## Keeping it all natural –

A research into the underlying factors influencing the intention to purchase and the intention to continue purchasing organic cosmetics among German consumers

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## Abstract

In previous studies, organic cosmetics seemed to be an overlooked category in the field of organic consumption. Since they offer some serious benefits for both one's own health and the environment additional research is needed. To close this research gap, research on factors influencing the intention to purchase organic cosmetic and the intention to continue purchasing organic cosmetics was done. The research model was based upon the social identity theory and the theory of planned behaviour. It suggested that intention to purchase or to continue purchasing is influenced by consumers health- and environmental related self-identity as well the variables of the theory of planned behaviour. Additionally, it was proposed that subjective knowledge towards organic cosmetics as well as attitude towards brand communication positively influence consumer's attitude towards organic cosmetic consumption.

To test these hypotheses, participants were approached using an online questionnaire. In total, data from n=256 people was used for further analysis, which were divided into organic cosmetic purchaser (n=120) and non-purchaser (n=136). Hierarchical regression analyses revealed that attitude towards organic cosmetics and perceived behavioural control positively influence the intention to continue purchasing organic cosmetics. For the non-purchaser, environmental self-identity, attitude towards organic cosmetics and subjective norm were significant predictors.

Attitude towards brand communication had no influence on attitude towards organic cosmetics for both purchaser groups. In contrast, subjective knowledge was significantly and positively related with attitude towards organic cosmetics for both purchaser groups.

The results of the research study at hand provide some new interesting insights that can help marketers to establish new, effective marketing strategies to target new consumers and to keep current customers. Especially the distinction between current purchasers and non-purchasers is new in the field of organic cosmetic consumption and indicates that indeed, both groups should be approached with different marketing strategies.

**Keywords**: green consumerism; organic cosmetics; purchase intention; social identity theory; theory of planned behaviour;

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## **1. Introduction**

Sustainable consumption increasingly gained popularity among consumers in the 21<sup>st</sup> century. Consumers got concerned about issues like global warming, pollution and animal abuse, which caused them to consume environmental friendly products (Chen, Lin, & Chang, 2014). Therefore, this rise in green consumerism is no longer a surprising shift in today's society. Next to the spectacular trend of organic food, which quickly developed from a niche market to a mainstream segment in the food sector, the demand for organic non-food products is increasing as well (Annis, 2011; Cervellon, Rinaldi, & Wernerfelt, 2011). Nowadays, consumers do not only want to eat green, but also drive green cars, use green electricity, wear green clothes, use green detergents and turn to green cosmetics (Marangon, Temptesta, Troiango, & Vecchiato, 2015; Cervellon & Carey, 2011). This highlights the rise of ethical consumerism in all kinds of markets, showing a general ethical sensitivity in purchase decisions among consumers (Maggioni, Montagnini, & Sebastiani, 2013). Consumers turn towards natural and organic products because they believe it is better for their own health and beneficial for the environment, showing an increased pattern of responsible consumption (Maragon et al., 2015).

An interesting field on the rise within green consumers is the organic cosmetic market. Today, the organic cosmetic market is the second largest organic industry after organic foods in several countries such as the United States, which are also leading the global organic cosmetic market (Transparency market research, 2016). Statistics show that the international growth rate for organic cosmetics is higher than the rate for conventional cosmetics, which is more or less oscillating (Fonseca-Santos, Corrêa, and Chorilli, 2015). According to Cervellon et al. (2011), the European market for organic cosmetics is continuously growing by approximately 20% per year.

In Germany, which is Europe's leading organic cosmetic market, the organic and natural cosmetic market exceeded the billion mark with a turnover of 1.01 billion and a total growth of 10% for the first time in 2015. Therefore, organic and natural cosmetics hold 7.8% market share of the whole cosmetic market in Germany (Heinze, 2015).

Especially the trend in organic cosmetics seems to be pushed by the consumption of organic food and its market share is increasing worldwide (Dimitrova, Kaneva &

Gallucci, 2009). When consumers become more aware of what they are taking into their bodies by means of the increased consumption of organic food, they may also become more interested in what they are applying topically to their body such as organic cosmetics (Lee, 2007). Organic food is after all considered to be healthier and of better quality, which could be conferred to organic cosmetics as well (Cervellon et al., 2011). Kim and Chung (2011) also stated that similarities between the purchase of organic food and organic cosmetics exist, since both promote a healthy lifestyle. However, buying organic food and organic cosmetics purchase refer to two distinct behavioural patterns (Kim & Chung, 2011). As mentioned above, organic food is something you take into your body whether organic cosmetics are applied topically and directly affect consumer's appearance. By means, the motivation behind buying food and buying cosmetics may differ, which makes distinct research in both segments necessary.

However, even though consumer's demand for ecological products in general is nowadays widely recognized by marketers and organizations, scientific research is limited and if available, mostly focused on the food sector (Cervellon et al., 2011; Testa, Iraldo, Vaccari, & Ferrari, 2013). This lack of scientific research results in little evidence on consumers underlying motivations to buy organic cosmetic and what factors might be crucial for consumers to actually choose organic cosmetic over conventional cosmetic. Organic cosmetic can offer some serious benefits compared to conventional cosmetics, which makes research in this sector as important as research on the food sector.

For example, research showed that several ingredients found in conventional cosmetics disrupt the hormonal system and increase the risk of cancer (Annis, 2011; Csorba & Boglea, 2011). Organic cosmetics alternatives are proven to have better safety measures than conventional cosmetics, meaning that they often produced with fewer synthetic or genetically modified ingredients (Annis, 2011; Kim & Chung, 2011). Meaning that organic cosmetics lower the risk to be exposed to harmful ingredients (Annis, 2011). For example, chemicals and synthetics in conventional cosmetic products that are put on the skin can trigger the asphyxiation of the skin, and can accelerate dehydration and photosensitivity (Brown, 2016). This means that conventional cosmetic products can cut of the oxygen exchange to the skin, cause

premature skin aging, and increase the risk of sunspots. To sum-up, synthetic chemicals in skincare can trigger the skin or exacerbate sensitivity (Stacy, 2014). With these means, the problems that consumers initially want to counteract like wrinkles by buying anti-wrinkle cream can actually get worse while using those products (Brown, 2016).

In addition, organic cosmetics are less harmful for the environment as they do not contain chemicals like petroleum, aluminium or micro plastic. For instance, to extract petroleum and aluminium mining is needed which is done within the Amazon rainforest. Furthermore, ingredients such as micro plastic pollute our drinking water when we wash cosmetics off our body (Csorba & Boglea, 2011). To conclude, organic cosmetics have the same characteristics and functions as conventional cosmetics, however cause less damage to the environment and are friendlier to our body (Fonseca-Santos et al., 2015).

Interestingly, a lot of organic cosmetic brands are rather reluctant in communicating these health and environmental benefits. They mention that their products are free from PEG's and Parabens for example, however, they do not specifically explain why PEG's and Parabens are bad. Instead, many brands chose to communicate rather vague messages, that for instance their products do not lead to any negative side effects because of the use of all natural ingredients (cf. Lavera, 2017). The German organic cosmetics brand 'Lovely Day Botanicals' is one brand that specifically mentions on their website, that their products do not contain any ingredients that are found to be hormonally active or are suspected to be carcinogenic (Lovely Day Botanicals, n.a.). This is one example showing an attempt of organic cosmetic brands to directly communicate the changes that organic cosmetics can bring to the consumer.

Looking into the findings above, research into the field of factors influencing the purchase behaviour of organic cosmetic is relevant in order to find out more about consumers behavioural pattern, which then can help marketers to improve the right product segmentation and to target more consumers. Research cannot only help to increase sales, but also give information on how to interact with the consumer, to improve the relationship between producer / seller and customer. Even though its

market share is increasing, the total market share of organic cosmetics is still quite small compared to conventional cosmetics (Maggioni et al., 2013). Besides, past research that actually focused on consumer behaviour in the organic cosmetics sector found contradictory results about what factors play a role in the decision making process of purchasing organic cosmetics: Tsakiridou, Tsakiridou, Mattes and Arvaniti (2010) highlighted that consumers become more and more conscious about environmental friendly production methods, which influences their purchase decision towards organic cosmetics. Kim and Chung (2011) support the influence of environmental consciousness. On the contrary, Cervellon and Carvey (2011) as well as Ong (2012) found out that the protection of the environment is not a motivation when buying organic cosmetics, but rather is a positive side effect. This highlights the fact that additional research is necessary in order to get a better understanding of the organic cosmetics consumer. In general, different studies found out that different factors might influence the purchase intention and the actual purchase behaviour of organic cosmetics such as the variables of the theory of planned behaviour (attitude, subjective norm and perceived behavioural control), past behaviour, health- and environmental consciousness and product related knowledge (Kim & Chung, 20211;Cervellon et al., 2011; Kim & Seok, 2009; Gracia & de Magistris, 2007; Recker & Saleem, 2014).

