchasing behaviour of *Ayurvedic* skin care products in Sri Lanka.

2. Review of literature

The need of application and usage of skin care products by female consumers in particular, had been discussed abundantly through past works of literature by various researchers. The general concept is that people's needs for appearance and materialism is increasing significantly with the change of beauty consciousness among people (Vigneron et al., 1999; Sinha, 2003). With the advancement of technology and equipment, a growing demand for personal and skin care products can be observed. Therefore, more people are inclined towards purchasing skin care and cosmetics items as their preferences are gradually changing from 'merely functional' to 'more advanced and specialized' products (Nair & Pillai, 2016). As Moteiro (2003) pointed out, due to increased level of literacy and growing influence of the media, the women employment has been increased. The resulted purchasing power led women to enliven their lifestyles by adapting to more hygienically accepted beauty treatments (Souiden & Diagne, 2009). As Vanessa and Sandra (2011) argued, the cosmetics and skin care products are basically used due to sexual attractiveness and social and professional attractiveness (Vanessa & Sandra, 2011). Most of the women feel confident after the application of cosmetics and skin care products and in turn reflects in their attitudes or behaviors which assist them when dealing with public relations (Cox & Glick, 1986). In order to grasp a better image of the cosmetics industry, the current situation and evolving trends must be clearly recognized.

Sri Lanka's contribution is comparatively lower for the segment in the international arena as renowned for their famous disposition emerging markets where BRIC countries have captured 81 percent of the global cosmetics sales growth (Euromonitor, 2016). In Asian skin care market, the major focus is on producing skin whitening products due to the belief of pale skin is the ideal resemblance of a beauty. High purchase orientation and usage of skin whiteners, a significant portion of consumers are also fascinated about the anti-aging properties contained in these products. The cosmetics and skin care segment is

one of the profitable business sectors in modern world as market segment being attractive and irresistible can be identified as rising hygiene and beauty consciousness due to changing demographics and lifestyle, deeper consumer pockets, rising media exposure, greater product choice, growth in retail segment and wider availability (Euromonitor, 2016). Further the success and growth of cosmetics industry is the increasing fashion and beauty consciousness is coupled with rising income and focus on health and fitness (Malhotra, 2003).

A number of studies has been conducted on usage pattern and factors affecting the choice of products in order to predict the future behavior of consumers and trends prevailing within market segments (Ajzen & Fishbein, 1980). According to Reuters, Asia is seen to be a growing market for skin care. Indonesia has been overlooked by cosmetic firms and it is expected to become the third biggest beauty market in Asia (Charlton, 2012). Interestingly, there are theories in opposition to the identification and development of skincare segment and the importance it holds over human consumption. It has been stated that despite the increasing importance of the cosmetic segment, a little attention has been given to capture the growing demand of cosmetics industry (Sabhrawal, Mann & Kumar, 2014). Female consumers are more inclined towards purchasing skincare products which they perceive as being natural or herbal, thereby reducing the negative impact on the skin. The users tend to search for skincare products which contain fewer chemicals or chemical free skincare products, in order to have a youthful and improved appearance (Kim & Chung, 2011). WHO estimates that at least 80 percent of the population globally relies on traditional medicine to meet their primary health care needs and it could apply when purchasing organic/ herbal skin care products because women are more prone towards purchasing more natural products rather than selecting a routine product advertised on the television (Basha, Anjaneyulul & Sudarsanam, 2013). The role of herbal ingredients is widely recognized in the beauty care industry, and as a result, interests in the exploitation of medicinal and aromatic plants as well as pharmaceuticals, herbal remedies, flavouring, perfumes, cosmetics and other natural products have been increased (Rao & Arora, 2004).

3. Methodology

Theory of Reasoned Action was adopted in this study to conceptualize the relationship between beliefs and attitudes, normative influences, purchasing intention and purchasing behavior of *Ayurvedic* skin care products (Figure 1).

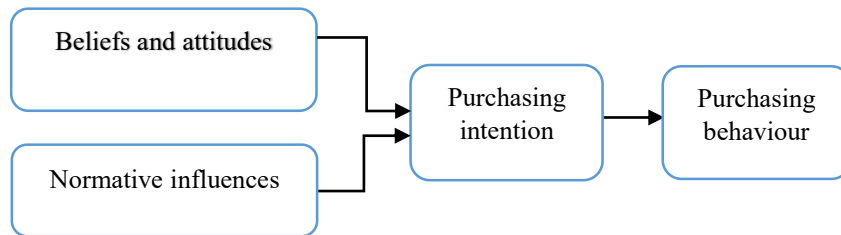


Figure 1 Conceptual framework

Hypotheses of the study are as follows.

Hypothesis 1: Beliefs and attitudes have a positive effect on purchasing intention of female consumers

Hypothesis 2: Normative influences have a positive effect on purchasing intention of female consumers

Hypothesis 3: Purchasing intention positively effects on female consumers’ purchasing behavior

A multi-stage sampling was adopted by selecting 150 respondents in Colombo District. Four major supermarkets, Cargills Food City, Keells Super, Arpico Super Center and Laughs Sunup, were selected for the survey (Retail Intelligence, 2013). The internal validity of the questionnaire has been tested by Chronbach’s Alpha. The sampling procedure utilized; as the first stage to choose province and four supermarkets, multi stage sampling method has been adopted. In second stage, number of supermarket outlets within each supermarket chain was identified and two outlets from each chain was selected by adopting simple random sampling. Next step was to select respondents proportionately from each supermarket. When selecting respondents, the time slot method was devised and the sample time frame was 9.00a.m to 5.00p.m on any given day. Data were collected using a questionnaire, and analyzed using descriptive statistics and the mediating effect through Barron and Kenney method and Sobel’s test.

