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Exposé

**Green purchase behavior in luxury fragrance market and determinants of
purchase decision-making process**

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15.05.2020, Kassel

Abstract

Title: “Green” purchase behavior in luxury fragrance market and determinants of purchase decision-making process

Background: Researchers attempt to explore and to explain consumer behaviour in different economic sectors, where luxury, as economic sector, gets special attention. Due to the information spread about the negative influence of the non-eco-friendly products more and more customers are demonstrating an increased willingness to purchase “green” products, especially in food and cosmetics sectors. Luxury fragrance sector hasn’t been studied enough and there’s no clear information about luxury fragrance consumers and their preferences of green ingredients.

Purpose: To explore the impact of “green” purchase behavior determinants in the luxury fragrance market using the model of green luxury fragrance purchase behavior, which includes and defines different kinds of factors and mediators, affecting the purchase decision.

Methodology: A literature review to set up a theoretical ground and empirical research to analyze the determinants of “green” purchase behavior. The data needed will be collected through a questionnaire asked a series of 5-point Likert scale questions, that will be spread among offline-consumers in private perfumeries and among online-consumers on the simulative perfume website. The hypotheses will be developed derived from the model of green cosmetic products purchase behavior. Independent sample T-test will be used to compare online and offline samples. In order to test how well the proposed model explains the purchase-decision process the Partial Least Squares technique will be applied. This technique will examine the relative importance of different groups of factors proposed by the model and will be based on the data extracted from questionnaires distributed among online and offline luxury fragrance consumers.

Keywords: green purchase behavior, green luxury, sustainable consumption, green luxury fragrance consumption, green purchase behavior determinants, green cosmetics.

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List of abbreviations

TPB – Theory of Planned Behaviour

1. Introduction

Escalating environmental degradation and diminishment of natural resources trigger the interest of governments, producers and consumers all over the world in developing and promoting sustainability and minimization of the devastating impact on nature and society (Cohen et al., 2010, p. 1) Nowadays, due to the information spread about the negative influence of the non-eco-friendly goods more and more customers are demonstrating an increased willingness to purchase “green” products (Yatish & Zillur, 2015, p. 128) (Petljak et al., 2018, pp. 1-15).

Researchers define distinct factors and determinants of positive consumer attitude to green purchasing, which include internal, social and external factors (Liobikienė & Bernatoniene, 2017, p. 113) (Timokhina et al., 2018, pp. 49-71).

Moreover, the majority of academic writings claim that the customer willingness to “green” purchasing not always converts into actual green purchase behavior (Yatish & Zillur, 2015, p. 138). Another challenge for researchers has to do with the distortion of results caused by encompassing all product categories into one term. Liobikienė und Bernatoniene indicate in their literature analysis, that such kind of generality of terms in case of product category definition could confuse the respondents and dispartate the results (Liobikienė & Bernatoniene, 2017, p. 116). Confirmation of that can be found in varying results of studies, which examined “green” consumer preferences without defining a concrete product category.

The next important issue is addressing the difference between luxury and commodity consumption patterns, which in turn demonstrate the causal gap in determinants of purchase decision-making process. It’s questionable if luxury consumers demonstrate similar “green” consumption patterns, as consumers of utilitarian products do (Davies et al., 2012, p. 38).

Therefore, it’s important to analyze the “green” purchase behavior determinants of concrete type of consumers in a specific product category.

To explore the green purchase behavior in the luxury fragrance market the model of Liobikienė und Bernatoniene will be adapted with the theory of planned behaviour model by Kim and Chung and tested with questionnaire investigation (Liobikienė & Bernatoniene, 2017, pp. 109-120) (Kim & Chung, 2011).

2. Theoretical background

Researchers from all over the world attempt to explore and to explain consumer behaviour in different economic sectors, where luxury, as economic sector, gets special attention (Aliyev et al., 2017, pp. 347-351) (Aliyev et al., 2019, pp. 233-264).

Jean Kapferer in one of his papers explores the degree of sensitivity to sustainability issues among luxury consumers. The results of this research, on the one side, demonstrate that luxury brands are expected to be exemplar also in terms of sustainability, but on the other side, consumers can't consider sustainability issues when purchasing luxury goods because of the information lack about it. Moreover, consumers do believe that, luxury purchases are too infrequent to have a negative impact on the nature and current production level of luxury goods is not high enough to destroy nature (Kapferer & Michaut, 2017, pp. 94-107).

To describe the forerunners of intention to purchase green cosmetic products researchers Kim and Chung developed a theory of planned behaviour model based on the Ajzen model (1991). The results demonstrate that health consciousness, environmental consciousness, and appearance consciousness are influencing attitudes towards purchasing organic cosmetic products (Kim & Chung, 2011).

Griskevicius and Tybur (2010) investigate in their study how status attributes affect desire for green purchases. The results illustrate that status attributes motivated people to choose green alternatives over more luxurious goods.

Researchers Achabou and Dekhili (2013) in their paper investigate to which extent luxury consumers associate sustainable development issues with luxury goods. Luxury consumers' preferences for recycling are also explored in this article. According to the main results, environmental aspects of the product are not a decisive selection criterion when buying luxury goods. Moreover, from the consumers' point of view luxury goods appear to be incompatible with recycling aspects. Authors also claim, that the gender has a big impact on consumer preferences: men are more reluctant toward the usage of recycled materials in luxury goods. Steinhart, Ayalon and Puterman (2013) explore in their research the influence of the environmental claim on the luxury and commoditized purchasing behaviour. For luxury products an environmental claim of the product increases the fit with social norms and the accessible justification of luxury purchasing.