However, until now, no study combined all potential factors mentioned above in order to provide a complete picture of the 'organic cosmetic consumer'. To do so, this study uses both the social identity theory and the theory of planned behaviour as a theoretical framework to examine the influence of health- and environmental selfidentity, attitude, subjective norm and perceived behavioural control as predictors of purchase intention. In addition, the study considers subjective knowledge and attitude towards brand communication as antecedents of consumers attitude towards organic cosmetics. Therefore, this study aims to find out what factors impede or enhance the consumers purchase intention of organic cosmetics in order to fill-in the existing literature gap, by answering the following research question:

What factors positively influence consumers intention to purchase or to continue purchasing organic cosmetics among German consumers?

## 2. Theoretical framework

This chapter will provide the theoretical foundation for factors that are related to organic consumption. Therefore it intends to give insight into variables that might influence the intention to purchase organic cosmetics and the intention to continue purchasing organic cosmetics. The chapter will finish with a conceptual research model in order to provide an overview about how the different factors are expected to influence each other.

## 2.1 The current situation of organic cosmetics

The concept of cosmetic products that contain natural, plant-based ingredients is not new. Already in the mid-1970s, botanicals and fruit-based formulas were found out to be an effective alternative for conventional, chemical ingredients in cosmetic products (Dimitrova et al., 2009; Csorba & Boglea, 2011). However, the strong demand for those products is quite new, notably increasing since the last decade. This is due to the general rise in green consumerism, which led to a general change in the product range and marketing orientation of the cosmetic industry worldwide (Dimitrova et al., 2009; Sahota, 2014).

Unfortunately, until now, the term 'organic' is not legally regulated among all product categories like organic food, organic clothes and organic cosmetic products. This means, firms are allowed to design and implement ecological claims and selfcertification labels without having an independent third party ensuring that those standards are actually met (Hussain & Lim, 2000; D'Souza et al., 2006). This means that no legal binding standards exist for what the term 'organic' actually stands for. Companies may choose to use those claims and labels with the hope to make a product more attractive than products containing no claim at all (Hoek et al., 2013). Within the cosmetic industry, five European organic certifiers allied to counteract this to develop a European standard for organic cosmetics (The Soil Association, BDIH, Cosmebio, Ecocert & ICEA). Today, this is known as the COSMOS standard and can be found on a diverse range of cosmetic products (COSMOS-standard, 2013). Manufacturer can apply for this standard; however, it is not yet obligatory to do so. The COSMOS standard is divided into organic certification and natural certification. In order to get a 'natural' certification, the product must not contain more than 5% synthetic ingredients. In addition, the requirements for a product under organic

certifications are that at least 95% of the physically processed agro-ingredients need to be organic as well as at least 20% of the total product (COSMOS-standard, 2013).

#### **2.2.** Purchase Intention

According to the TPB, behavioural intention refers to the desire of people to eventually perform a specific behaviour in the near future (Ajzen, 1985). In general, people are expected to actually carry out their intentions when a suitable opportunity arises (Ajzen, 2006). Therefore, a link between intention and behaviour is made. Past research showed that people are more likely to engage in a certain behaviour if they actually intend to perform it (Connor & Armitage, 1998). Beck and Ajzen (1991) also found out that the stronger an individuals intention to perform a given behaviour, the more successfully the behaviour is predicted (Beck & Ajzen, 1991). In this research, behavioural intention will be measured by looking at the intention to purchase and to continue purchasing organic cosmetics.

Hence, the present study uses the variable *intention to purchase organic cosmetics/intention to continue purchasing organic cosmetics* as dependent variable, which can be used to give an indication about the future purchase pattern among Germans.

#### 2.3 Past behaviour

Actual purchase behaviour or consumers past experience with a product category influences the purchase intention of that category (Kim & Chung, 2011).

Therefore, measuring consumers past experience can help to get insights of consumers actual behaviour, because intentions to perform a behaviour do not necessary mean that consumers actually do perform that behaviour. In addition, D'Souza et al. (2006) found that past experience also influences consumers' attitudes about products and more specific organic products. In general, the influence of past behaviour on current behaviour has received a lot attention in past research, showing that past behaviour is a significant predictor of future behaviour (Connor & Armitage, 1998). To the authors' best knowledge, only one research yet focused on the differentiation of green purchaser and non-purchaser when looking for factors that influence the purchase intention in the sustainable consumption sector: Nam, Dong, & Lee (2017) did research into consumers intention to purchase green sportswear and divided participants of the study based on their past green purchase behaviour. They discovered interesting results that differ between the two purchaser groups.

For example, perceived behavioural control only had significant influence on the purchaser group and not on the non-purchaser group.

The present study will adapt this approach and use past behaviour in order to divide the respondents into two categories: people who actively purchase organic cosmetics and people who do currently not purchase organic cosmetics. By doing so, a comparison can be made on factors influencing the intention to purchase and factors influencing the intention to continue purchasing organic cosmetics. This helps to find out where marketing or communication efforts can be most effectively positioned in order to transfer the non-purchaser to the purchaser group.

## 2.2 Factors related to organic consumption

The present study adopted both the social identity theory and the theory of planned behaviour as a theoretical framework to gain more insights in the purchase behaviour of organic cosmetics among German customers.

### **2.3 Social Identity Theory**

Developed by Tajfel and Turner in 1979, the social identity theory claims that an individuals behaviour is influenced by the expectations and behaviour of group members who are relevant to that certain behaviour (Fielding, Terry, Masser, & Hogg, 2008). In other words, people intent to categorize themselves into social categories or groups (Tajfel & Turner, 1986; Stets & Burke, 2000). Social groups consist of individuals who hold a common social identification. Here, people compare each other by categorizing people who are similar to the self as in-group members while accentuating the similarities like shared attitudes, beliefs, values or style of speech or similar. In addition, differences are accentuated by putting people who differ from the self into a so-called out-group (Terry, Hogg, & White, 1999; Stets & Burke, 2000). According to this viewpoint, social identities which are derived from group memberships, form an important part of someone's self-concept (Fielding et al., 2008). Social identities are related to different roles occupied by every individual in social settings (Carfora, Caso, & Connor, 2016). Self-identity refers to the extent to which an individual "sees him- or herself as fulfilling the criteria for any societal role; for example, 'someone who is concerned with green issues'" (Sparks & Sheperd, 1992, p. 392). According to Ozcaglar-toulouse, Shiu, and Shaw (2006), the underlying rationale is that as soon as an issue becomes central to an individuals selfidentity, then people are likely to adjust their behavioural intentions accordingly. This is in accordance with Callero (1985, p. 205) who stated, "role identities, by definition, imply action". Charng, Piliavin, & Callero (1988) found out during their research on donating blood that peoples intention to give blood was higher when donating blood was an important part of their self-identity. Sparks and Sheperd (1992) supported these findings with research on consuming organically grown vegetables. Therefore, it can be assumed that in the context of purchasing organic cosmetics, a person's identity as a green consumer plays an important role.

A lot of research on the influence of a person's self-identity on behaviour is combined with the variables of the theory of planned behaviour (cf. Kim & Chung, 2011; Kim & Seock, 2009). In fact, researchers often use self-identity as an additional factor to extend the theory of planned behaviour (cf. Sparks & Sheperd, 1992; Terry et al., 1999). However, it was ascertained that self-identity can significantly predict the intention to perform a behaviour independent of other variables of the theory of planned behaviour (cf. Sparks et al., 1997; Brouwer & Mosack, 2015). Therefore, the current research will use the variables health self-identity and environmental self-identity as first factors in the model, proposing that self-identity will make an independent contribution to the prediction of the intention to purchase or to continue purchasing organic cosmetics.

