

# ATTITUDE FORMATION TOWARDS LOCAL AND INTERNATIONAL ECOLOGICAL FACE AND BODY CARE BRANDS AMONG LITHUANIAN FEMALE CONSUMERS

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**Abstract.** *Current environmental trends in production and marketing resulted in a close-loop situation, when on the one hand consumers demand environmentally friendly and ecological products and are ready to pay price premiums for them, on the other hand, marketers explore usage of environmentally friendly brands and labels as a competitive advantage. Both local and international brands compete in the market of ecological products. However, consumer propensity to purchase ecological brands differs, as this variable can be a function of a number of factors. The paper analyses the impact of consumer values, perceived environmental knowledge and pro-environmental concern on consumer attitudes towards ecological brands (local or international), and the influence of consumer attitude elements on intention to purchase local vs. foreign ecological brands in the industry of face and body care. Lithuanian women were polled to determine the relationship of these variables. The results indicate that the attitude towards an ecological product is related to the value of a sense of belonging and pro-environmental concern; intention to purchase a local brand is predicted by the attitude towards the local brand only, whereas intention to purchase an international brand is predicted by the attitude towards an international and ecological brand, and negatively correlates with the attitude towards a local brand.*

**Key words:** *attitude towards an ecological brand, pro-environmental concern, perceived environmental knowledge, local vs. international brand, Theory of Planned Behavior.*

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## Introduction

Current environmental trends in production and marketing resulted in a close-loop situation, when on the one hand consumers demand for environmentally friendly and ecological products and are ready to pay price premiums for them (Borin, Cerf &

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Krishnan, 2011; McDaniel & Rylander, 1993), on the other hand, marketers explore usage of environmentally friendly brands and labels as a competitive advantage (Tan, 2011). Mass media and environment friendly movements work as catalysts for the increasing market of environmentally friendly and ecological products. Competition in the field also increases. Although environmental issues have attracted scholars' attention since 1970, consumers became the key driver to research sub-topics of environmental marketing and management only in 1990 (Leonidou & Leonidou, 2011). The topics of ecological brands perception and attitudes towards them, propensity to purchase, marketing have attracted increasing scholars' attention in recent years (Alsamdi, 2007; Chang, 2011; Hartmann & Ibanez, 2006).

Both local and international brands compete in the market of ecological products. Lithuania is an emerging market where local and international ecological brands compete. Since the market for ecological products has promising growth opportunities and is in line with Western trends of interest towards ecology, competition keeps increasing; every year several local or foreign newcomers that are positioned as ecological can be monitored.

Face and body care products were selected as an industry for the research. Products from this sector are used by the majority of people. They are purchased frequently, thus decision making criteria are evoked and different alternatives considered at least several times per year, and consumers can respond about their assessments. A number of local and international brands are prevalent in this sector in Lithuania; some of them emphasize their country of origin. A lot of brands in the sector position themselves as ecological by demonstrating certificates, stressing the pureness of ingredients, "clean" extraction and production process, or by creating eco-associated package and brand design.

It is a well-known rule that attitudes towards an object lead to positive behavior towards it (Ajzen, 1985). Thus producers who are willing to sell their ecological brands have to understand the contributing factors of positive attitude towards the ecological brand, the factors of positive attitude towards local vs. international brand, and how elements of attitudes are related to intentions to purchase a brand with particular characteristics.

During the recent decades authors Ajzen (2006), Stern, Dietz, Kalof and Guagnano (1995), Schuiling and Kapferer (2004), Roy and Chau (2011), Steenkamp, Batra and Alden (2002) have contributed to the scientific discussion by determining factors that affect consumer attitudes in general, and attitudes towards local and international brands. However, up till now, these factors have not been analyzed via the prism of attitudes towards ecological brands (both local and international). Attitudes towards ecological local or international brands, as presumed, should be consciously formed and derive from consumer values and worldview, related to ecology. Some of these variables can be shaped using marketing efforts. Therefore disclosing these relationships would be highly beneficial for marketers of local and foreign ecological brands. Thus, the aim of the paper is to determine the factors that affect consumer attitudes towards ecological local and international brands and intention to purchase them.

## **1. The concept of ecological international and local brand**

Although ecological marketing and branding attracts a lot of scholars' attention, it should be outlined that up till now the concept of ecological branding is not clearly defined. Rather, the concept in many cases is used interchangeably with concepts "environmental", "green", "natural", and only few attempts have been made to draw the lines between seemingly synonymous terms.

Nearly every product which is produced, purchased, consumed and disposed of has a negative impact on environment in one or another stage of cycle (Pickett-Baker & Ozaki, 2008). Having this in mind, there are very few real ecological products out of the entire volume of products that are used. Therefore by using the concept of ecological product, the presumption of a product which is friendlier to the environment as compared to a non-ecological product is taken into account. To be more precise, ecological products are those that do not harm environment, preserve natural resources and can be recycled (Shamdasani, Chon-Lin & Richmond, 1993; Alsamdi, 2007). There is a common assumption that ecological products are those that are natural and do not include harmful ingredients (Pujari & Wright, 1996).