Foyer & Backham (2014) investigate consumers' perception towards luxury goods and sustainability concept. The main outcomes indicate, that although luxury goods are often associated with unsustainability, consumers still prefer them because they claim a high status, social power and prestige of the customer and consumers are likely to associate luxury with unsustainability. Another important finding of this research is that consumers- are likely to percept luxury goods less luxury if they're labelled as "sustainable".

3. Methodology

For this work a literature review is used to set up a theoretical ground and empirical research is applied to analyze the determinants of “green” purchase behavior. The data needed will be collected through a questionnaire asked a series of 5-point Likert scale questions, that will be spread among offline-consumers in private perfumeries and among online-consumers on the simulative perfume website.

The hypotheses will be derived from the model of green cosmetic products purchase behavior and from the theory of planned behaviour model by Kim and Chung and tested with questionnaire investigation (Liobikienė & Bernatoniene, 2017) (Kim & Chung, 2011). Moreover, the hypotheses of other researchers chosen for the literature analysis will be used to develop and derive hypotheses for the new model. For literature search the database of Web of Science www.webofknowledge.com was used.

Independent sample T-test will be used to compare online and offline luxury fragrance consumer samples.

The Partial Least Squares technique is selected to test how well the proposed model explains the process of purchase decision making. This method is suitable for small datasets with missing values and unknown distribution, because it enables to reduce the negative consequences of these conditions. Moreover, partial least squares method provides with the graphic depiction of the relationships between variables, and in a such way the research question can be seen from another perspective.

4. Literature review

Titel	Authors	Year	Contribution to your research question / gap
A Study on Millennial Purchase Intention of Green Products in India: Applying Extended Theory of Planned Behavior Model	Sadhna Shukla	2019	This study proposed an extended theory of planned behavior model to examine the green product purchase intention of millennials in India. The results of the research propose that environmental responsibility is a major predictor of subjective norm toward millennial green product purchase intention.
Green Consumer Behavior in the Cosmetics Market	Nora Amberg, Csaba Fogarassy	2019	In this paper the main factors affecting green consumer behaviour were identified. Based on the results of the study 3 clusters can be formed. The first one is completely green, the second one prefers chemical cosmetics and the third cluster is mixed and there both natural and chemical cosmetics are purchased.
Common and Contradictory Motivations in Buying Intentions for Green and Luxury Automobiles	Farhad Aliyev, Ralf Wagner, Stefan Seuring	2019	This article explores the relationship between green and luxury automobile buying intentions. The present study also investigates common and contradictory motivations for luxury and green buying intentions of automobiles.
Why determinants of green purchase cannot be treated equally? The case of green cosmetics: Literature review	Genovaitė Liobikiene, Jurga Bernatoniene	2017	This article reviewed 80 papers published between 2011-2017 on green purchase behaviour and demonstrated that researchers have obtained different results analysing green products in general purchase behaviour. So, it's important to regard different product categories analysing green purchase behaviour. The authors also offered a model of green personal care products and colour cosmetics purchase behaviour.
Are luxury purchasers really insensitive to sustainable development? New insights from research	Jean-Noel Kapferer, Anne Michaut	2017	This article explores degree of sensitivity to sustainability issues among luxury consumers. Sustainable products are desirable but not necessarily purchased.
Luxury versus conscious consumption: are they really paradoxical?	Ana Carolina De Pierro Bruno, Edgard Barki	2017	This article explores some differences in buying behaviour between Brazilian and Portuguese luxury consumers. This research analyses the extent Brazilian or Portuguese do care about sustainability when purchasing luxury products.

<p>Consumer Behavior towards Green Products</p>	<p>Yi Chang Yang</p>	<p>2017</p>	<p>This article investigates how brand awareness influences perceptions and evaluation of consumers in order to recognize the importance of product features when purchasing cosmetic brands.</p> <p>The results of the study demonstrate the factors that have an impact on consumers' attitudes and purchasing behaviour toward green cosmetic products in Taiwan.</p>
<p>Predicting green product consumption using theory of planned behavior and reasoned action</p>	<p>Justin Paul, Ashwin Modi, Jayesh Patel</p>	<p>2016</p>	<p>This study validates the Theory of planned behavior by Ajzen and its extended form as well as the Theory of Reasoned Action in order to foresee the green purchase intention of Indian consumers.</p> <p>The results of the study show, that the perceived behavioral control and the attitude toward purchasing a product have a significant impact on the purchase intention.</p> <p>The next important finding of the study is that the subjective norm has no influence on the purchase intention.</p>
<p>Factors Affecting Green Purchase Behavior and Future Research Directions</p>	<p>Yatish Joshi, Zillur Rahman</p>	<p>2015</p>	<p>This study reviewed empirical articles on green purchase behaviour and identified different prevalent motives, facilitators and barriers that are influencing purchase decision-making process towards green products.</p> <p>Environmental concern of consumers and functional attributes of goods are identified as 2 main determinants of consumer green purchase behaviour.</p> <p>This paper provides information about the major predictors of green consumer purchase behaviour.</p>
<p>Luxury and sustainability: a common future? The match depends on how consumers define luxury</p>	<p>Jean-Noel Kapferer, Anne Michaut</p>	<p>2015</p>	<p>This article investigates why customers are not caring about sustainability aspects when buying luxury goods.</p> <p>Another important finding of this article is that although consumers are not focusing on sustainability when doing luxury purchases, they still have latent expectations about the commitment of luxury products and the sustainability concept.</p>
<p>Consumers' Attitude and Intention towards Organic Food Purchase: An Extension of Theory of Planned Behavior in Gender Perspective</p>	<p>Heru Irianto</p>	<p>2015</p>	<p>The research showed that health and environmental consciousness determine an individual's positive attitude toward buying organic food. The author also claims that gender is effecting attitude, intention, and behavior of purchasing organic food.</p>