#### 2.3.1 Health- and environmental self-identity

When an issue becomes central to an individual's self-identity, then behavioural intention is accordingly adjusted (Shaw, Shiu, & Clarke, 2000). Kim and Seock (2009) stated for instance that being environmental conscious could become part of someone's identity, influencing their consumption on a daily basis. In the context of the present study, consumers may decide to purchase organic cosmetics because health- and environmental concerns have become an important part of their self-identity. Here, health self-identity refers to a person being conscious about its own personal health. According to Kim & Chung (2011), consumers which identify themselves as health conscious put effort into maintaining a healthy life. In the context of cosmetic products, they might look out for ingredients that can be harmful to their skin and body. Then, environmental self-identity refers to a person who is concerned about the state of the environment and as a result constantly looking for

ways to reduce his or hers negative impact on the environment (Kim & Chung, 2011; Recker & Saleem, 2014).

Shaw et al. (2000) ascertained, that individuals are likely to make ethical consumption choices, if ethical issues are an important part of someone's self-identity. Several studies on green consumption figured out that the factors health- and environmental consciousness could play an important role in motivating green consumerism (cf. Kim & Chung, 2011; Magnussen, 2003). With regard to organic food, it is perceived to be better for one's health as it contains no food additives, preservatives and residues. With regard to organic cosmetics, a few studies found that this motivation applies as well (cf. Kim & Chung, 2011, Kleine Stüwe & Strauß, 2016). However, these studies focused on the influence of being health- and environmental conscious on the attitude towards organic cosmetics. In contrast, the present study proposes that this consciousness is part of someone's self-identity and therefore, directly influences the intention to purchase or to continue purchasing organic cosmetics. As stated above, this is in line with Brouwer and Mosack (2015) who ascertained that identification as a healthy eater significantly predicted healthy eating behaviour. Additionally, ÅstrOm and Rise (2001) suggested that self-identity as a healthy consumer directly influences the formation of intentions to become a healthy eater independent of attitudes. Therefore, the following hypotheses are stated:

H1a: Health self-identity positively influences the intention to continue purchasing organic cosmetics.

H1b: *Health self-identity positively influences the intention to purchase organic cosmetics.* 

H1c: Environmental self-identity positively influences the intention to continue purchasing organic cosmetics.

H1d: Environmental self-identity positively influences the intention to purchase organic cosmetics.

Because the behavioural aspect is a major interest of this thesis, the theory of planned behaviour is used as an additional theoretical framework. It allows taking a closer look at the factors influencing the intention to purchase organic cosmetics next to selfidentification.

## 2.4 Theory of planned Behaviour

The Theory of Planned Behaviour (TPB) is a well-studied theory within the social psychological research area and is often used as a framework for understanding and predicting human behaviour (cf. Tarkiainen & Sundqvist, 2005; Kim & Chung, 2011). The theory states that intention can work as a direct antecedent of human behaviour, meaning that an individuals intention to engage a certain behaviour is a determinant of the actual performance of that behaviour (Fielding et al., 2008). Behavioural intentions are in turn guided by three situation-specific beliefs. First, behavioural beliefs lead to an overall negative or positive evaluation of the behaviour. This evaluation then results in a favourable or unfavourable attitude towards the behaviour (Bamberg, 2003; Fielding et al., 2008). Second, normative beliefs refer to the normative expectations of important others, which result in perceived social pressure or the subjective norm to perform a certain behaviour (Bamberg, 2003). Third, control beliefs reflect potential factors that may hinder the performance of the behaviour. This results in individuals perceived ease or difficulty to perform that behaviour also known as perceived behavioural control (Bamberg, 2003).

The TPB has been previously used in research about green consumer behaviour (cf. Bamberg 2003; Kim & Chung, 2011; Ong, 2012) and will therefore function in the present study as a foundation to explain the antecedents of consumers intention to buy organic cosmetics.

#### 2.4.1 Attitude towards organic cosmetics

Attitude towards behaviour refers to "a learned disposition to respond to an objective in a consistently favourable or unfavourable manner" (Fishbein & Ajzen, 1975, p. 336). Attitudes are formed through behavioural beliefs, which can be translated into beliefs concerning the expected outcomes of a behaviour. A positive attitude refers to the belief that the outcome of performing the behaviour is positive, a negative attitude to the belief that the outcomes will be negative. This means that attitudes are evaluative responses towards an object or behaviour that are based on information a person has about this behaviour (Fennis & Stroebe, 2016). According to many researchers, attitudes are formed through three different processes, called cognitive, affective and behavioural processes. The cognitive component refers to individual responses that reflect an individual's knowledge about an attitude object or the ability to form associations between an attitude object and certain attributes (Eagly & Chaiken, 2007; Ajzen, 1989, p. 243). The affective component involves feelings and emotions an individual has towards an attitude object. Therefore, an individual will respond with certain emotions when being exposed to a certain attitudinal object. The behavioural component refers to an individuals expression of behavioural intentions. This includes for example the verbal expression of intending to perform a certain behaviour. (Ajzen, 1989, p. 244). However, these three processes cannot always be separated easily and also attitudes do not necessarily need to be formed through all three components (Eagle & Chaiken, 2007). According to Eagle and Chaiken (2007), attitudes can be formed or expressed trough any of the three components or based on a mix of these three processes. Furthermore, the present study uses the three different components as part of the attitude variable and as parts of the antecedents influencing attitudes. The general attitude variable will measure the affective component. Affect is a necessity of forming an attitude and often seen as the core of an attitude (Eagle & Chaiken, 2007). The cognitive component will be seen as part of the subjective knowledge variable and the behavioural component will be seen as antecedent of the variable past behaviour.

In past research, attitudes found to be powerful predictors of purchase decisions because people tend to buy products, which they consider as useful and attractive (Fennis & Stroebe, 2016). Therefore, people tend to be more likely to perform a certain behaviour if they have positive attitudes towards it (Ajzen, 1985). With regard to organic cosmetics, Kleine Stüve and Strauß (2016) ascertained attitude to be a significant predictor of the intention to purchase organic hair products. This is in line with other research on organic personal care products; all supporting that attitude significantly predicts a certain amount of the variance in consumers' purchase intention (cf. Kim & Chung, 2011; Recker & Saleem, 2014). Additionally, Gracia and de Magistris (2007) proposed that especially environmental- and health- related attitudes are important in the case of organic consumption behaviour, which are incorporated in this attitude variable. In line with previous research, the following hypotheses are proposed:

H2a: *Attitude towards organic cosmetics positively influences the intention to continue buying organic cosmetic for the organic cosmetic buyers.* 

H2b: Attitude towards organic cosmetics positively influences the intention to purchase organic cosmetic for the non-buyers.

#### 2.4.2 Subjective Norm

According to the TPB, subjective norm refers to the perceived social pressure of an individual to perform or to not perform a specific behaviour (Ajzen, 1985). As with attitudes, this pressure is evoked through salient beliefs, which represent the perception someone has about whether significant others think one should or should not perform a behaviour and the individuals motivation to comply with these expectations (Ajzen, 1985; Connor & Armitage, 1998). Several studies found a strong relationship between subjective norm and green consumerism (cf. Bamberg, 2003; Tarkainen & Sundqvist, 2005; Kim & Chung, 2011). The research conducted by Kim and Chung (2011) is especially relevant in the context of the present study, because they figured out that subjective norm was a statistically significant predictor for the purchase intention of organic personal care products. Based on that, the third hypotheses read as follows:

H3a: Subjective Norm positively influences the intention to continue purchasing organic cosmetics of organic cosmetic buyers.

H3b: Subjective Norm positively influences the intention to start purchasing organic cosmetics for the non-buyers.