More and more producers start using ecological branding as a competitive advantage. An ecologic brand in a general sense is the brand, symbol or design of products that are environmentally friendly (Rahbar & Wahid, 2011). The supreme level of ecological branding is special certificates of acknowledged organizations that signify strict control of production, starting from the ingredients extraction. However, very few brands are certified as really ecological. More brands, although not certified, use the perceptual tools to convey that their products are ecological: positioning as natural or environmentally caring, excluding chemical ingredients, using eco-related design elements in a brand and packaging. Thus, identity of an ecological brand is created, and consumer added-value is expressed by perceived reduced harm for environment and safety for the consumer. Being an ecological (certified or not) brand itself cannot create competitive advantage, thus additional communication and differentiation means are necessary to distinguish the brand among other non-ecological and ecological brands (Pickett, Kangun & Grove, 1995).

Since consumers not always distinguish between certified ecological brands, and brands that are positioned as ecological, it is common to assume that benefits deriving from an ecological brand identity will be understood depending on consumer perception. That is, the brand that consumers perceive to be ecological, could be considered as ecological for consumer attitudes and behavior research. The current article will use the standpoint of consumer, but not objective brand characteristics to determine the ecological brand.

Similarly, there is an extensive discussion in academic literature what should be considered as a local or international brand. The discussion is vital, since effects between a local and an international brand perception and purchase likelihood are clearly distributed. It is typical to claim that local brands are determined by the

objective criteria (local sales market, place of production, place of headquarters), or by the subjective criteria (consumer perception and associations with local production and their symbolic relations with local market) (see more in Batra, Ramaswamy, Alden, Steenkamp & Ramachander, 2000). International brands are those that are sold in a number of countries with similar coordinated marketing strategies (Steenkamp, Batra & Alden, 2003). These distinctions are plausible having objective measures in mind, however, many consumers fail to identify the correct country of origin (Balabanis & Diamantopolous, 2011). However, even in this case the effects of country of origin still hold, since they are dependent on consumer perception.

Thus, further in this article consumer-perception measure, i.e., subjective understanding of brand origin (local vs. international) will be applied. That is, if consumers consider the brand to be local, the brand will be affected by the attitude towards a local brand. In this case the product place of origin is not differentiated from brand place of origin, since there are no Lithuanian ecological brands the place of production of which would be abroad; all the other brands should be considered as international.

## **2. Formation of attitude towards an ecological international or local brand**

### ***2.1. Components of attitudes and their relation to behavioral intentions (on the basis of the Theory of Planned Behavior)***

Prediction of behavior is of long term interest for marketers, sociologist, economist and scholars of other fields. Up till now, several domains have been considered to be important measures in understanding future behavior: attitudes (see, for example, Sherman & Fazio, 1983, for the review), personality traits (Ajzen, Timko & White, 1982, Sherman & Fazio, 1983), emotions (Allen, Machleit & Kleine, 1992), past behavior (Smith, Terry, Manstead, Louis, Kotterman & Wolfs, 2008), knowledge (Small, Weinman, Buzi & Smith, 2009). The domains are closely interrelated (for example, past behavior results in knowledge, and knowledge affects attitudes, which consequently might result in new behavior); however, most of the research is able to grasp one or two domains into account at best, treating them as separate variables, due to the complexity of relationships.

Attitudes have been identified as the major drivers of assessment of various objects, persons, issues or behavior (Bonnes, Lee & Bonaiuto, 2003). According to Ajzen (1985), so far attitudes are among the most important predictors of behavioral intentions and consequently, behavior. Therefore studies of attitudes towards objects that have particular features constitute a good portion of consumer behavior, branding and marketing research (Fraj & Martinez, 2006; Laroche, Bergeron & Barbaro-Forleo, 2001; Martin & Simintiras, 1995; Pickett-Baker & Ozaki, 2008; Raska & Shaw, 2012; Straughan & Roberts, 1999).



Icek Ajzen, probably the most prominent researcher in attitudes formation and their link to behavior, has created the Theory of Planned Behavior which explains attitude elements and their links to behavior. According to Ajzen (1985), attitude toward behavior, subjective norm and behavioral control are the major predictors of behavioral intentions.

Attitude towards behavior is a function of behavioral beliefs (assessment of behavioral outcome) and the importance of that outcome. Judging upon the behavioral beliefs towards ecological products, the perceived outcomes of their usage to environment and/or consumer and the importance of the positive outcome should be estimated. Generally, attitude towards environmental protection is a collection of beliefs, norms and behaviors related to an individual's environmental activities or environmental issues (Schultz, Shriver, Tabanico & Khazian, 2004). Chang (2011) has identified two groups of factors that could affect attitudes towards environmental issues: product related factors and consumer related factors. As for product related factors, usually ecological products are associated with higher perceived price, perceived quality (lower, if it is believed that chemical ingredients might induce functionality of certain product categories, and higher, if ecology is related to health or safety issues), and higher perceived usefulness for the environment. Consumer related factors include perceived effectiveness for the consumer and perceived emotional value.