4. Results and discussion

The result indicates the most preferred brand of the respondents was 4ever Skin Naturals and highly purchased products were cream, face wash and cleansers. The descriptive statistics shown in Table 1 signify that beliefs and attitudes, and normative influences towards the *Ayurvedic* skin care products are moderately high even though their purchase intention is relatively low when compared with the purchasing behavior.

Table1
Descriptive statistics

Variable	Mean	Standard Deviation	Variance	Evaluation criteria		
				Almost agree (%)	Moderately agree (%)	Almost disagree(%)
Beliefs and attitudes (BA)	3.592	0.468	0.288	56	42.7	1.3
Normative influences (NI)	3.464	0.573	0.109	46	48.7	5.3
Purchase intention (PI)	2.558	0.724	0.275	66	32	2
Purchasing behavior (PB)	3.763	0.848	0.282	68.7	26.7	4.6

The result of correlation analysis (see Table 2) reveals that beliefs and attitudes are positively correlated with purchase intention ($r=.567, p<.01$). The result further indicates that there is a positive relationship between normative influences and purchase intention ($r=.346, p<.01$). These signify that optimistic beliefs and attitudes, and normative influences towards *Ayurvedic* skin care products would make positive purchasing intention among the customers.

Table 2

Result of the correction analysis

Variable	BA	NI	PI
Beliefs and attitudes (BA)	-		
Normative influences (NI)	0.123	-	
Purchasing intention (PI)	0.567**	0.346**	-
Purchasing behavior (PB)	0.362**	0.235**	0.457**

** Correlation is significant at 0.01 (1%) level

A hierarchical regression analysis was performed in the multivariate analysis with assist of Barron and Kenney method and Sobel's test. The analysis consists of three steps. The Step 1 examines the direct effect of beliefs and attitudes, and normative influences on the purchasing behavior. In Step 2, beliefs and attitudes, and normative influences were regressed against purchasing intention and finally all the variables were inserted to the model to predict the purchasing behavior. Results shown in Table 3 for Model I indicate that beliefs and attitudes, and normative influences have positive and significant effects on purchasing behavior. The result for Model II also confirms the positive effect of beliefs and attitudes, and normative influences on purchasing intention as depicted the correction analysis. Model III signifies that it has ability to account greater variation of purchasing behavior than that of Model I (*Adj. R² change = .203*). Moreover, weakening effect of beliefs and attitudes, and normative influences (*Unstandardized Beta coefficients*) on purchasing behavior in Model III, when compared with Model I, also confirms the mediating role of purchasing intention in the relationship between beliefs and attitudes, and normative influences and processing behavior. Sobel's test also confirms this mediating effect ($Z_{BAvs.PI} = 69.98$, $Z_{PIvs.PB} = 85.13$, $p < .01$). These results support all the hypotheses of the study indicating that beliefs and attitudes, and normative influences are important predictors in creating purchasing intention of *Ayurvedic* skin care product among the women, which finally becomes action.

Table 3

Result of linear regression analysis

Variable	Model I	Model II	Model III
Constant	1.739**	0.796**	1.528*
Beliefs and Attitudes (B vs A)	0.416**	0.634**	0.247*
Normative influences (NI)	0.291**	0.316**	0.190*
Purchase Intention (PI)			0.319**
<i>Adjusted R²</i>	<i>0.245</i>	<i>0.440</i>	<i>0.448</i>
<i>Adjusted R² change</i>	-	-	<i>0.203</i>
<i>F</i>	<i>38.23</i>	<i>57.80</i>	<i>59.55</i>
<i>F change</i>	-	-	<i>21.30</i>

The result also shows that the majority of the respondents is looking for local *Ayurvedic* skin care products due to their trustworthiness, easily access for any customer and availability. However, they had some concerns over price and quality of Sri Lankan brands. Mostly customers are more concerned about the product ingredients and quality of production process.

5. Conclusion

This study adopted Theory of Reasoned Action to examine the female consumers' purchasing behavior with respect to *Ayurvedic* skin care products. The result reveals that beliefs and attitudes, and normative influences are significant factors in creating purchasing intention of *Ayurvedic* skin care products among female consumers. This implies that positive beliefs and attitudes would develop higher the purchasing intention. Normative influences also play a vital role in this phenomenon. Further, it was found that the consumers give higher priority to Sri Lankan products rather foreign brands due to the trustworthiness, easy accessibility and availability, and low price of the local brands. Even though the products are routinely purchased by the consumers, awareness about the brands was minimum. Hence effective promotional strategies focusing the production process should be carried out to make consumers more aware about the brands and their quality maintaining strategies.

The findings also suggest that the current domestic manufacturers should have a clear vision towards building a sustainable market for the skin care product. Further brands developed with *Ayurvedic* ingredients would attract a larger market since today's consumers are more concerned about the green and herbal products.

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