

GREEN COSMETICS PURCHASE: A MODIFICATION OF KNOWLEDGE - ATTITUDE - BEHAVIOR MODEL

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Abstract

Due to the rising trend of healthy living style, organic products, ranging from food, means of transport, and house decoration to cosmetics are now gaining popularity. Vietnam is facing huge opportunities for organics cosmetics due to the country's richness in herb and natural ingredients. There is still a lack of literature on determinants of purchase intention of green cosmetics, especially in developing countries. This study aims to provide an in-depth understanding of the knowledge – attitude – behavior model, also known as KAB as well as suggest a modification of its model in order to apply it to investigate the green cosmetics buying intention.

Keywords: *Beauty products, developing countries, green cosmetics, knowledge, purchase intention*

1. Introduction

1.1. Research background

The concern towards a healthy life and natural products are on the rise, leading to a rapid growth in consumer consciousness of the risk associated with using synthetic chemicals. This has called the need for a healthier lifestyle in a variety of aspects, including beauty products, ranging from skincare, haircare, oral care, color cosmetics and hygiene products (Ghazali et al., 2017). Rising disposable income in Thailand, Philippines, Vietnam and Indonesia, coupled with changing lifestyle is expected to support the growth of green cosmetics market over the next six years.

The green cosmetics could be simply understood as the use of organic ingredients in personal care products such as skin cream, anti-aging lotions, shampoos, and hair conditioners as an alternative to toxic substances. Although rising demand for green cosmetics has attracted the interest of marketing managers, little academic research has been made to study the purchase intention of this product type. Most of studies have revolved around determinants of purchase intention of green products in general (Mohd Suki, N. 2016; Tih, S. and Choslay, S.H., 2011; Nguyen, 2019), green apparel (Bong Ko, S. and Jin, B. 2017). A majority of these researches have employed the Theory of Planned Behavior (TPB) (Aril et al., 2018).

Vietnam is meeting the challenges of environmental protection and sustainable development with regards to population growth, resulting in increasing consumer demand of society. Several attempts to study the organic products buying behavior of Vietnamese consumers have been made (Nguyen et al., 2019).

Vietnam has a population of 97 million inhabitants, with a GDP of \$245 million. Member of the ASEAN, the country has seen its GDP skyrocketing over the last 20 years, becoming one of the countries with the highest growth rate in the world. As incomes rise, standard of living increase and so does consumption. The growth of the cosmetic market is mainly due to these factors, as well as the increasing use of social media. In 2019, only 14% of women in Vietnam do not use makeup, while two years ago it was 24%. Statistics also show that half of the women in Vietnam wear makeup at least once a week, and the percentage is even higher for skincare products. Vietnam is open to opportunity for manufacturing green cosmetics with no chemicals and respectful of the environment. Yang (2017) stated that consumers recently have shown interest in safe cosmetics that use natural ingredients, eco-friendly packaging and ethics in their manufacture. Allergy and skin damage problems as results of using synthetic beauty products are also playing a part in raising the ecological concern among consumers (Pudaruth et al., 2015).

1.2. Research gap

There is a need to find out the intention to purchase green cosmetics as women use them frequently and exploring their attitude on organic can provide significant guidelines and insights about the consumer for the marketing managers to raise the consumer perception and purchase intention in the future. However, empirical studies related to green cosmetics and purchase intention among Vietnamese consumers is still limited. Al-Haddad et al. (2020) examined the relationship between selected dimensions of brand equity, namely brand awareness, brand loyalty and perceived quality, and green cosmetics purchase intention. Nguyen (2019) in their paper termed “Determinants affecting green purchase intention: a case of Vietnamese consumers” reported a positive relationship between consumer trust, eco-labelling environmental concern and attitude towards green cosmetics and green purchase intention. Nonetheless, this study did not take into account the role of health consciousness and knowledge in making impact on consumers’ attitude towards purchasing organics cosmetics and purchase intention.