The subjective norm is understood as external pressure to comply with certain existing opinions and widely accepted behavioral patterns. It is computed by weighting normative beliefs (pressure from peers and others) by motivation to comply with the pressure. It could be assumed that peers' behavior and opinions related towards socially desirable issues, like ecology and environmental protection, should make a pressure forming an attitude towards ecological face and body care brands. Belz and Dyllik (1996) identify self-satisfaction by demonstrating socially desired ecological behavior being one of the emotional factors of "green" brands usage. What concerns subjective norms towards local or international brands, Pikturnienė and Treigyte (2009) have identified that consumers who have stronger susceptibility towards interpersonal influence hold more positive assessments of international brands, when both country of origin and country of brand origin are well developed countries. Although results were not compared in the framework of local vs. international brand in general sense, consumers might feel more peer pressure to use international brands since they signal quality, innovativeness, prestige.

Behavioral control is a function of control factor (how important it is for the consumer) and perceived power of the control (to what extent can consumer control a particular factor upon sufficient will). It refers to a person's understanding whether there are hindrances or incentives to perform in a certain way, and his/her determination to overcome hindrances or use incentives. In the case of ecological face and care body products (local vs. international), control of particular factors might be related to the efforts of information search, brand access via limited distribution channels, and sacrifice in monetary terms.

All three elements lead to behavioral intentions. Behavioral intentions in turn should work as a predictor of actual behavior. In marketing research, behavioral intentions most often are equated with intentions to purchase an object (product, brand) that holds particular characteristics (in this case, intention to purchase an ecological local or international brand should be affected by the attitudes, subjective norms, and perceived behavior control).

Research hypothesis H1 refers to the relationship of attitude elements (attitude, the subjective norm, and perceived behavioral control) with intentions to purchase an ecological local or international face and body care brand.

Local origin of a brand, all other circumstances being equal, should signal more ecological way towards consumer due to lower transportation and storage usage, compared to foreign goods. Also, in Lithuania local face and body care brands are substantially cheaper in comparison with the imported ones, which presumably should lower efforts of perceived behavioral control. Positive attitude towards an international brand should negatively affect intention to purchase a local brand. Thus:

*H1\_1. Attitude towards an ecological brand, attitude towards a local brand, and perceived behavioral control have statistically significant positive relationship; attitude towards an international brand has statistically significant negative relationship with intention to purchase a local brand.*

Attitude towards an international brand, together with the subjective norm, should be a predictor of intention to purchase an international face and body care brand, since it might be perceived as more prestigious and qualitative. Attitude towards an ecological brand should also be a predictor of intention to purchase an international brand, since many international brands have strong positions in pursuing ecological production and signaling that to consumers. In the same manner as previously stated, attitude towards a local brand should be negatively related to intentions to purchase an international brand.

*H1\_2. Attitude towards an ecological brand, attitude towards an international brand, and the subjective norm have statistically significant positive relationship, attitude towards a local brand has statistically significant negative relationship with intention to purchase an international brand.*

## **2.2. Antecedents of attitudes, subjective norm, and perceived behavioral control**

Attitudes derive from other internal characteristics of a consumer, for example, values and particular concerns (beliefs) (Leonard & Cronan, 2005), also from consumer knowledge. The current paper analyses attitudes towards a brand that holds (at least) two characteristics – ecological and local versus international. Since local and international brands convey different meanings, quite frequently related to consumer identity, values, and particular quality characteristics (for example, freshness vs. recent technological advancement), it is plausible to conclude that factors leading to positive assessment of a local or an international brand in the same category of ecological products will differ

among consumers. Consumers holding different values, knowledge and environmental concern will form different attitudes, the subjective norm and perceived behavioral control in relation to international and local brands due to their perceived quality, purity, freshness, friendliness towards environment, that is, characteristics used for ecological brand judgment.

### *Values as antecedents of attitudes*

Values are long term beliefs that particular behavior is desired and good, simultaneously assessing the environment (Pickett-Baker & Ozaki, 2008). They serve as major principles in life to distinguish desirable and undesirable goals and behaviors.

There are numerous typologies of values (Rokeach, 1974; Schwartz, 1994; Wetzel, 2006). One of the most popular of them is List of Values (LOV) (Kahle, 1983), which distinguishes nine values: sense of belonging, excitement, warm relationship with others, self-fulfillment, being well-respected, fun and enjoyment in life, security, self-respect, a sense of accomplishment. Although values cannot be sufficient predictors of particular brand choice, they serve as the major guidelines for the pursued lifestyle, which in turn leads to the particular attitude shaped behavior (Beatty, Kahle, Homer & Misra, 1985). Also they help to determine the selection criteria (Pitts & Woodside, 1983) and work as antecedents of attitudes (Tan, 2011).