#### 2.4.3 Perceived behavioural control

Perceived behavioural control is another variable of the TPB to predict purchase behaviour and purchase intention and is, by some researchers, suggested to be the most influential factor (Armitage & Talibudeen, 2010). The variable refers to so-called control beliefs about whether an individual actually has access to all necessary resources needed to perform the behaviour. If someone beliefs, he/she has the resources to engage in a behaviour it is likely to have a high degree of PBC which then positively influences the intention to engage in that behaviour (Ajzen, 1991; Connor & Armitage, 1998). In the case of organic cosmetics, it is likely that PBC influences consumers purchase intention. Several resources such as price, time, money, and availability can influence consumers perception of control towards purchasing organic cosmetics (Kim & Chung, 2011). Johnstone and Tan (2015) for instance did research on general organic consumerism and discovered that people

often mention price as a factor beyond their control. This means that products which are more expensive than other products in a specific category are not considered due to lack of money: "Well if you're struggling to pay the bills you're not going to worry about it [buying green products]" (Johnstone & Tan, 2015, p. 317). In addition, Kleine Stüwe and Strauß (2016) suggested that, in the case of organic hair care, availability also might be a factor influencing consumers perceived behavioral control to purchase organic hair care. For instance, consumers might think that purchasing natural cosmetics is too difficult because it is not available at a local store nearby (Rybowska, 2014). Derived from this, the fourth hypotheses will be:

H4a: Perceived behavioural control positively influences the intention to continue purchasing organic cosmetics.

H4b: Perceived behavioural control positively influences the intention to start purchasing organic cosmetics.

#### 2.5 Antecedents of attitude

Next to the constructs of the social identity theory and the theory of planned behaviour, previous research revealed that there are a few other variables that should be taken into account when analysing consumers purchase patterns. In conjunction with the goal to get a full picture on factors that influence the organic cosmetic consumer, two additional variables that are not part of a specific theory will be added: Subjective knowledge about benefits of organic cosmetics and consumers attitude towards brand communication of organic cosmetics

## 2.5.1 Subjective knowledge about benefits of organic cosmetic

In general, subjective knowledge refers to self-perceived knowledge about an issue, which means what an individual perceives that he/she knows (Aertsens, Mondelaers, Verbeke, Buysse, & van Huylenbroek, 2011). It therefore incorporates one's confidence in his/hers own knowledge (Brucks, 1985). According to the literature, subjective knowledge is an important factor in the field of consumer behaviour that can influence attitude and both the intention to purchase and actual purchase behaviour (Brucks, 1985; House, Lusk, Traill, Moore, Morrow, & Yee, 2004; Gracia & de Magistris, 2007). As reported by Recker and Saleem (2014), knowledge was especially used in previous research on pro-environmental and health related behaviour. As stated by Gracia and de Magistris (2007), knowledge is the only

instrument that consumers have to differentiate organic products from conventional ones. Therefore, it is an instrument that helps consumers to form an (positive) attitude toward organic products (Gracia & de Magistris, 2007). In the past, several studies examined, for instance, the influence of environmental knowledge on environmental attitude and found significant relationships (cf. Recker & Saleem, 2014; Ramsey & Rickson, 1976). Since organic cosmetics do not only offer environmental benefits but also some serious health benefits, subjective knowledge about health-related benefits will be incorporated as well. With regard to health-related knowledge, Byrd-Bredbenner and O'Connel (1984) found that education on nutrition positively influences food- and nutrition attitude of students.

Therefore it is expected that subjective knowledge positively influences consumers attitude to continue purchasing organic cosmetics and to start purchasing organic cosmetics. Accordingly, the following hypotheses are formulated:

H5a: Consumers subjective knowledge about the benefits of organic cosmetics positively influences the attitude towards organic cosmetics of organic cosmetic purchaser.

H5b: Subjective knowledge about organic cosmetic benefits positively influences the attitude towards organic cosmetics of non-purchaser.

# **2.5.2 Attitude towards brand communication on benefits of organic cosmetic**

In the cosmetic industry, consumers are almost 'marketed to death' to buy every kind of product imaginable. This means, brands in the cosmetic industry often try to manipulate the publics understanding by using false claims in order to simply sell the products (Rosebrook, 2016). Using false claims is also a recognized problem in the organic cosmetics sector, so-called "green-washing" and the extensive use of natural and organic claims of cosmetic brands decreased the consumers trust (Nyilasy, Gangadharbatla, & Paladino, 2013). Here, the communication of truly organic certified cosmetic brands gets important in order to educate the consumer. The information provided by the brand on the benefits of organic cosmetics is essential for knowledge transfer and the expansion of knowledge among (potential) consumers of organic cosmetics (Dimitrova et al., 2009). Also, when consumers are satisfied with the amount of information they are retrieving, the relationship with the brand gets stronger (source).

Though as stated in the above-mentioned paragraph, literature revealed that consumers seem to lack actual knowledge about what organic truly means, what ingredients in conventional cosmetics are potentially harmful and why, and how organic cosmetics can compete here (cf. Cervellon et. al., 2011; Johnstone & Tan, 2015). This indicates that brands may not sufficiently inform consumers about the benefits that come along with using organic cosmetics. Hence, it is necessary to find out to what extent consumers are satisfied with the communication of the benefits of organic cosmetic products. Feedback from the target group can give insights into how making marketing efforts more effective since marketing tools are usually used by brands to transfer knowledge. Based on the reviewed literature, the following hypotheses are proposed:

*H6a: Attitude towards brand communication positively influences organic cosmetic purchasers attitude towards organic cosmetics.* 

*H6b: Attitude towards brand communication positively influences non-purchasers attitude towards organic cosmetics.* 

## 2.6 Conceptual research model

Based on the reviewed literature and proposed hypotheses, the following research model has been developed:

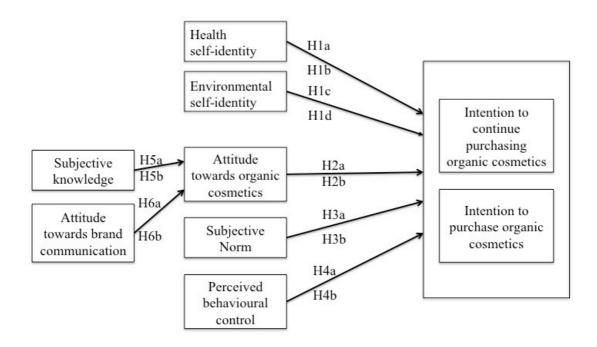


Figure 1. Conceptual research model.

## 3. Research Methodology

In the following chapter the research design will be explained in detail. In this context, further insight into the research design, the chosen participants, the measurements, the procedure of data gathering and the analysis will be given.

## 3.1 Research Design

The research method of choice in this study is quantitative in nature to test the proposed hypotheses in order to get insights into the factors influencing the purchase intention of organic cosmetics.

An online survey was chosen due to several benefits. First of all, using a quantitative research approach enables a researcher to test hypotheses and to determine casual relationships and effects between the different constructs considered in this research (Saunders, Lewis, & Tornhill, 2009, p. 367; Recker & Saleem, 2014). In the context of this research allows a quantitative approach to detect relationships between the independent variables (attitude, subjective norm, perceived behavioural control etc.) and the dependent variable (purchase intention).

Second, using an online questionnaire enables a researcher to gather self-reported subjective views of respondents. Moreover, online surveys can reduce the chance of social desirability bias due to the absence of both other respondents and the research conductor. This means that people who fill in a survey online are less likely to answer a question in order to please the research conductor or because they believe a certain answer is more socially desirable than another (Saunders et al., 2009, p. 363).

Third, choosing an online survey as a research method enables to reach a broad target audience which is geographically distributed within Germany. This is a benefit in the present study because the Internet allows contacting people that are not in the personal network of the research conductor and people who do not live in the close surrounding of the research conductor.

Finally, online questionnaires are convenient for the target group. Participants can comfortably complete the questionnaire from home or from work at any time frame given (Bryman & Bell, 2008, p. 242).

## **3.4 Procedure**

After the first version of the survey was set up, a pre-test took place in order to test the surveys comprehensibility, to look out for eventual grammar- and spelling mistakes and to gather an overall feedback concerning the survey. In total, five people participated in the pre-test, which lead to several small adjustments in order to increase the comprehensiveness. No major changes concerning the different variables and items were made based on the pre-test. Afterwards, the survey was uploaded via the online tool *Qualtrics* and spread via social media, e-mail and the online platform *poll-pool*, which allowed the researcher to approach people within the target group without using the personal network to achieve random sampling. In addition, the snowball technique was used allowing people who already participated in the survey to spread the survey link as well to help gather participants.