<p>The Catch-22 of responsible Luxury: Effects of Luxury Product Characteristics on Consumers' Perception of Fit with Corporate Social Responsibility</p>	<p>Catherine Janssen, Joelle Vanhamme, Adam Lindgreen, Cécile Lefebvre</p>	<p>2014</p>	<p>This article explores if scarcity and ephemerality as luxury attributes do influence the consumers' perception of the fit between luxury goods and corporate social responsibility. This article also investigates how this fit influences attitudes toward luxury goods.</p>
<p>Is luxury compatible with sustainability? Luxury consumers' viewpoint</p>	<p>Jean-Noel Kapferer, Anne Michaut-Denizeau</p>	<p>2014</p>	<p>In this paper the extent of sensitivity of luxury purchasers to the origin of sustainable development is explored. The results of the study show that one-third of luxury consumers feel mixed emotions towards the concept of luxury. 54,1% of respondents claim that luxury is not so successful in terms of sustainability.</p>
<p>Can Sustainability Be Luxurious? A Mixed Method Investigation of Implicit and Explicit Attitudes Towards Sustainable Luxury Consumption</p>	<p>Benjamin G. Foyer, Daisy Backham</p>	<p>2014</p>	<p>This study investigates consumer perception towards luxury goods and sustainability concept. Although luxury goods are often associated with unsustainability, consumers still prefer them because they claim a high status, social power and prestige of the customer.</p>
<p>Consumer Green Behaviour Toward Green Products and Green Purchase Decision</p>	<p>Faizan Zafar Sheikh, Ashfaq Ahmed Mirza, Anam Aftab, Bilal Asghar</p>	<p>2014</p>	<p>This study examines the impact of price, gender, quality, brand and green marketing on green consumer behaviour. The results of the study demonstrate, that gender and brand have no significant positive impact on green purchase behaviour, but quality, price and green marketing do have impact on it.</p>
<p>The effect of an environmental claim on consumers' perception about luxury and utilitarian products</p>	<p>Yael Steinhart, Ofira Ayalon, Hila Puterman</p>	<p>2013</p>	<p>This article explores the influence of the environmental claim on the luxury and commoditized purchasing behaviour. The authors are defining the terms of hedonic and utilitarian products. The definition of "environmental claim" is also given.</p>
<p>Sustainability as Part of the Luxury Essence: Delivering Value through Social and Environmental Excellence</p>	<p>Nadine Hennings, Klaus-Peter Wiedmann, Christiane Klarmann, Stefan Behrens</p>	<p>2013</p>	<p>Deeper luxury is about being sustainable and sustainability should include all production levels. Consumers expect luxury companies to address ethical aspects of luxury goods.</p>
<p>Luxury and sustainable development: Is there a match?</p>	<p>Mohamed Akli Achabou, Sihem Dekhili</p>	<p>2013</p>	<p>This article investigates to which extent luxury consumers associate sustainable development issues with luxury goods. Also, the propensity of consumers to regard recycled materials in luxury products is explored. Luxury consumers' preferences for recycling are explored in this article.</p>

Consumer purchase behaviour for green products	Vinod Sharma, J. Sonwalkar, Maohar Kapse	2013	The main outcomes of the study demonstrate, that awareness & concern is an important factor that is influencing green purchase behaviour. Quality and price also have positive impact on green purchase behaviour. Moreover, availability and perceived consumer effectiveness are showing a positive relationship with consumer purchase behaviour for green products. Information and environmental attitude are also directly influencing green purchase behaviour. The results of the study also confirm that promotional activities are influencing consumer purchase behaviour.
Do Consumers Care About Ethical-Luxury?	Iain A. Davies, Zoe Lee, Ine Ahonkhai	2012	This article investigates the degree to which consumers are regarding ethical issues in their products consumption and whether they are willing to buy ethical luxury.
Understanding Consumer Behavior towards Green Cosmetics	Surya Rashmi Rawar, Pawan K. Garga	2012	This study explores the potential of green marketing in cosmetic industry. Most respondents claim that the eco claims of green products can't be relied upon. To get a mark of credibility consumers suggest adding a label to green cosmetic products.
Fast Fashion, Sustainability, and the Ethical Appeal of Luxury Brands	Annamma Joy, John F. Sherry, Alladi Venkatesh, Jeff Wang, Ricky Chan	2012	This research explores customers' perceptions of sustainability, fast fashion and luxury fashion.
Consumer purchase intention for organic personal care products	Hee Yeo Kim, Jae-Eun Chung	2011	The TPB framework is applied to describe the forerunners of intention to purchase organic skin & hair care products. The study is claiming that health consciousness, environmental consciousness, and appearance consciousness are influencing attitudes toward purchasing organic skin&hair care products.
Going Green to Be Seen: Status, Reputation, and Conspicuous Conservation	Vladas Griskevicius, Joshua M. Tybur	2010	This study explores how status attributes affect desire for green purchases. The activation of status attributes motivated people to choose green alternatives over more luxurious goods.