1.3. Research objectives

The aim of this study therefore is to understand the consumer insight on green cosmetics regarding environmental concern, perceived safety, health consciousness, green cosmetics knowledge and the success dimension of materialism.

2. Method

This section describes the methodology of the study, which covers the development and approach of research model and hypotheses.

2.1. Research model and hypothesis development

Define green cosmetics

Current environmental issues are stimuli for consumers, motivating them to purchase green products. Green products have several advantages, for instance: less water, material and energy usage during production, none or slightly pollutant to natural environments, and their package can be recycled. According to Amberg and Fogarasy (2019), green or natural cosmetics are made out of natural resources, without the usage of chemicals, coloring additives, or other non-natural mixtures. The European Cosmetics Standards Working Group launched the Cosmetics Organic and Natural (COSMOS) Standard (D'Amico, 2008). For further progress, the COSMOS standard certification was officially launched in February, which is trying to be an internationally recognized standard. Green cosmetics are also often called organic cosmetics; however, the latter has a more strict definition and selling them in the consumer system can be challenging due to short expiration and the need for careful storage. Green cosmetics are usually priced higher (Smith et al., 2018). Lin et al. (2018) pointed out that green cosmetics are eco-friendly in the sense that they are non – hazardous to natural resources and renewable. Green cosmetics are natural cosmetics, primarily made up of plant and fruit extracts and renewables. Natural ingredients such as argan oil, coconut oil, green tea, calendula, pomegranate and soy have advantages, for example, anti-inflammation, anti-oxidation, hydration, UV – protection, and other effects. The similarities of the mentioned studies suggest that using green cosmetics is a lifestyle or treating self – care and treating the environment with respect.

Cosmetic chemists fought hard against the idea that natural ingredients are inherently safer than their synthetic counterparts. In their view of opinion, ingredients should be chosen on safety and efficacy regardless of its natural or synthetic makeup. Some companies are overestimating the merits of natural ingredients versus synthetic ingredients to protect the reputation of the industry.

Motivated by healthy trend in the market, hundreds and thousands of companies and suppliers are now producing and selling cosmetic products which they claim are “green” and better for the consumer and environment (Green Choices 2012). In 2010, Mintel suggested a regular innovation campaign about natural and organic ingredients will help maintain growth in the UK’s beauty products industry that are estimated to be worthy of £6.7 billion.

However, there are obstacles that could destabilize consumer confidence, including the lack of regulation and misleading marketing information (Mintel 2010). Different

standards and abundant cosmetics boasting green concepts confuse enthusiastic consumers. Consumers are confused by the different standards and exaggerated marketing of green cosmetics. They find it difficult to select green cosmetic products. Mason (2012) found that cosmetic consumers purchase benefits, not features. Therefore, they pay more attention to functions rather than detailed ingredients.

In Vietnam, many cosmetics brands have recently introduced products that are environmentally friendly. Though the quantity of these products is not significant, the variety in products such as lipstick, foundation, contour kit, face cleanser, toner and moisturiser has impressed many customers.

These products tend to have simple packaging, including a glass bottle or bamboo box. Many cosmetics firms said that as ingredients of their products are taken from natural coconut, turmeric, and honey, among other items, they are safe to use even on sensitive skin.

Take rose mask as an example. It is made from rose petals grown in non-chemical environment and later ground into a powder form for easy application on the skin.

Local green cosmetics are sold in a relatively affordable price range compared to those of international brands. For example, an eyelash serum made from coconut oil costs VND 30,000 per tube while face toner is usually VND 500,000 per bottle (Vietnamnews, 2019).