The final questionnaire consisted of three parts. First, all participants got an informed consent to read, informing the participants' about the purpose of the study and most importantly their legal rights. This included inform that participation is voluntarily and that every participant was allowed to quit the survey at any given moment if it brought any discomfort. Besides, it was emphasized that all collected data is kept in confidence and processed anonymously.

By clicking on the 'weiter' button, participants agreed with the above-mentioned conditions of the research and got directed to the actual survey. Here, participants were asked about their past consumption patterns concerning organic cosmetic. Based on that, participants were split into two groups for further analysis, organic cosmetic purchaser and non-purchaser. This resulted in 120 purchasers and 136 non-purchasers. Then all participants had to give their opinion about several items on a five-point Likert scale (see Appendix B). Next, a couple of demographical questions were asked. This included age, gender and highest education achieved. Finally, each participant was thanked for his or her participation and the e-mail address of the researcher was mentioned in case of concerns or questions.

#### **3.2 Research participants**

German citizens above the age of 18 were chosen as a target audience. This age restriction was chosen in order to avoid any conflict with the German law. Underaged people should not be asked to take part in any research without an informed consent given by a legal representative. The nature of the measurement instrument made this very difficult and therefore the age restriction was chosen. Apart from that, the only other necessity for participants was to be a German citizen. This was chosen partly because of convenience, as the researcher is German and partly because the German organic beauty industry market is growing rapidly. However, until now, little research about organic consumption in Germany focused on the niche of organic cosmetics.

A total of 319 people participated in the current study. Though only 256 respondents were used for further analysis. Hence, 63 people (19,53%) of the total number were excluded from the analysis because they did not meet the criteria of being above the age of 18 (N=2,) or because they dropped out of the survey before completing it (N= 61). The mean age of organic cosmetic purchasers is 35, with way more female than male participants (N=98, 81.7% N=22, 18.3% respectively). The educational level is high with 50% (N=60) of the participants having a university degree (Bachelor or higher) and only 5.8% (N=7) not having finished high school. In the group of non-purchasers, the majority of the participants are female as well (N=87, 64%) but slightly younger with a mean of 31 years compared to group one. The level of education obtained by group 2 is also slightly lower compared to group one but still quite high with 48.6% (N=66) holding a university degree and only 6.6% (N=9)

without a high school degree. The complete demographics of both groups can be found in table 1.

## Table 1

Demographical Data final Dataset Group One: Organic cosmetic purchaser Group Two: Non-purchaser

	Mean	SD	Ν	Valid %
Age	34.7	13.36		
	31.5	13.53		
Gender			22	10.0
male			22	18.3
			49	36.0
female			98	81.7
jemule			87	64.0
			07	04.0
Education				
Secondary school (class 9)			0	0
			2	1.5
Secondary school (class 10)			7	5.8
			7	5.1
Vocational secondary school			6	5.0
			10	7.4
Academic secondary school			19	15.8
			32	23.5
Apprenticeship			28	23.3
			19	14.0
			22	27.5
Bachelor			33	27.5
			40	29.4
Master			16	13.3
11145701			10	7.4
			10	,
Magister/Diploma			11	9.2
			16	11.8
Total N				
Group 1			120	100
Group 2			136	100

## **3.3 Measures**

The online questionnaire consists out of mandatory closed ended questions. This is chosen due to several benefits, which outweigh disadvantages such as missing out responses that were not considered by the researcher in the predetermined answers (Bryman & Bell, 2008).

All items will be answered using a five-point Likert Scale featuring scale labels such as the agreement-scale ranging from *strongly disagree* to *strongly agree*.

As shown in the research model, different constructs need to be measured in order to answer the research question. Each construct consists out of different items, which were partly derived from past scientific research and partly developed by the research conductor self. According to Bryman and Bell (2008) is it beneficial to adapt scales from previous studies because their measurement qualities have already been proven which can enhance the validity and reliability of the present study. Both validity and reliability are important to measure because they indicate the quality of the research instrument. Therefore a reliability analysis (Cronbach's  $\alpha$ ) and a factor analysis (F) were conducted.

The questionnaire starts with a section that consists out of several demographic variables such as *Age* and *Gender*. This is important for the researcher to get a picture of the research sample and to check whether the sample is representing the population. The remaining questionnaire includes questions about each construct representing the conceptual model, which will be explained further in the following part.

#### Health self-identity

The construct health self-identity was measured through three items, which were obtained by Sparks and Shepard (1992), including *I see myself as a person who is concerned about it's health.* The reliability of this construct was high with a Cronbach's alpha of .88. All items were measured on a 5-point Likert scale, with higher scores indicating greater values of self-identity as a health concerned person. All items loaded on one Factor with F> .75 indicating construct validity.

#### **Environmental self-identity**

As with health self-identity, environmental self-identity was measured with three items that were obtained by Sparks and Shepard (1992), including *I see myself as someone who is concerned with "green issues"*. The reliability of this construct was good with a Cronbach's alpha of .84. The construct also appeared to be valid with all items loading the same factor with F > .69,

#### Attitude towards organic cosmetic products

To measure the general attitude towards organic cosmetics six items were used like "*I* am favourable towards organic cosmetics". Each item was rated on a 5-point Likert scale where higher scores refer to a more positive attitude towards organic cosmetics. The items were partly adapted from Magnussen et al. (2001) and Kleine Stüve and Strauß (2016). With a Cronbach's alpha score of  $\alpha = .89$ , the construct was proven to be highly reliable. In addition, CFA showed that all items and solely the intended items for the attitude construct load on the same factor with F > .07 which guarantees construct validity.

#### **Subjective Norm**

The construct subjective norm was measured using five items that were inspired by items developed by Ajzen (2002) and Kim and Chung (2011). Participants had to agree or disagree on statements such as "*My friends and family think that I should purchase organic cosmetics instead of conventional cosmetics.*" The higher people scored on these variable the higher their level of being influenced by significant others. Reliability and validity of this construct was high with  $\alpha = .90$  and F > .07.

## **Perceived Behavioural Control**

Four items measured the construct perceived behavioural control such as "*I can afford to buy organic cosmetics*". Items were adapted and modified for the current research from Ajzen (2002) and Ajzen (2013). In general, higher scores on these items indicated greater perceived control to actually buy organic cosmetics. Cronbach's alpha of this construct was .96 and therefore proven to be highly reliable. Content validity was high as well with all items loading on the same factor with F > .7.

#### Subjective knowledge about benefits of organic cosmetics

Six items measured participant's subjective knowledge about health- and environmental related benefits of organic cosmetics such as "*I am not familiar with the health benefits of organic cosmetics*." The items for this construct were partly adapted and modified from Dodd, Laverie, Wilcox and Dunhan (2005) and Aertsens et al. (2011) and had a high reliability with  $\alpha$ = .91. Content validity was good as well with all items loading on the same factor (F > .06). In general, high scores on this scale indicate greater self-perceived knowledge about the benefits of organic cosmetics.

#### Attitude towards brand communication about benefits of organic cosmetics

Six items covering both the attitude towards brand communication about environmental and health related benefits of organic cosmetics were used, like "Overall, I am satisfied with the amount of information about harmful ingredients promoted by organic cosmetic brands." All items were self-developed by the research conductor for the purpose of this study. Cronbach's alpha of this construct was proven to be reliable with  $\alpha = .89$  as well as content validity (F >. 07). The higher the scores on the 5-point Likert scale the more positive the attitude towards brand communication.

#### Intention to purchase organic cosmetics

Finally, four items including "*I am planning to regularly purchase organic cosmetics in the near future*." were used to measure participants intention to continue purchasing organic cosmetics or to start purchasing organic cosmetics. The items derived and modified from existing scales used by Ajzen (2002) and Kim and Chung (2011). Reliability of this construct was high ( $\alpha$ = .96) and content validity was given (F >.06).

An overview of all items used for each construct including the Cronbach's alpha and factor scores from a factor analysis can be found in table 2.