<p>All that glitters is not green: The challenge of sustainable luxury</p>	<p>Jean-Noel Kapferer</p>	<p>2010</p>	<p>This article discusses the congeniality of the sustainable development with luxury and argues that luxury supports long term products. Luxury being "the business of lasting worth" forgoes obsolescence and mass production. Luxury is criticized not because of its impact on the environment but because of its social impact.</p>
<p>The Theory of Planned Behavior</p>	<p>Icek Ajzen</p>	<p>1991</p>	<p>The research confirms that the intention to perform behaviors can be predicted from subjective norm, perceived behavioral control and attitudes toward behavior. Intentions of an individual and his perceptions of behavioral control are reflected in his behavior.</p>

5. Research model

To explore green purchase behavior in the luxury fragrance market and its determinants the model of Liobikienė und Bernatoniene (Figure 2) will be adapted with the theory of planned behaviour model by Ajzen (1991) (Figure 1) and theory of planned behavior by Kim and Chung (Figure 3) and tested with questionnaire investigation.

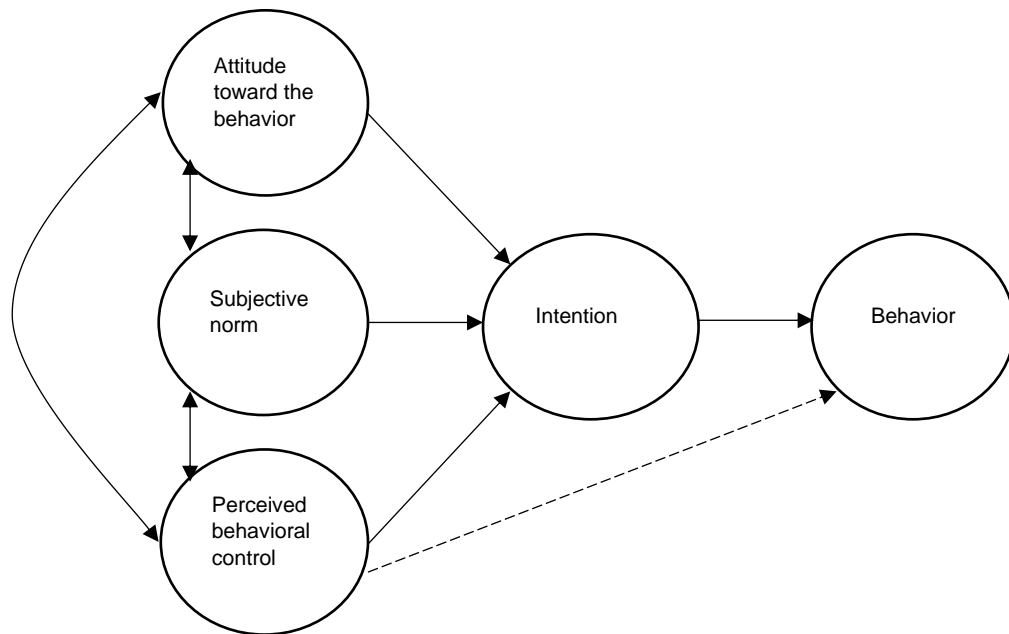


Figure 1. Theory of planned behavior

Source: (Ajzen, 1991)

The basic model used for the development of the model of green luxury fragrance purchase behavior is the theory of planned behavior by Ajzen (1991). The theory of planned behavior literally widened the original theory of reasoned action by Ajzen and Fishbein 1980 by adding the approach of perceived behavioral control.

The theory of planned behavior describes three different types of beliefs: behavioral, normative, and control and includes several related constructs of attitude, subjective norm, and perceived behavioral control (Ajzen, 1991, p. 199).

The theory assumes that the best predictor of behavior is behavioral intention. The research confirms that the intention to perform behaviors can be predicted from subjective norm, perceived behavioral control and attitudes toward behavior. Intentions of an individual and his perceptions of behavioral control are reflected in his behavior (Ibid., p.199).