Environmental attitudes can be ascribed to the value-expressive ones according to Katz (1960) functional theory of attitudes. Holding a positive attitude towards environment protection represents certain values individuals prioritize not only to themselves, but to others as well. Since due to current environmental concern at least minimum level of environmentally cautious behavior is desired, this kind of attitude serves as a tool to represent a fit into the group of individuals that demonstrate positive behavior.

Previous research has determined that individuals who have stronger expressed values of security and fun and enjoyment usually have positive attitudes towards environmental protection and ecological products (McCarthy & Shrum, 1994). By behaving in an environmentally friendly way, consumers perceive less harm for environment and themselves, thus feeling more secure. Fun and enjoyment is explained as fulfillment and happiness gained through the interaction with the environment in an eco-friendly way. Since environmental protection is the issue related to the sense of belonging (an individual feels contributing to the community and environment), and self-respect (an individual feels satisfaction in pursuing “correct” behavior), being respected and holding warm relationship with others, it is plausible to assume that these values will be predictors of attitude elements in relation to an ecological brand. Social pressure to use brands that are considered to be less harmful for environment and community should be stronger felt by those individuals who have strongly expressed values of sense of belonging, being well-respected, and desiring warm relationship with others. Behavior control, in a general sense, should be related with values of self-respect (as a reward for the ability to control

the desired factors) and being well respected. In general, H2 proposes relationships of values with the elements of attitudes (TPB). Thus:

*H2\_1. The values of fun and enjoyment, being well-respected, a sense of belonging, warm relationship with others, security and self-respect have statistically significant positive relationship with attitude towards ecological face and body care brands.*

*H2\_2. The values of being well-respected, a sense of belonging, warm relationship with others have statistically significant positive relationship with subjective norms.*

*H2\_3. The values of being well-respected and self-respect have statistically significant positive relationship with perceived behavioral control.*

Positioning a brand as local or international raises different associations for the consumers in relation to product quality or specific functions, value for money, desired user groups, countries of origin or other differentiating characteristics. Both local and international producers realize that their brand strength lies in different effects related to their place of origin.

International brands might be perceived as more qualitative and prestigious (Steenkamp et al., 2003), status rewarding (Roy & Chau, 2011) and innovative (Cheng, Chen, Lin & Wang, 2007), and their users – as modern, sophisticated, cosmopolite (Steenkamp et al., 2003). More cosmopolite consumers tend to give preferences for international brands (Parts & Vida, 2011). Since brand usage is related to fitting within reference group (Bearden & Etzel, 1982), sense of belonging, being well respected and holding warm relationship with others should be strong antecedents of attitudes towards brands that hold particular characteristics, probably more important for peers. The majority of consumer convenience products brands should convey emotional value (Zaltman, 2003), thus value of excitement should correlate with attitude towards an international brand, since it is considered to be more prestigious, innovative, qualitative. Therefore:

*H2\_4. Values of the sense of belonging, excitement, being well respected, warm relationship with others have statistically significant positive relationship with attitudes towards an international face and body care brand.*

Preferences for local brands are derived from consumer ethnocentrism (Shimp & Sharma, 1987) and domestic country bias (Balabanis & Diamantopolous, 2004). A survey performed using Schwartz typology of values reported that consumer ethnocentrism is related to values of stimulation (benevolence), self-direction, self-enhancement and conservation (security, tradition and conformity) (Balabanis, Mueller & Melewar, 2002). Although the LOV and Schwartz typologies do not allow exact equivalents, some commonalities can be drawn: representatives of these values in LOV would be fun and enjoyment, a sense of accomplishment, self-respect, being well-respected, security, thus consumers with well-expressed listed values should favor local brands. Therefore:



*H2\_5. Values of fun and enjoyment, a sense of accomplishment, self-respect, being well-respected, and security have statistically significant positive relationship with attitude towards a local face and body care brand.*

### *Worldview as antecedents of attitudes*

Stern et al. (1995) suggested including worldview as an antecedent of attitudes for ecological brands. Worldview is a psychographic characteristic which in the case of attitude towards an ecological brand might include pro-environmental concern and consumer knowledge about ecology.

The role of knowledge on the behavior is highly acknowledged in the cases when cognitive, reasoned action is involved (Small et al., 2009; Frick, Kaiser & Wilson, 2004). Knowing the consequences of the behavioral pattern in general results in particular actions when doing or not doing is contrasted (like recycling vs. non-recycling, owning vs. not-owning a vehicle (Flamm, 2009), conserving vs. not (Frick et al., 2004)), or when the choice between alternatives is involved (for example, selecting a particular brand with featured characteristics). Consumer knowledge about ecology affects attitudes (Laroche et al., 2001) since behavioral outcomes using ecological brands are assessed in a different manner, fully realizing negative and positive consequences for the environment and consumer if ecological or non-ecological brands are used. Grundey (2009) has determined that in Lithuania 60% of consumers consider environmental education and information to be an important factor for the purchase of ecological products, outweighing advertising.