## Table 2

Items per construct

Constructs	<b>Cronbach's α &amp; Factor analysis</b>	Source
Attitude towards organic cosmetics	$\alpha = .89$	Modified from
1. I am favourable towards organic cosmetics.	Factor $1 = .77$	Magnusson et al.
2. I consider organic cosmetic as good.	Factor $1 = .75$	(2004),
3. I regard organic cosmetic as valuable.	Factor $1 = .71$	Ajzen (2006) and
4. I do not consider organic cosmetic as	Factor $1 = .73$	Kleine Stüve and
important.		Strauß (2016)
5. I believe that organic cosmetics can be good	Factor $1 = .70$	
for my skin. 6. I believe that organic cosmetics are less	Factor $1 = .74$	
harmful to the environment than conventional	Factor $1 = .74$	
cosmetics.		
Subjective Norm	$\alpha = .90$	Modified from
My friends and family would rather buy organic cosmetic than conventional cosmetics.	Factor $3 = .81$	Ajzen (2002) and Kim and Chung (2011)
People whose opinion I value would want me to	Factor $3 = .79$	
purchase organic cosmetics. My family and friends think that I should	Factor $3 = .77$	
purchase organic cosmetics instead of	$\Gamma actor 5 = .77$	
conventional cosmetic.		
People in my surrounding purchase organic	Factor $3 = .74$	
cosmetics instead of conventional cosmetics.		
My friends and family would approve	Factor $3 = .75$	
purchasing organic cosmetics.		
Perceived behavioural control	$\alpha = .96$	Modified from
I can buy organic cosmetics whenever I want	Factor $5 = .85$	Ajzen (2013) and
to.		Ajzen (2002)
I can buy organic cosmetics wherever I want to.	Factor $5 = .83$	
Organic cosmetics are available in shops near	Factor $5 = .79$	
my neighbourhood.		
I am confident that I am able to purchase		
organic cosmetics If I would want to.		
Health self-identity	$\alpha = .84$	
I think as myself as a person who reflects a lot	Factor $7 = .84$	Sparks and Shepherd
about their health.		(1992)
I see myself as a person who is concerned about	Factor $7 = .79$	
their health.		
I see myself as a person who is constantly	Factor $7 = .78$	
looking for ways to improve their health.		
Environmental self-identity	$\alpha = .88$	Sparks and Shepherd
I think of myself as an environmental friendly	Factor $8 = .75$	(1992)
consumer.		
I am a person who cares about the state of the	Factor $8 = .72$	
environment.		
I think of myself as someone who is concerned	Factor $8 = .69$	
with "green issues".		
Attitude towards brand communication about	α= <b>.89</b>	Items self-developed
benefits of organic cosmetic		by researcher
Organic cosmetics contain sufficient	Factor $4 = .86$	

information about the health benefits on the package/the product.

Overall, I am satisfied with the amount of information about environmental benefits	Factor $4 = .84$	
promoted by organic cosmetic brands. Organic cosmetic brands inform to what extent organic cosmetics avoid ingredients that harm the environment.	Factor 4 = .81	
Organic cosmetics contain sufficient information about why organic cosmetics are harmless to our waters.	Factor 4 = .77	
Brands that sell organic cosmetics, communicate the benefits for an individuals' health.	Factor 4 = .77	
Overall, I am satisfied with the amount of information about harmful ingredients promoted by organic cosmetic brands.	Factor $4 = .76$	
Call remained whitesting knowledge about		Itoma partly adapted
Self-perceived subjective knowledge about benefits of organic cosmetics	$\alpha = .91$	Items partly adapted and modified from
I know a lot about the health benefits of organic cosmetics.	Factor $2 = .74$	Aertsens et al. (2011) and Dodd et al. (2005)
I am knowledgeable on how ingredients in	Factor $2 = .77$	
conventional cosmetics can harm my health. My knowledge about the health benefits of organic cosmetics is better compared to other people in Germany.	Factor 2 = .71	
My knowledge about the ecological benefits of organic cosmetics is better compared to other people in Germany.	Factor $2 = .73$	
I am knowledgeable about how organic cosmetic is better for the environment compared to conventional cosmetics.	Factor 2 = .69	
I am aware about how my consumption of organic cosmetics can affect the environment.	Factor $2 = .63$	
Purchase Intention	$\alpha = .96$	Modified from
I am planning to regularly purchase organic cosmetics in the near future.	Factor $6 = .72$	Ajzen (2002) and Kim and Chung (2011)
The next time I purchase cosmetics, it is likely	Factor $6 = .71$	
that I will choose organic cosmetics. I have the intention to purchase organic cosmetics in the next weeks.	Factor 6 = .68	
It is likely that I will continue purchasing organic cosmetics.	Factor $6 = .67$	

## 4. Results

In the following chapter, the results of the research study will be described in detail. Therefore, the statistical results for all different tests conducted will be presented for both groups of participants (purchaser and non-purchasers) separately.

## 4.1 Descriptive statistics

First, the mean scores and standard deviation scores of each construct will be examined. Moreover, a one-sample t-test was performed to find out whether a variable can be interpreted as significantly negative or significantly positive using 3 as a test value.

For the group of organic cosmetic purchaser, the variables health self-identity, environmental self-identity, attitude, subjective norm, subjective knowledge, perceived behavioural control and purchase intention are all significant positive. Attitude towards organic cosmetics shows the highest mean score with M= 4.45, SD= .58. Hence, the variable is statistically significant positive with t(119)= 27.27, p< .01, showing that people who already purchase organic cosmetics have a very positive attitude towards organic cosmetics. Only attitude towards brand communication has a mean score of M= 2.84, SD= .85. Furthermore, the mean score is significantly lower than the test value with t(119) = -2.05, p < .05. Meaning, organic cosmetic purchaser do not show a positive attitude towards the perceived brand communication about the benefits of organic cosmetics.

For the group of non-purchasers, results are a little different. Here, subjective norm, attitude towards brand communication, subjective knowledge and purchase intention are significantly negative. For instance, subjective norm has the highest negative score with M= 2.43, SD= .81, t(135)= -8.21, p< .01. This indicates that the non-purchaser group does not feel social pressure when thinking about purchasing organic cosmetics. On the contrary, the variables health self-identity, environmental self-identity, attitude and perceived behavioural control all show significant positive mean scores as well. However, they are all lower compared to the significant positive variables from the purchaser group.

A detailed overview for all descriptive statistics and analysis can be found in Table 3.

## Table 3

**One-Sample Statistics** 

Group One: Organic cosmetic purchaser Group Two: Non-purchaser

Group Two: Non-purc	N	Mean	SD	
Constructs	120			
	136			
Health self-identity		4.16	.81	
		3.49	.88	
Environmental self-		4.18	.77	
identity		3.26	.88	
Attitude		4.45	.58	
		3.56	.80	
Subjective Norm		3.24	.84	
		2.43	.81	
Perceived behavioural		4.00	.81	
control		3.41	.87	
Attitude towards		2.84	.85	
brand communication		2.70	.84	
~				
Subjective knowledge		3.74	.78	
		2.56	.85	
		4.02	01	
Purchase intention		4.02	.81	
		2.41	.92	

*Note.* Measurement scale: 5-point Likert scale, test value= 3.

One-Sample t-test				
	Ν	t	df	sig. (2-tailed)
Constructs	120 136			
Health self-identity		15.58 6.92	119 135	.00** .00**
Environmental self-identity		16.90 3.46	119 135	.00** .00**
Attitude		27.27 8.82	119 135	.00** .00**
Subjective Norm		3.09 -8.21	119 135	.00** .00**
Perceived behavioural control		13.94 5.51	119 135	.00** .00**
Attitude towards brand communication		-2.05 -4.22	119 135	.04* .00**
Subjective knowledge		10.39 -6.04	119 135	.00** .00**
Purchase Intention		13.80 -7.45	119 135	.00** .00**

*Note*. Measurement scale: 5-point Likert scale, test value= 3.

## 4.2 Correlation analysis

In order to see whether linear relationships between the different variables exist a correlation analysis was carried out. Besides, the correlation coefficient can give insights into the strength and direction of these relationships. All results of the correlation analysis can be found in table 4 and 5.

For the group of organic cosmetic purchaser, all independent variables except attitude towards brand communication show a significant positive relationship with the dependent variable purchase intention. Nevertheless, this non-existent relationship is not surprising as the research is only interested in the relationship between attitude and attitude towards brand communication. The correlation between attitude and purchase intention is the strongest with r=.72, n=120, p<.01. Important for the model testing as well is the fact that subjective knowledge has a significant positive correlation with attitude with r=.54, n=120, p<.01. However, attitude towards brand communication shows no significant correlation with attitude at all. Fundamental, all independent variables except attitude towards brand communication correlate with each other on a significant level with p < .01.