Knowledge – attitude – behavior

Knowledge, attitude and behavior (KAB) model is an important theoretical model of health and environmental education, which claimed that behavior change, is affected by knowledge and attitude (Schneider and Cheslock, 2003). KAB model was first developed in the 1950s and has been widely used in the field of health education. Researchers assume that knowledge, attitude and behavior are related, and that knowledge and attitude directly influence behavior. Knowledge, according to Merriam-Webster on line dictionary (2011) refers to “the fact or condition of knowing something with familiarity gained through experience or “the fact or condition of being aware of something” or “the range of one's information or understanding” or “the sum of what is known: the body of truth, information, and principles acquired by humankind. Knowledge could be measure by self – report data which is criticized for measuring people’s confidence in their knowledge, not how they actually know about the subject. Another way to measure knowledge is through multiple choices or other similar forced choice item formats. However, knowledge does not always translate into actual behavior (Kyu and Van der putten, 2005). The past literature suggested that exclusive dependence on knowledge change is likely to have little behavioral impact (Schneider and Cheslock, 2003).

A second component of the KAB model is the assumption that attitudes are closed

related to behavior. Attitude is measured by the feelings and beliefs of people towards a problem. Allport (1967) and LaPiere (1967) define attitude in a behavioral sense, as a mental and neural state of readiness conditioned by stimuli directing an individual's response to all objects with which it is related. The KAB model proposed that knowledge about any behavior will determine how the person's attitude towards the behavior then the attitude will display through the behavior.

Ajzen also states "although formal definitions of attitude vary, most contemporary theorists agree that the characteristic attribute of attitude is its evaluative (pro-con, positive-negative) dimension" (1993, p. 41). As a result, most assessment and scaling techniques (see Gable & Wolf, 1993) result in a score that locates the individual on an evaluative continuum. From one perspective, what an individual knows may inform his or her attitude about that topic, and how he or she feels about that topic may influence behavior.

Nguyen et al. (2019) on their study regarding the influence of consumers' personal factors and green marketing practices of food stores acknowledged a positive influence of organic food knowledge on organic food purchase behavior. A research in India found that consumers are willing to go green especially in the cosmetics market that used natural or herbal components.

The following hypothesis is formulated:

H_1 : Green cosmetics knowledge is positively correlated with the purchase intention of organic cosmetics

Attitude could be simply defined as one's like or dislike (Blackwell et al., 2011). Ajzen (1991) characterized it as "a degree of positive or unfavorable behavioral assessment and acts as a primary factor in deciding intent". Past studies have confirmed the positive relationship between attitude towards purchasing green cosmetics and green cosmetics purchase intention.

H_2 : Attitude towards purchasing green cosmetics is positively correlated with purchase intention of green cosmetics

Environmental concerns

Dunlap and Jones (2012) define environmental concern as "the degree to which people are aware of problem regarding the environment and support efforts to solve them or indicate the willingness to contribute personally to their solution". Consumers who show concern about the environment tend to develop positive environmental attitude, express willingness to pay for eco-friendly products and exhibit pro-environmental behavior.

By using natural, oleo chemical sources, green cosmetics avoid many of the toxic elements found in popular brands. These chemicals damage environmental and human health, and consumers should never read them on a "green" label. Thus, consumers with an

environmental concern are likely to purchase green beauty products. The following hypothesis is formed:

H_3 : Environmental concern is positively correlated with attitude towards green cosmetics

Health consciousness

Health consciousness refers to an individual's alertness on one's own diet and healthy living style. Past researches have confirmed health benefit is a key factor motivating the use of green products. Kim and Chung (2011) stated that health awareness plays a crucial role in influencing consumers' purchase behavior. Yang et al. (2014), along with Cabuk (2014) reported the positive relationship between health consciousness and positive attitude. Hence, it encourages the below hypothesis:

H_4 : Health consciousness is positively correlated with attitude towards green cosmetics

Materialism (success)