Besides environmental knowledge in general, knowledge about particular characteristics of the product could be related to attitudes. The strength of attitude elements towards an ecological brand effects could be differently distributed when ecological brands are local or international. Local products are associated with freshness due the shorter way (and time) from the moment of production till the moment of sale, when freshness is an evaluation criterion. Freshness and shorter travel towards the consumer should be associated with ecology, since local production and consumption results in lower harmful resources wastage (less transportation, warehousing, etc.).

Pro-environmental concern is understood as greater concern about environment which influences everyday decisions and behavior (Akenhurst, Afonso & Goncalves, 2012). This trait has developed over time and can be seen as consequence of knowledge in combination with certain values or personal norms. Although these domains can be interrelated, for further research pro-environmental knowledge will be considered as an independent exogenous variable. People who are more environmentally concerned will assess behavioral outcomes of an ecological brand purchase more positively, also outlining that it is important for them. They should feel more social pressure to behave in an environmentally friendly way, and should be willing to put more efforts to pursue this behavior. Local brands should be understood as more environmentally friendly,

therefore attitude towards a local brand can also be affected by pro-environmental concern. The hypothesis is raised as follows:

*H3: The variables of worldview, namely, pro-environmental concern and perceived knowledge about ecology, have statistically significant positive relationship with attitude towards an ecological brand, attitude towards a local brand, the subjective norm, and perceived behavioral control.*

### **3. Methodology**

#### *Measures*

Values, perceived environmental knowledge, pro-environmental concern, attitudes towards behavior, the subjective norm, and perceived behavioral control were considered to be independent variables. Dependent variables were intention to purchase local and international ecological face and body care brands.

Values, perceived environmental knowledge and pro-environmental concern were exogenous variables; attitude elements and intention to purchase local vs. international ecological cosmetics brand were endogenous variables.

Precise measurement instruments are provided in Table 1.

Actual behavior was not assessed, since that would require strict control of consumers. According to Ajzen (2005), behavioral intentions serve as a good proxy to predict behavior. Although reported intentions to purchase deviate from actual purchase, they might still work as good purchase predictors depending on applied model of prediction (Jamieson & Bass, 1989). In this case the dependent variable represented choice (preferences for an ecological international vs. local brand) rather than commitment to be involved in the behavior that requires effort (ecological behavior), thus self-report bias due to social desirability was expected to be low. For the independent endogenous variables, that is, attitude elements in relation to ecological brands, the socially desirable reporting should be taken into account when assessing the results.

Respondents' income and age were measured on interval scales; education was measured using a nominal scale.

#### *Sample and respondents selection procedure*

To test the model, convenience survey of Lithuanian respondents was used. A link referring to an online questionnaire was snowballed across social networks and available contact groups of authors. 262 answers were received. Since the survey settings did not allow missing a single answer (except sensitive demographics, like income), all questionnaires were fully completed. Several outliers were eliminated: male respondents (since their number was small, and results addressing a more homogeneous sample of females would only have more practical advantages), few very young and elderly respondents (for the same reason of a more homogeneous sample), and respondents who had reported that they reside outside Lithuania (since presumably their attitudes

TABLE 1. Variables and measures

<i>Variable</i>	<i>Author and theory</i>	<i>Measurement</i>	<i>Internal consistency</i>
Values	List of Values (LOV), Kahle, 1983.	Self-assessment on the strength of value, 7-point Likert scale.	N/A
Pro-environmental concern	Ishaswini and Datta, 2011.	Self-assessment of statements, 7-point Likert scale. Statements were reworded to fit face and body care products; several irrelevant statements were removed.	Cronbach $\alpha$ (N=7) = 0.905.
Perceived environmental knowledge	Mostafa, 2007	Self-assessment of statements, 7-point Likert scale.	Cronbach $\alpha$ (N=5) 0,863
Attitude towards behavior	Theory of Planned Behavior, Ajzen, 2005.	A weighted average of behavioral outcome and the importance of that outcome (for example, "I am aware that purchasing ecological cosmetics is important for nature prevention" and "Nature prevention is important for me"), 7-point Likert scale.	N/A
Subjective norm		A weighted average of normative beliefs in relation to ecological face and body care products purchase and motivation to comply with normative beliefs (for example, "Many people who are important to me suppose that I should purchase ecological face and body care brands" and "It is of vital importance to me what other important to me people think of me"), 7- point Likert scale.	N/A
Perceived behavioral control		A weighted average of control belief and self-assessed ability to control the factor (for example, "I have sufficient resources and opportunities to purchase ecological face and body care brands" by "I am ready to pursue more effort in order to purchase ecological face and body care brands regularly"), 7-point Likert scale.	N/A
Intention to purchase local or international ecological brand		Agreement with the statements "Knowing that the face and body care brand is ecological, I would purchase a local (Lithuanian) brand" and "Knowing that the face and body care brand is ecological, I would purchase an international brand", 7-point Likert scale.	N/A

towards Lithuanian and international brands, as well as purchase behavior while selecting brands would differ as compared to consumers who reside in Lithuania due to the differences in experience, exposure to marketing efforts and brand availability).