Within the group of participants that did not purchase organic cosmetics, all predictors except perceived behavioural control and attitude towards brand communication showed a positive correlation with the dependent variable purchase intention. Here, the strongest correlation exists between subjective norm and purchase intention with r=.54, n=136, p<.01, followed by attitude and environmental self-identity, both having the same correlation coefficient score with r=.42, n=136, p<.01. Nonetheless, no correlation is above r=.7 indicating that the correlations are only weak to moderate (Burns & Burns, 2008). Similar to the results of the first group, subjective knowledge positively correlates with attitude (r=.28, n=136, p<.01) whilst attitude towards brand communication does not.

Correlation	Correlation analysis for group one: organic cosmetic purchaser							
	Attitude	Subjective	Perceived beh.	Health	Environmental	Attitude brand	Subjective	Purchase
		Norm	control	self-identity	self-identity	communication	knowledge	Intention
1. Attitude	1							
2. Subjective Norm	.37**	1						
3. Perceived behavioural control	.43**	.29**	1					
4. Health self-identity	.32**	.29**	.24**	1				
5. Environmental self- identity	.54**	.31**	.33**	.39**	1			
6.Attitude towards brand communication	10	.04	.03	25**	151	1		

 Table 4

 Correlation analysis for group one: organic cosmetic purchaser

*Notes*. N=120, \*p<. 05; \*\*p<.01

	Attitude	Subjective Norm	Perceived beh. control	Health self-identity	Environmental self-identity	Attitude brand communication	Subjective knowledge	Purchase Intention
1. Attitude	1							
2. Subjective Norm	.32**	1						
3. Perceived behavioural control	.22**	.21*	1					
4. Health self-identity	.37**	.27**	.21*	1				
5. Environmental self- identity	.40**	.40**	.11	.33**	1			
6. Attitude towards brand communication	.14	.15	.09	00	.07	1		
7. Subjective knowledge about benefits	.28**	.43**	.28**	.30**	.40**	.18*	1	
8. Purchase Intention	.42**	.54**	.19	.27**	.42**	02	.39**	

## 4.3 Model testing

Based on the outcomes of the correlation analysis, it can be assumed that a linear relationship between both, purchase intention variables and the independent variables attitude, subjective norm, health self-identity and environmental self-identity exist. Looking at the perceived behavioural control variable, the correlation analysis suggests that a relationship only exists for the intention to continue purchasing thus for the group of organic cosmetic purchaser.

Besides, it can be presumed that, for both groups, subjective knowledge has influence on attitude. Certainly, attitude towards brand communication is likely to have no relationship with attitude. To examine to what extent the independent variables now actually predict the purchase intention respectively the attitude on a significant level, a hierarchical regression and linear regression analysis was conducted for both the group of organic cosmetic purchasers and the non-purchasers.

A detailed overview of all results can be found in table 6, 7, 8 and 9. In addition, table 10 will display the hypotheses that were tested during the analysis and whether they can be supported or not.

# **4.3.1 Regression predicting the intention to (continue) purchasing organic cosmetics**

First, a closer look will be taken at the outcomes of the hierarchical regression for the group of organic cosmetic purchasers. Here, the first group of predictors consisted out of health self-identity and environmental self-identity. Together, both variables explain 31% of the variance in the variable purchase intention ( $R^2$ = .31, F(2,117)= 28.05, p< .01). Moreover, both variables have predictive value with  $\beta$ = 20, p< .05 respectively  $\beta$ =46, p< .01. However, when adding the three variables of the TPB for analysis, the influence of health- and environmental self-identity vanishes and only attitude and perceived behavioural control add predictive value to the variable purchase intention with  $R^2$ = .59, F(5,114)= 35.45, p< .01. Though worth mentioning is that the influence of environmental self-identity is very close to significance with p=.05 in the second model. In contradiction to the correlation analysis, subjective norm does not show a significant relationship with the dependent variable purchase intention as the significance level is above .05 with p< .21. This suggests that even though subjective norm has some kind of relationship with the dependent variable, it does not add predictive value to it. Furthermore, as expected based on the correlation

analysis, attitude has the strongest impact with  $\beta$ = .48, p< .01, followed by perceived behavioural control showing moderate influence ( $\beta$ = .22, p< .01). To sum up, even though the predictive value of both self-identity variables disappear when adding the TPB variables, the proportion of explainable variance increases up to 59%, R<sup>2</sup>= .59, suggesting that both attitude and perceived behavioural control have a strong influence on the purchase intention of organic cosmetic purchasers.

Second, the results of the hierarchical regression for non-purchasers will be presented. Again, the first group of predictors tested are health- and environmental self-identity. Here, only environmental self-identity adds predictive value with  $\beta$ = .37, t(135)= 4.49, p< .01. The influence of health self-identity is non-significant. Therefore, environmental self-identity explains 18% of the variance with R<sup>2</sup>= .18, F(2,133)= 16.28 p< .01. Adding the three remaining variables of the TPB, the explained variance increases up to 36%, R<sup>2</sup>= .36, F(5,130)= 16,31, p< .01. In contrast to the outcomes for group 1, environmental self-identity remains a significant predictor even though its strength decreases with  $\beta$ = .17, t(135)= 2.09, p< .05. In addition, attitude and subjective norm significantly add predicative value as well with  $\beta$ = 21, t(135)= 2.68, p< .01 respectively  $\beta$ = .39, t(135)= 5.03, p< .01.

#### Table 6

*Results of the hierarchical regression analysis for the organic cosmetic purchaser group* 

	ß	t-value	Sig.
Model 1			
Health self-identity	.20	2.47	.01*
Env. self-identity	.46	5.56	.00**
Model 2			
Health self-identity	.09	1.38	.17
Env. self-identity	.14	1.96	.05
Attitude	.48	6.43	.00**
Subjective norm	.08	1.27	.21
Pbc	.22	3.37	.00**

Regression coefficients

*Notes*. N=120, \*\*p<.01; \*p<.05

Outcome variable: Purchase intention

Table 7
Results of the hierarchical regression for the non-purchaser group

	ß	t-value	Sig.
Model 1			
Health self-identity	.13	1.81	.07
Env. self-identity	.37	4.49	.00**
Model 2			
Health self-identity	.02	.30	.76
Env. self-identity	.17	2.09	.03*
Attitude	.21	2.68	.00**
Subjective Norm	.39	5.03	.00**
Pbc	.04	.58	.56

Regression coefficients

*Notes*. N=136, \*\*p<.01; \*p<.05

Outcome variable: Purchase intention

## 4.3.2 Regression predicting the attitude towards organic cosmetics

To test the second part of the model, a linear regression analysis was performed two times for both groups of participants. The linear regression aimed to find out whether the two variables attitude towards brand communication and subjective knowledge influence participants attitude towards organic cosmetics.

Based on the correlation analyses for both groups, it was already expected that attitude towards brand communication has no significant influence on attitude. The linear regression analysis supported this finding for both groups of participants.

For the organic cosmetic purchaser, subjective knowledge and attitude towards brand communication explained 28% of the variance of the variable attitude towards organic cosmetics, with  $R^2$ = .28, F(2,117)= 24.40. Since the influence of attitude towards brand communication was non-significant, subjective knowledge remains as a strong predictor with  $\beta$ = .54, t(119)= 6.90, p< .01.

For the non-purchaser group, a low but significant explained variance of 7% can be found with  $R^{2=}.07$ , F(2,133)= 6.10. Again, attitude towards brand communication had no influence on participants attitude towards organic cosmetics, leaving subjective knowledge responsible for the explained variance of 7% with  $\beta$ = .26, t(135)= 3.08, p< .01.

#### Table 8

Results of the linear regression for the organic cosmetic purchaser group

	β t-value		Sig.	
Sub. Knowledge	.54	6.90	.00**	
Attitude brand	03	35	.73	
comm.				