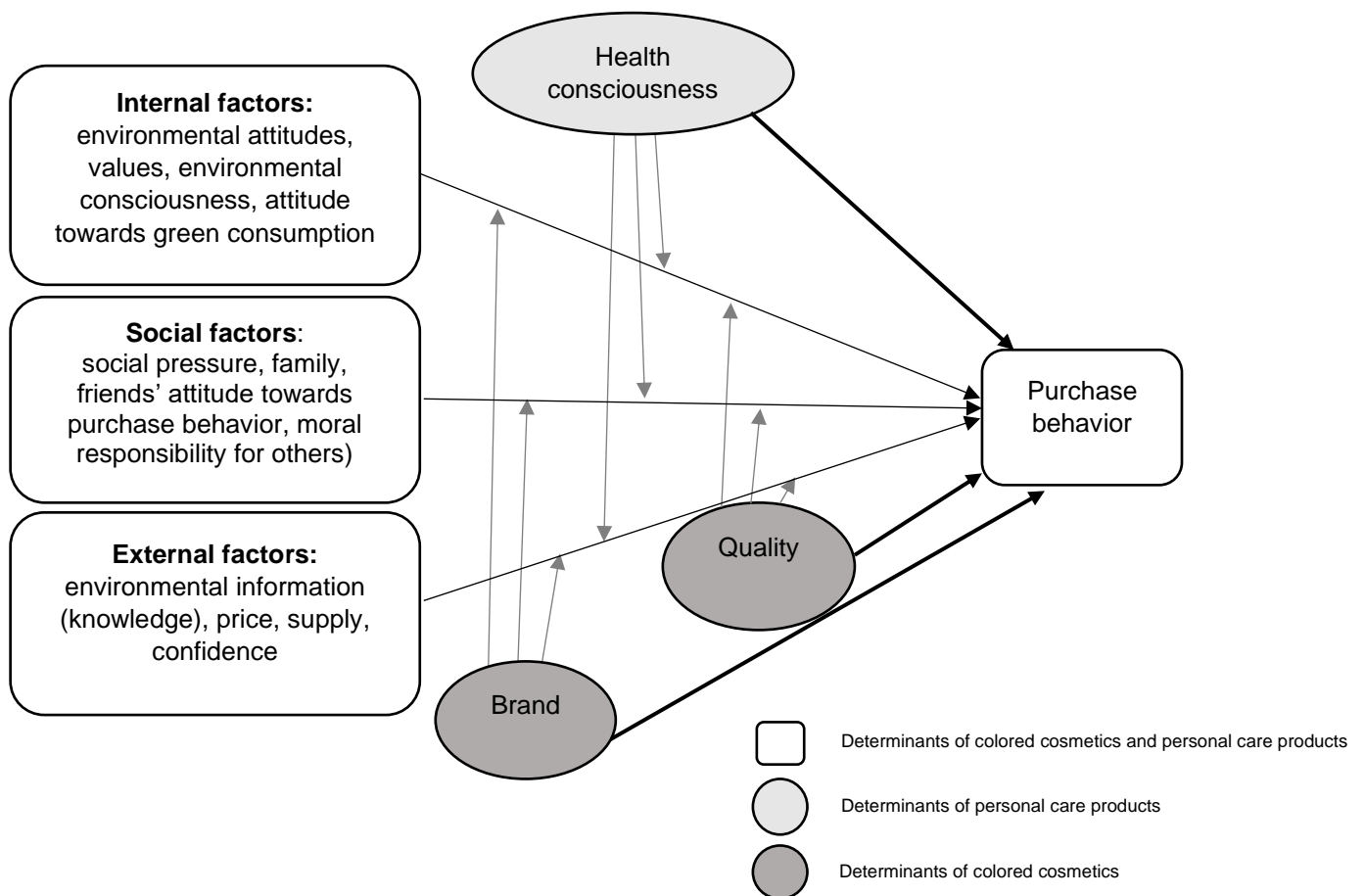


Figure 2. Model of green personal care products and color cosmetics purchase behavior

Source: (Liobikienė & Bernatoniene, 2017)

The model proposed by Liobikienė & Bernatoniene (2017) (Figure 2) describes consumer purchase behaviour regarding green personal care products and color cosmetics. This model includes following determinants of green cosmetic purchase behaviour: internal, social and external.

Internal factors, in their turn, include environmental attitudes, values, environmental consciousness, attitude towards green consumption. Social factors involve social pressure, family, friends' attitude towards purchase behavior, moral responsibility for others. To external factors belong environmental information or knowledge, price, supply, confidence (Liobikienė & Bernatoniene, 2017).

The model contains also several mediators such as health consciousness, brand and quality. Health consciousness is a motivator to buy green cosmetic products, because it affects internal, social and external factors and it can be seen as one of the main factors. Moreover, brand and quality variables are the main factors that are influencing green color cosmetics purchase behavior. They serve as mediators in this model as well and indirectly affect the purchase of color cosmetics products (Ibid, p. 117)

The model proposed by Kim and Chung (2011) (Figure 3) suggests that consumer values can be seen as a precursor of attitude and past experiences of a consumer, in their turn, can predict purchase intention. The model suggests following values that may effect attitude toward buying organic cosmetic products: health consciousness, environmental consciousness and appearance consciousness.

Perceived behavioral control is regarded as a moderator of attitude toward buying a product and the purchase intention relationship. Perceived behavioral control is influencing the positive relationship between attitude and purchase intention of organic cosmetic products in a positive way (Kim & Chung, 2011).

Moreover, perceived behavioral control is seen as an independent variable in this model. The authors are claiming that purchase intention of organic cosmetic products is higher when consumers seize more control over buying such products (Ibid, p. 41).