After eliminations, 206 questionnaires were left. The final sample can be characterized as urban women, living in Lithuania, from 20 to 59 years old (women from 20 to 29 dominating), with a variety of income ranging from minimum 800 Lt<sup>1</sup> to 5500 Lt for a family member (average salary in Lithuania is 1903 Lt (Lithuanian Department of Statistics, Dec. 2012)). Table 2 provides more detailed sample characteristics.

TABLE 2. Age and income characteristics of the sample (206 females)

	Frequency	Percent	Cumulative Percent
<b>Age</b>			
20-29	115	55.8	55.8
30-39	61	29.6	85.4
40-49	18	8.7	94.2
50-59	12	5.8	100
<b>Income</b>			
No income reported	6	2,9	2.9
Up to 800 Lt	42	20,4	23.3
800-1500 Lt	60	29.1	52.4
1501-2500 Lt	59	28.6	81.1
2501-3500 Lt	22	10.7	91.7
3501-4500 Lt	13	6.3	98.1
4501-5500 Lt	4	1.9	100

#### 4. Results

First of all, the distribution of intention to purchase ecological international and ecological local face and body care brands was assessed. A local brand had clear preferences among the sample (Mean = 5.21, Mode = 6, Median = 6), compared to an international one (Mean = 3.88, Mode = 4, Median = 4).

Further it was measured to what extent attitudes towards an ecological, local or international brand, subjective norms and perceived behavioral control are the predictors of intentions to purchase an ecological local or international brand. Stepwise regression was run. Multicollinearity tests reveal good data fit for regression (tolerance between 0.784 and 0.978; VIF between 1.023 and 1.276). Normal distribution of variables is not maintained (for the larger part of the variables the Kolmogorov-Smirnov test is significant). The problem of non-normality, or, to be more precise, J curve response concentration, is common for small, homogeneous samples when self-reports on attitudes and values are addressed (Graham, 1940). The results are provided in Table 3.

<sup>1</sup> The rate of Lithuanian currency litas (LTL) is fixed to 3.45 euro.



TABLE 3. Attitudes, subjective norm and perceived behavioral control as predictors of intentions to purchase an ecological local or international brand: summary of multiple regression model coefficients

Hypothesis No	Dependent variable and model coefficients	Potential predictors, identified by stepwise regression	B	beta	t	Sig.	Excluded variables
1_1	Intention to purchase an ecological Lithuanian brand $R^2=0.243$ , $F=65.540$ , $p=0.000$	Attitude towards local brand	4.027	0.493	8.096	0.000	Attitude towards an ecological brand, perceived behavioral control, attitude towards an international brand (reverse)
1_2	Intention to purchase an ecological international brand $R^2=0.265$ , $F=24.221$ , $p=0.000$	Attitude towards an international brand	2.352	0.472	6.730	0.000	Subjective norm
		Attitude towards a local brand		-0.396	-5.586	0.000	
		Attitude towards an ecological brand		0.223	3.277	0.001	

Intention to purchase an ecological Lithuanian brand has a single related variable, namely, an attitude towards a local brand ( $\beta=0.493$ ,  $t(201)=8.096$ ,  $p=0.000$ ). Although the relationship seems to be evident and absence of other predictors is a bit disappointing, the result has significant managerial implications. In Lithuanian face and body care cosmetics sector there are few, however, strong local brands. For years their positioning was heavily based on local origins of ingredients, deep traditions of herbs knowledge, extraction and processing, and freshness. Even a short shelf-life (up to 12 months) is interpreted by companies as an advantage, signaling absence of chemical ingredients in the product. It might be assumed that associations between local and “green”, or ecological brand are now so strong, that it is sufficient for the marketer to put all marketing stakes on local origin to increase intentions of local ecological brand purchase. The model holds significant ( $F(1,225)=65.540$ ,  $p=0.000$ ,  $R^2=0.243$ ).

For the international brand the segment also exists. Although most of the respondents demonstrated a neutral position towards its purchase, there were some strong inclinations. For this segment an international origin supported with a strong ecological aspect should be stressed, since attitude towards an international brand is a strong predictor ( $\beta=0.472$ ,  $t(201)=6.73$ ,  $p=0.000$ ). Most likely, this is the segment that for certain reasons demonstrates negative attitudes towards local brands, since significant reverse relationship with attitude towards a local brand and intention to purchase an international brand was determined ( $\beta=-0.396$ ,  $t(201)=-5.586$ ,  $p=0.000$ ).

Also, intention to purchase an international brand was predicted by attitude towards an ecological brand ( $\beta=0.223$ ,  $t(201)=-3.277$ ,  $p=0.001$ ). The model is significant and sufficiently explanatory ( $F(1,201)=24.221$ ,  $p=0.000$ ,  $R^2=0.265$ ).

It was asserted that particular values, pro-environmental concern and perceived environmental knowledge were related with attitudes towards an ecological brand, an international or local brand, the subjective norm and perceived behavioral control. For each endogenous variable, separate stepwise regressions with particular indicated independent variables were run. Multicollinearity tests reveal data fit for regression (tolerance between 0.447 and 0.986; VIF between 1.014 and 2.237). The results indicated that very few values have relationship with attitudes, subjective norms, and perceived behavioral control. Pro-environmental concern and perceived environmental knowledge are more important in explaining attitude elements in relation to ecological brands (see Table 4).