Materialism is commonly viewed as a value that consumers give to possessions and should be studied within the context of the larger value systems that individuals hold (Richins and Dawson, 1990; Kasser and Ryan, 1996). Richins and Dawson (1992, p. 308) further defined materialism as a "value that emphasizes the importance of possessions and material goods in person's life towards achieving life goals or desired states". Success dimension of materialism refers to wealth and material possessions as signs of success in life. An investigation into the relationship between materialism and green purchase behavior in Vietnam (Nguyen, 2019) found a positive influence of success on attitude towards green products. This could be explained as using green products may help consumers express their self as knowledgeable ones and a sign of their success. The following hypothesis is proposed:

H_5 Success (materialism) is positively correlated with attitude towards green cosmetics

Perceived safety

This could be simply understood as the safety features that the products have based on literature. It was found that consumers perceive safety towards organic products is an important predicting factor that could lead to consumers to have the intention to purchase the organic personal care products (Mohammad and Baharun, 2017).

This brings to another hypothesis for the study:

H_6 : Perceived safety is positively correlated with attitude towards green cosmetics

2.2. Research approach

Data collection and sampling

The population of the study comprises of individuals who have purchase cosmetics in the past 3 months. Sample was form by convenience sampling technique. Participants would be asked to fill in online and offline survey form.

Measurements

In process of operationalizing the constructs, various literatures were reviewed and adopted for present study. For environmental concern, 4 items were adopted from Yadav and Pathak's study. For health consciousness, 3 items were taken from Tarkiainen and Sundqvist (2005). A total of 3 items were used to measure green cosmetics knowledge. Attitude towards buying green cosmetics and purchase intention were operationalized using items from Chang (1998) and Armitage and Conner (1999). Success dimension of materialism was measured using items from Richins & Dawson (1992).

All the items were measured using a 7 – point Likert scale, which ranged from 1 for “Strongly disagree” to 7 for “Strongly agree”. Regression analysis would be employed for data analysis.

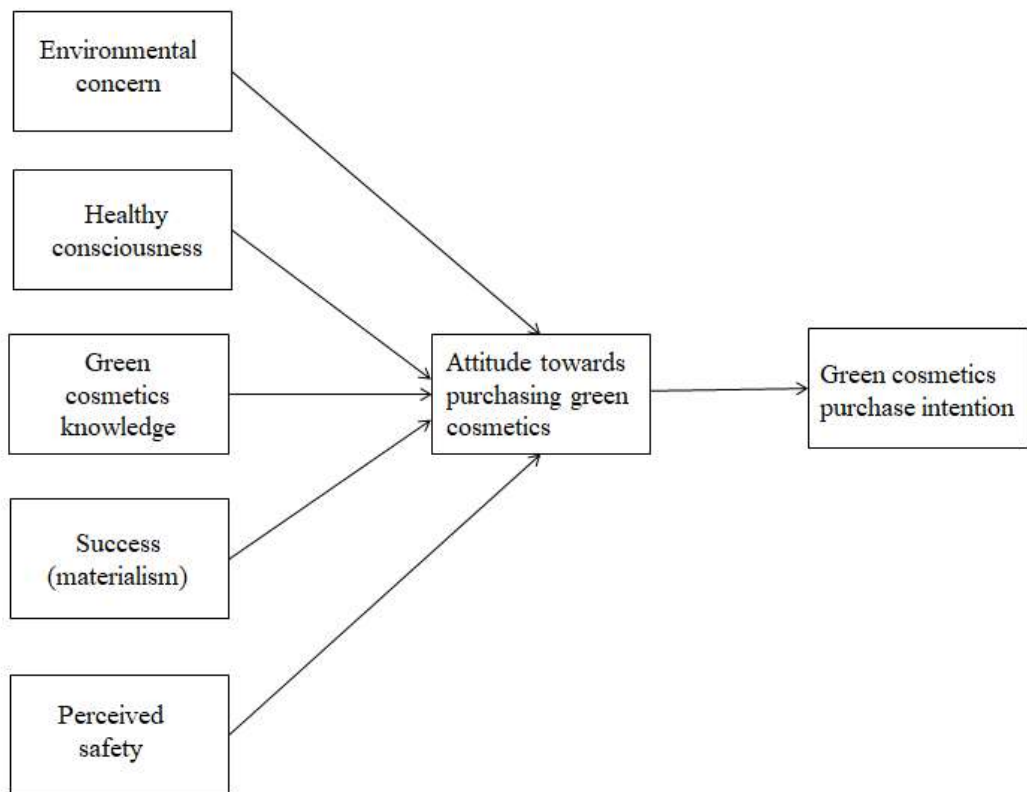
Variables and their measurement items are summarized in the table below:

Variables	Measurement items
Environmental concern	The balance of nature is very delicate and can be easily upset Human beings are severely abusing the environment Humans must maintain the balance with nature in order to survive Human interferences with nature often produce disastrous consequences
Green cosmetics knowledge	Compared with an average person I know a lot about green cosmetics I know a lot about how to evaluate the quality of green cosmetics People who know me, consider me as an expert in the field of green cosmetics
Health consciousness	I choose cosmetics carefully to ensure good health I think of myself as a health – conscious consumer I think often about health issues
Perceived safety	For the amount I paid, I am convince that green cosmetics have

Variables	Measurement items
	no side effect I am convinced that the green products contain pure natural ingredients from nature Green products labeled claimed is completely safe to use
Success (materialism)	I admire people who own expensive homes, cars and clothes Some of the most important achievements in life include acquiring material possessions I place much emphasis on the amount of material objects people own as a sign of success The things I own say a lot about how well I'm doing in life I like to own things that impress people
Attitude	Purchase of green products is a smart choice Purchase of green products bring many benefits Purchase of green products is a good thing to do
Green cosmetics purchase intention	I intend to make purchases of green cosmetics I plan to buy green cosmetics I want to buy green cosmetics

3. Results

Based on the rationale of these above hypotheses, a proposed model can be established as the following to test all mentioned hypotheses:



The following hypotheses are tested:

H_1 : Green cosmetics knowledge is positive correlated with purchase intention of green cosmetics

H_2 : Attitude towards purchasing green cosmetics is positively correlated with purchase intention of green cosmetics

H_3 : Environmental concern is positively correlated with attitude towards purchasing green cosmetics

H_4 : Health consciousness is positively correlated with attitude towards purchasing green cosmetics

H_5 : Success (materialism) is positively correlated with attitude towards purchasing green cosmetics

H_6 : Attitude towards purchasing green cosmetics is positively correlated with intention to purchase green cosmetics

4. Discussion and Conclusion

4.1. Discussion

This study has not conducted an empirical research yet, proposed hypotheses are not

confirmed. Therefore, an empirical research as a follow up should be done soon. Once the research is conducted, it will contribute to the current literature of green cosmetics research by two points: First, it show a detailed analysis of the relationship between environmental concern, health consciousness, perceived safety, green cosmetics knowledge, success dimension of materialism and attitude towards green cosmetics. Although green products have been researched in many articles, little is known with regards to beauty products. Second, there has been a lack of studies about Vietnamese green cosmetics market, so this study will be a significant contribution.

Implication

This study also has a practical implication because it will provide insight into consumers' motivation to purchase green cosmetics and give recommendations to marketing managers or the authority on what can be done to promote green living style.

Limitations

Due to actual research has not been undertaken, proposed hypotheses are not confirmed yet.

4.2. Conclusion

To sum up, the purpose of this study is to examine the effects of environmental concerns, health consciousness, green cosmetics knowledge, perceived safety and the success dimension of materialism on attitude towards purchasing organics cosmetics. A modification of knowledge – attitude – behavior model is deployed to test six hypotheses.

This study contributes to the current literature in two ways. First, to the author's best knowledge, it is the first research to study the influence of knowledge on green cosmetics purchase intention. Second, it complements existing literature by providing an insight into green cosmetics purchase behavior in Vietnam, an emerging economy where green living style is becoming a trend.

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