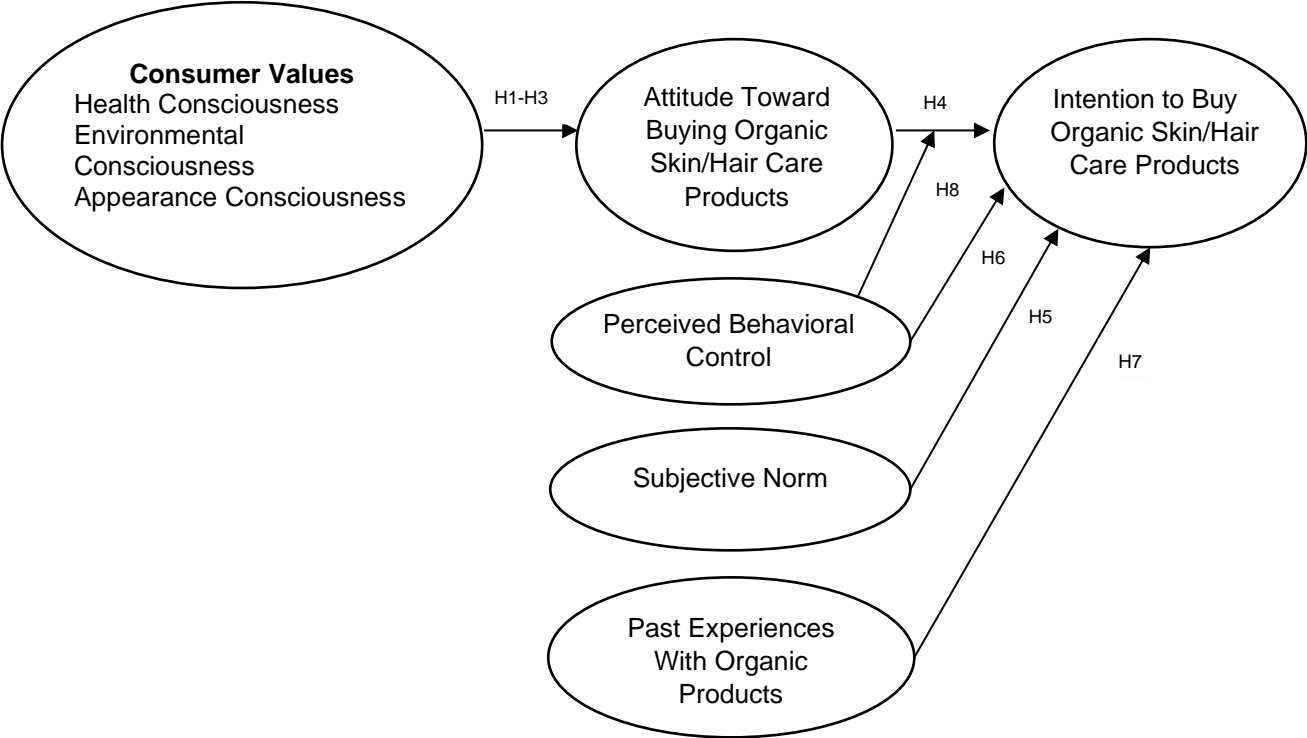


Figure 3. The theory of planned behaviour model by Kim and Chung
 Source: (Kim & Chung, 2011)

Subjective norm is another one important factor that is positively influencing purchase intention of organic cosmetic products. Past experiences with organic products are the next important element of the Kim and Chung theory of planned behavior model. Authors suggest that consumers' past experiences with organic products are influencing purchase intention of organic skin/hair care products in a positive way (Ibid, pp. 40-42).

In the model of green luxury fragrance purchase behavior such factors as health consciousness, environmental consciousness and appearance consciousness will be merged and grouped under internal factors. External factors include environmental information and knowledge. Social pressure and status are grouped under social factors. Quality, environmental claim and brand will be grouped under product related characteristics. Demographical characteristics incorporate gender and age and serve as independent variables.

Moreover, past experiences with green luxury fragrances and shop related characteristics are also considered in this model and serve as independent variables. Perceived behavioral control serves as an independent variable and as a moderator. Product related and shop related characteristics are also seen as moderators of the relationship between attitude toward buying green luxury fragrances and intention to buy green luxury fragrances.