As indicated, pro-environmental concern is a significant and strong predictor of attitudes towards ecological brands ( $\beta=0.573$ ,  $t(197)=10.487$ ,  $p=0.000$ ). Together with the sense of belonging ( $\beta=0.211$ ,  $t(197)=3.86$ ,  $p=0.000$ ), these two domains form a significant model, and explain more than 40% of variance ( $F(1, 197)=69.370$ ,  $p=0.000$ ,  $R^2=0.406$ ).

Attitudes towards local and international brands are poorly explained by the selected variables. Although there are domains that correlate significantly (pro-environmental concern with attitudes towards local brands, and the value of being well respected with attitude towards an international brand), in general  $R^2$  in both models is too low (0.055 and 0.019, respectively) to offer sufficient variance explanation. Besides, the model of attitude towards an international brand, with the value of being well respected as the predictor, is just on the margin of insignificant explanation ( $p=0.046$ ). Thus, none of the selected variables serve as sufficient predictors of attitudes towards local or international brands. Most likely, the purchase of international or local brand is not related with opinions of peers, security, excitement or other constructs of consumer thinking that are related with higher consciousness of purchase, when values are evoked. The fact that environmental knowledge is not related with attitude towards a local brand is surprising in this context, since purchasing local brands, presumably, should be affected by the knowledge that locally produced goods, all other circumstances being equal, are more environmentally friendly due to lower transportation and storage usage, as compared to foreign goods.

Contrary to what was expected, subjective norms are not predicted by any of the values. Only pro-environmental concern might serve as the predictor of subjective norms ( $\beta=0.349$ ,  $t(200)=5.321$ ,  $p=0.000$ ), however, the  $R^2$  of the model is too weak (0.122). It was predicted that consumers who have strongly established values of warm relationship with others, a sense of belonging and being well-respected would experience stronger pressure of external norms. The results can be explained by the fact that ecological face and body care products fall into the category of private usage products. According to the theory of Bearden and Etzel (1982), the usage of private products can hardly be affected by the group influence.

TABLE 4. Values, perceived environmental knowledge and pro-environmental concern as attitude, the subjective norm and perceived behavioral control predictors: summary of multiple regression model coefficients

Hypothesis No	Dependent variable and model coefficients	Potential predictors identified by stepwise regression	B	beta	t	Sig.	Excluded variables
H 2_1 H 3	<b>Attitude towards an ecological brand</b> R <sup>2</sup> =0.406, F=69.370, p=0.000	Pro-environmental concern	3.894	0.573	10.487	0.000	Fun and enjoyment, being well respected, warm relationship with others, security and self-respect, perceived environmental knowledge
		A sense of belonging		0.211	3.866	0.000	
H 2_4	<b>Attitude towards an international brand</b> R <sup>2</sup> =0.019, F=4.037, p=0.046	Being well respected	7.712	0.139	2.009	0.460	A sense of belonging, excitement, warm relationship with others
H 2_5 H 3	<b>Attitude towards a local brand</b> R <sup>2</sup> =0.055, F=11.767, p=0.001	Pro-environmental concern	2.284	0.243	3.430	0.001	Fun and enjoyment, a sense of accomplishment, being well respected, security, perceived environmental knowledge
H 2_2 H 3	<b>Subjective norm</b> R <sup>2</sup> =0.122, F=28.313, p=0.000	Pro-environmental concern	2.508	0.349	5.321	0.000	Being well respected, self-respect, perceived environmental knowledge
H 2_3 H 3	<b>Perceived behavioral control</b> R <sup>2</sup> =0.332, F=101.353, p=0.000	Perceived environmental knowledge	-4.648	0.576	10.067	0.000	Being well respected, self-respect, pro-environmental concern

Perceived behavioral control is strongly related with perceived environmental knowledge ( $\beta=0.576$ ,  $t(201)=10.067$ ,  $p=0.000$ ). More than 30% of variation is explained by this variable only. The result is easily explainable, since consumers who have strong environmental knowledge are more likely to overcome difficulties (for example, higher price or more scarce distribution) to get an ecological brand. However, none of the values serves as a predictor of perceived behavioral control.

The relationships of variables are depicted in Figure 1.