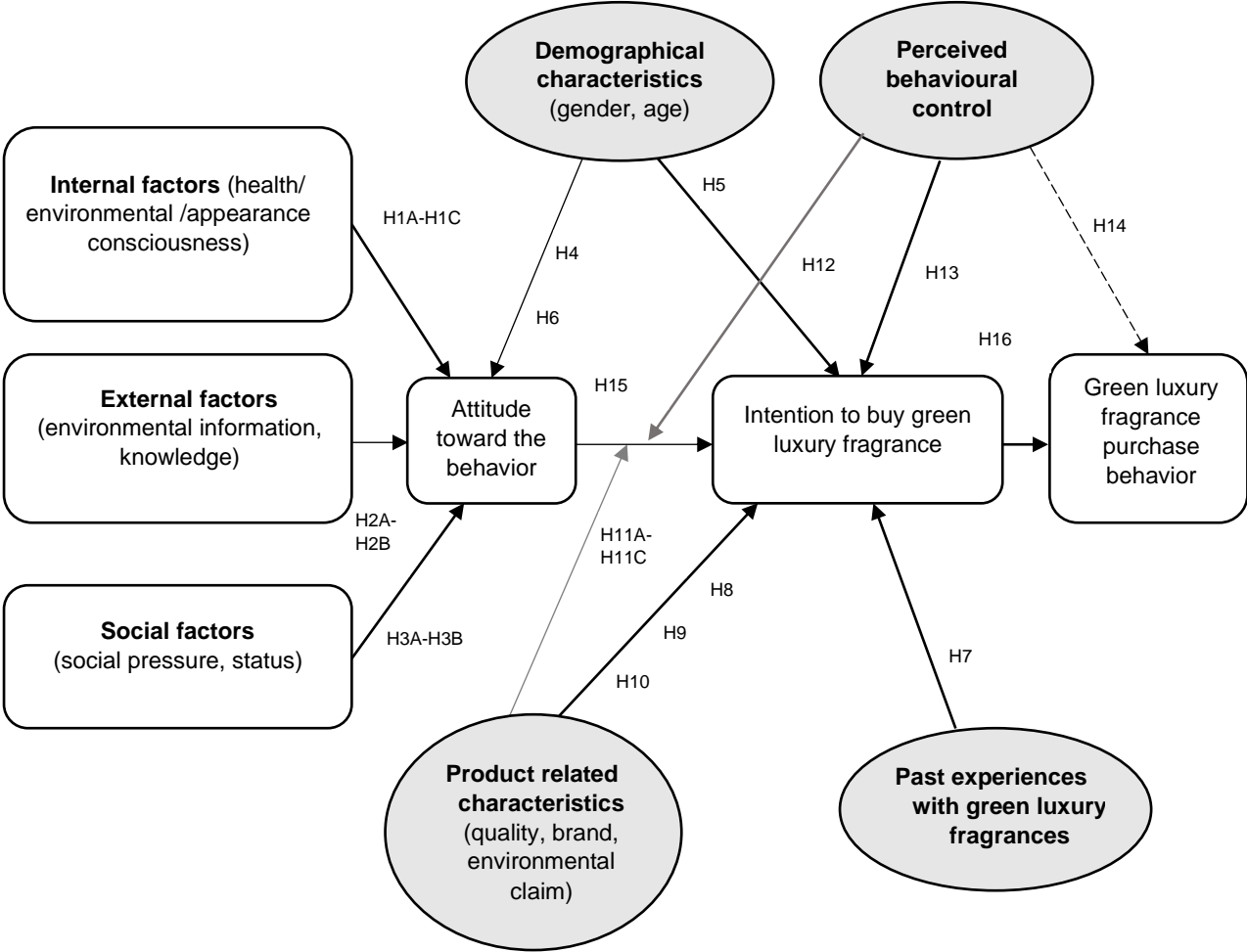


Figure 3. Model of green luxury fragrance purchase behavior

Source: own figure based on Ajzen 1991, Liobikienė und Bernatoniene 2017; Kim and Chung 2011

6. Hypotheses

Several researchers demonstrate that health consciousness together with environmental consciousness and with appearance consciousness positively influence attitude toward buying organic (Kim & Chung, 2011) or nonorganic cosmetic products (Liobikienė und Bernatoniene, 2017). Heru Irianto (2015) confirmed in his research, that health consciousness and environmental consciousness are the determinants of an individual's positive attitude to buy organic food. Based on results delivered by researchers it can be assumed that health consciousness together with environmental consciousness and with appearance consciousness positively influence attitude toward buying green luxury fragrances. These 3 categories will be grouped under internal factors in a new model. Thus, it can be hypothesized as:

H1. Internal factors will positively influence attitude towards buying green luxury fragrances.

H1A. Health consciousness will positively influence attitude towards buying green luxury fragrances.

H1B. Environmental consciousness will positively influence attitude towards buying green luxury fragrances.

H1C. Appearance consciousness will positively influence attitude towards buying green luxury fragrances.

The results of research by Joshi and Rahman (2015) confirm that knowledge is an important factor that is influencing green purchase behavior. Biswas and Roy (2015) claim that knowledge and environmental information have a positive relationship with intention and purchase behavior. Moreover, Jean-Noel Kapferer (2017) reported that luxury consumers can't consider sustainability issues when purchasing luxury goods, because of the lack of information about it. So available information on environmental aspects is important for purchase decision-making process of green products. Therefore, the following hypotheses are proposed:

H2. External factors will positively influence attitude towards buying green luxury fragrances.

H2A. Attitude towards buying green luxury fragrances is positively influenced by environmental information provided.

H2B. Attitude towards buying green luxury fragrances is positively influenced by knowledge about green products characteristics.

Griskevicius and Tybur (2010) report that status attributes influence green purchase behavior in a positive way when shopping in public. Jean-Noel Kapferer (2010) discusses in his paper the congeniality of the sustainable development with luxury. The author reports that luxury buying gives consumers the option to show their eco-friendly behavior and their status.

According to Liobikienė & Bernatoniene (2017), the hedonistic perspective of social norms is about doing something in order to increase the social status of a person. Griskevicius and Tybur (2010) in their research confirm that status attributes influence green purchase behavior in a positive way when shopping in public. So, it can be assumed, that status is positively connected with the attitude toward buying green luxury fragrance:

H3. Social factors will positively influence attitude towards buying green luxury fragrances.

H3A. Attitude towards buying green luxury fragrances is positively influenced by status when shopping in public.

According to Steinhart and Puterman (2013), for luxury products an eco-claim, which is highlighting personal social benefits, is generating a more positive perception of the product than an eco-claim underlining global benefits. Moreover, an environmental claim of the luxury product enlarges the fit with social norms and the accessible justification of luxury purchasing so that the following hypotheses is proposed:

H3B. Attitude towards buying green luxury fragrances is positively influenced by social pressure.

Achabou and Dekhili (2013) in their research reveal that gender has a big impact on green consumer preferences, namely, men are more reluctant toward the usage of recycled materials in luxury goods. Sheikh and Mirza (2014) confirmed this hypotheses in their study on consumer green behaviour toward green products. Moreover, Heru Irianto (2015) confirms that gender difference has impact on attitude, intention, and behavior of purchasing organic food. The researcher showed that female participants had higher attitude and intention to buy organic food product than male. So the hypotheses are to be formulated as follows:

H4. Female consumers have more positive attitude toward purchasing of green luxury fragrances.

H5. Female consumers have higher purchase intention of green luxury fragrances than male consumers.

Amberg and Fogarassy (2019) claim in their research that different age groups don't find the importance of green cosmetics to be the same. According to Jean-Noel Kapferer and Anne Michaut (2015) younger participants are likely to perceive a higher contradiction level between luxury and sustainability concept and therefore it can be assumed that:

H6. Attitude towards buying green luxury fragrances is positively influenced by increasing age.

The research of Kim and Chung (2011) confirms that intention to buy organic skin/hair care products is influenced by consumers' past experiences with other organic products. So that the following hypotheses is proposed:

H7. Positive consumers' past experiences with other green products will have a positive influence on their intentions to buy green luxury fragrances.

The next important group of factors that influences intention to buy green luxury fragrances and moderates the relationship between attitude toward buying green luxury fragrances and intention to buy such products is consisting of product related characteristics such as quality, brand and environmental claim. According to Yang (2017) green products' brand image and brand awareness are positively related to purchase intention. Moreover, Joshi and Rahman (2015) outlined that positive brand image is influencing green purchase behavior in a positive way. So the hypothesis is to be formulated as follows:

H8. Green luxury products' brand image is positively related to intention to buy green luxury fragrance.

Luxury researchers report that for consumers of luxury goods the quality factor is one of the most important (Aliyev et al, 2019). Liobikienė & Bernatoniene (2017) also claim that luxury consumers are focusing on the intrinsic quality of the product. So it can be assumed that:

H9. High quality of green luxury fragrance products is influencing intention to buy green luxury fragrances in a positive way.

Liobikienė and Bernatoniene (2017) suggest that the ordinary perception of the environmental claim may serve as a justification for buying luxury products. According to Steinhart et al (2013), the luxury product with an environmental claim is more favorable than the luxury product without such claim because environmental claim of the luxury product enlarges the fit with social norms and the accessible justification of luxury purchasing. So the following hypotheses are proposed:

H10. Environmental claim of green luxury fragrance products is influencing intention to buy green luxury fragrances in a positive way.

H11. The positive impact of attitude toward the green luxury fragrance behavior on intention to buy green luxury fragrances is moderated by product related characteristics.

H11A. The positive impact of attitude toward the green luxury fragrance behavior on intention to buy green luxury fragrances is moderated by quality.

H11B. The positive impact of attitude toward the green luxury fragrance behavior on intention to buy green luxury fragrances is moderated by brand.

H11C. The positive impact of attitude toward the green luxury fragrance behavior on intention to buy green luxury fragrances is moderated by environmental claim.

Ajzen (1991) in the theory of planned behavior suggests that the intention to perform behaviors can be predicted, inter alia, from perceived behavioral control. Kim and Chung (2011) and Shukla (2019) also report that perceived behavioral control positively influences consumer's intention of green product purchase. Thus, it can be hypothesized as:

H12. The greater perceived behavioral control is, the stronger the positive relationship between attitude and intention to buy green luxury fragrance products.

H13. Intention to buy green luxury fragrances is influenced by perceived behavioral control.

H14. Consumers' perceived behavioral control over buying green luxury fragrance products will have a positive influence on green luxury fragrance purchase behavior.

Paul and Modi (2016) and Shukla (2019) claim in their studies that attitude towards green product purchasing is positively related to green product purchase intention.

H15. Attitude toward buying green luxury fragrances positively influences consumer's intention of green luxury fragrance product purchase.

Ajzen (1991) claims that intention to act in a concrete way is directly related to behavior. So it can be hypothesized as follows:

H16. The greater intention to buy green luxury product is, the greater the probability of green luxury fragrance purchase.

7. Plan of work

Week	To-do	Description or notes
1 - 8	General research and exposé	Literature review, topic definition, readings, methodology establishment, first-draft exposé
9 - 13	Research design definition	Designing of questionnaire and of research model, survey development, pre-test
14 – 18	Building of theoretical background, methodology or data Collection	While running the survey, development of theoretical background and methodology
18 - 21	Data analysis	Gathering data, analysis of the questionnaire, creation of plots
22 - 24	Finalization	Writing of results and implications, conclusion, review and correction

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