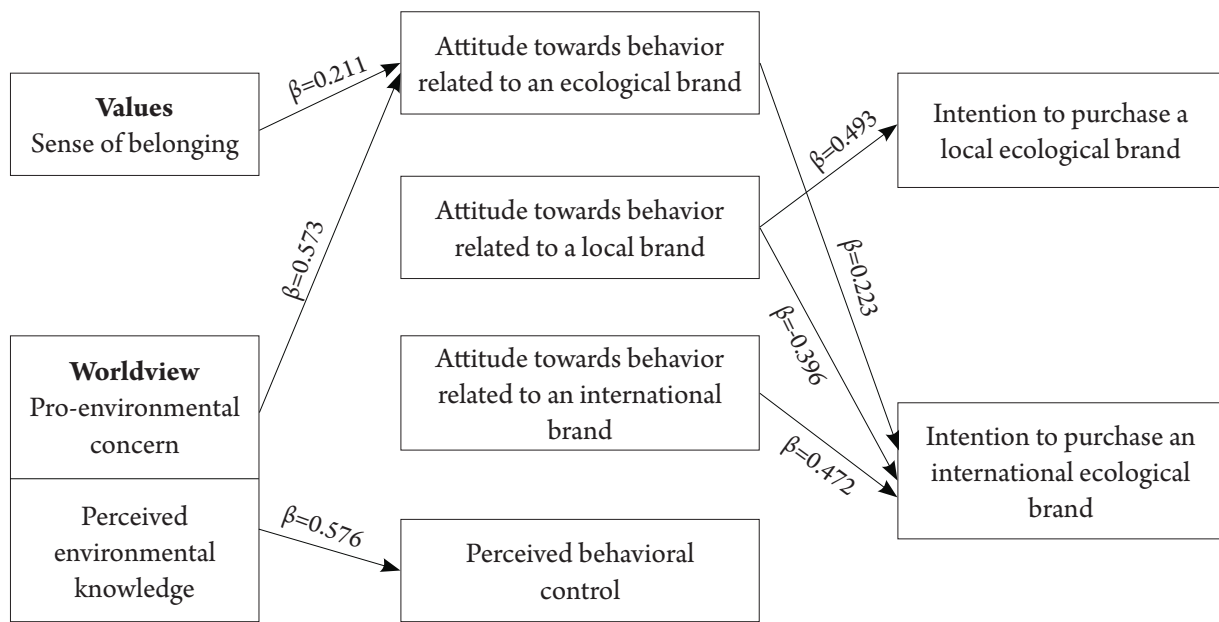


FIGURE 1. Relationships between values, worldview elements, elements of the Theory of Planned Behavior, and intentions to purchase an ecological local and international face and body care brand.

## Discussion and managerial implications

The results of the research have clear implications for local and international producers of ecological face and body care brands. Propensity to purchase an international ecological brand is closely related to attitude towards an international brand and attitude towards an ecological brand. It is also inversely related to the attitude towards a local brand, indicating a clear segment for international production. Attitudes towards ecological brands can be induced by pro-environmental concern and the value of a sense of belonging. Thus, marketers of particular international brands can use a broader concept positioning for their brands, that is, addressing the community and harmony with environment issues (to enhance a sense of belonging), and targeting pro-environmental concern. Additional proof of ecology (certificates, “green” stories) are highly recommended.

The relationship between pro-environmental concern and attitude towards ecological brands is favorable for current marketers, since environmental issues are often addressed by opinion leaders, mass media, various movements, and pro-environmental issues together with consumer knowledge keep escalating. Especially, foreign producers of ecological face and body care brands should benefit from that, since the relationship between increased pro-environmental concern, attitude towards an ecological brand and intention to purchase an international brand was demonstrated.

Intentions to purchase a local ecological brand were related to the attitude towards a local brand only. This implication could be considered as very positive, since the



country of origin *per se* serves as the major preference criterion in the local market. Addressing it is not difficult in marketing communication. Since the belief in local brand is so strong, there is no such big pressure to certify ecologic production. There are examples of Lithuanian brands that position themselves as being ecological, however, are not accredited as ecological, and consumers still trust them.

Perceived environmental knowledge proved to be the predictor of perceived behavioral control, however, this domain does not serve as a predictor for intention to purchase an ecological local or international brand. Most likely the results are related to the category itself, since no particular difficulties emerge or efforts are required while making the selection in this category of products. The subjective norm was neither explained sufficiently by selected variables, nor served as intention to purchase predictor. Again, this could be related to the category of privately used fast moving goods.

Limitations of the study include a rather small convenience sampling, although it was highly representative for the target group of ecological face and body care products. Another limitation might emerge due to the flexible understanding of what is an ecological brand. Ecology issues are new for Lithuanian consumers. Although the interest in them is comparable to world trends, consumers are still not able to differentiate between various levels of ecological labeling, terms “green”, “environmental friendly”, and “ecological”, or recognize a “green brainwashing”, when producers manipulate emphasizing only one ecological element or natural ingredients. However, it was presumed that if consumers perceive the brand to be ecological, all the effects of values-knowledge-environmental concern-attitude relationship hold for the brand, irrespective of its objective characteristics. The sample had characteristics of individuals that typically demonstrate higher environmental consciousness. In Lithuania, educated middle aged women with middle income (1200-2000 Lt) are the most eco-friendly when related to purchases (Banytė, Brazionienė & Gadeikienė, 2010). Therefore it is likely that relationships among values, pro-environmental concern, environmental knowledge, attitudes and intentions to purchase ecological brands would be allocated differently (presumably, weaker) among other consumer groups.

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