Dependent variable: Attitude

#### Table 9

Results of the linear regression for the non-purchaser group

	β	t-value	Sig.
Sub. Knowledge	.26	3.08	.00**
Attitude brand	.09	1.07	.29

*Notes*. N=136, \*\*p<.01; \*p<.05 Dependent variable: Attitude

## 4.4 Overview hypotheses tested

Table 10		
Hypothesis	Purchaser	Non-purchaser
H1a/b: Health self-identity positively influences the intention to continue purchasing and to start purchasing organic cosmetics.	not supported	not supported
H1c/d: Environmental self-identity positively influences the intention to continue purchasing and to start purchasing organic cosmetics.	not supported	supported
H2a/b: Attitude towards organic cosmetics positively influences the intention to continue buying and to start purchasing organic cosmetics.	supported	supported

H3a/b: Subjective Norm positively influences the intention to continue purchasing and to start purchasing organic cosmetics.	not supported	supported
H4a/b: Perceived behavioural control positively influences the intention to continue purchasing and to start purchasing organic cosmetics.	supported	not supported
H5a/b: Subjective knowledge about organic cosmetic benefits positively influences the intention to continue purchasing and to start purchasing organic cosmetics.	supported	supported
H6a/b: Attitude towards brand communication positively influences the intention to continue purchasing and to start purchasing organic cosmetics.	not supported	not supported

# 4.5 Relational models

To close this chapter, two relational models will be presented. They both display the results of the analysis based on the conceptual research model that was presented in the theoretical framework. The first model (Figure 2) represents the results of the purchaser group and the second model (Figure 3) represents the results of the non-purchaser group.

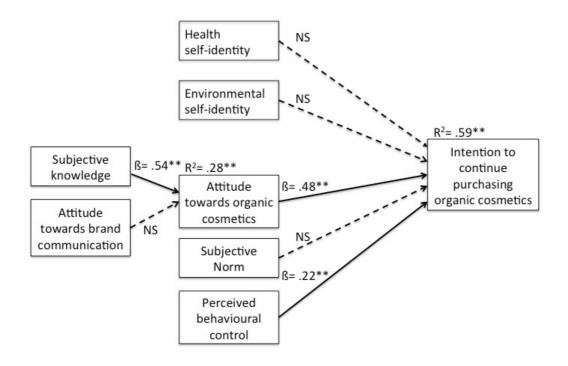


Figure 2. Results of the present study for the organic cosmetic purchaser group.

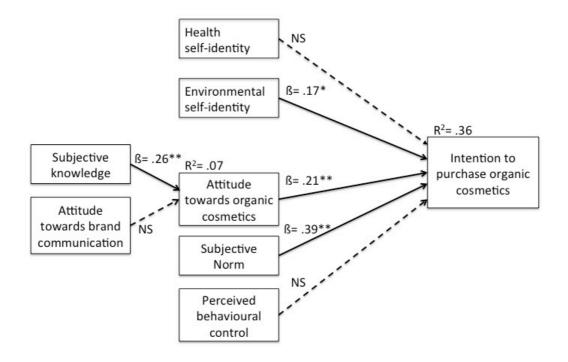


Figure 3. Results of the present study for the non-purchaser group.

# 5. Discussion

The present study was conducted in order to answer the overall research question: What factors positively influence consumers intention to purchase or to continue purchasing organic cosmetics?

Therefore, the study tested the influence of several variables on consumers intention to purchase or to continue purchasing organic cosmetics (health self-identity, environmental self-identity, attitude, subjective norm, perceived behavioural control). The influence of subjective knowledge and attitude towards brand communication was tested as well as the general attitude towards organic cosmetics. Moreover, all respondents who participated the online survey were divided in two groups, based on their past behaviour, which resulted in one group of organic cosmetic purchaser and one group of non-purchaser.

The following paragraphs will discuss the findings of all analyses done in detail and compare the results to existing literature. Then, limitations of the present research will be pointed out and both theoretical and practical implications will be presented, including recommendations for future research. The chapter will finish with an overall conclusion of the whole research study.

#### 5.1 Discussion of Results

#### Self-identity

When solely looking on the influence of health- and environmental self-identity, health self-identity has a significant positive influence on the intention to continue purchasing organic cosmetics. For the non-purchaser, health self-identity was non-significant. Since the group of non-purchaser scored above the median value of three on the health self-identity scale, they seem to be conscious about their health. However, they score negatively on the subjective knowledge scale, meaning that they do not see themselves as quite knowledgeable concerning the benefits of organic cosmetics and risks of conventional cosmetics. Meaning they might not see the connection on how organic cosmetics can contribute to their health conscious lifestyle. Furthermore, environmental self-identity appeared to be a highly significant predictor for both groups of purchasers. Both findings are in line with past research. Magnusson et al. (2003) found that health consciousness was more important for people who had a strong intention to purchase organic food compared to those people

who had a weak intention to do so. In addition, Kim & Seock (2009) found out that environmental consciousness is a strong predictor of the purchase behaviour of natural beauty products. Moreover, they pointed out that environmental consciousness is a relatively stronger predictor than health self-identity in the case of natural beauty products.

When adding the remaining variables of the TPB the influence of health self-identity for the purchaser group also vanish. Reason for that could be that even though health self-identity plays a role in the purchase intention, the other variables are more important in this decision making process.

In case of environmental self-identity, the variable still positively influences the intention to purchase organic cosmetic from the non-purchaser group even though the influence is less significant and less strong. However, the influence for the purchaser group is just not significant anymore when considering all variables of the research model. This can be due to the reason, that environmental self-identity is indeed an indicator for the intention to continue purchasing organic cosmetic, however, that the predictive values of other variables are more important. The strong correlation between environmental self-identity and purchase intention for organic cosmetic purchaser approve this. Still, that environmental self-identity has a stronger impact on the non-purchaser group compared to the organic cosmetic purchaser group in the overall model goes against the excepted results. This may be explainable because of the strong influence of attitude for the purchaser group.

#### **Theory of planned Behaviour**

Looking at the variables of the theory of planned behaviour, several interesting results can be found:

In line with the proposed hypotheses and past research, attitude towards organic cosmetics has a significant positive influence on the purchase intention of both groups of purchaser. This is in accordance with the findings of several researches which focused on factors influencing the purchase intention of organic cosmetic products, which all found attitude to be an significant predictor, generating a significant amount of the variance of the purchase intention variable (Kim & Chung, 2011; Recker & Saleem, 2014; Kleine Stüve & Strauß, 2016).

Subjective norm was found to be a predictor for the group of non-purchaser but not for the group of organic cosmetic purchaser.

This outcome is not in line with the proposed hypothesis, which expected that subjective norm also positively influences the purchase intention of organic cosmetic purchaser. Additionally, this result contradicts the well-cited research by Kim & Chung (2011) who indeed, found that subjective norm is a significant factor when predicting the purchase intention of organic cosmetic products. However, Recker & Saleem (2014) for instance, ascertained exactly the same results. In their study, subjective norm significantly correlated with purchase intention but was not adding predictive value to consumers intention to purchase organic cosmetic products in the future. This finding is also in accordance with findings from Tarkiainen & Sundqvist (2006), who found no significant influence of subjective norm on purchase intention of organic cosmetics intention of organic food. This result might be explained through the fact that, people who purchase organic cosmetics intent do continue purchasing them, independent of what other people in their environment think because they are self-confident in their purchase pattern due to repeated purchases of organic cosmetics.

Also, this makes sense when looking at the findings for the non-purchaser group. Here, subjective norm was not only a significant predictor for purchase intention but also the strongest one. This supports the findings of Kim & Chung (2011). One could argue that people who do not purchase organic cosmetics right now could still be influenced by significant others to do so.

Looking at the variable perceived behavioural control, analysis revealed that perceived behavioural control is a significant predictor of the intention to continue purchasing organic cosmetics for the group of organic cosmetic purchaser. However, perceived behavioural control did not influence the purchase intention of the nonpurchaser group. That supports the outcomes of Kim & Chung (2011) and Kleine Stüve & Strauß (2016) who also outlined a positive relationship between the variable perceived behavioural control and purchase intention of organic cosmetic products.. Inconsistent with the proposed hypothesis, perceived behavioural control had no significant impact on the purchase intention variable for the group of non-purchaser. This was already expected after the correlation analysis revealed that no correlation between the two variables exists. This is in line with research done by Recker & Saleem (2014) and Tarkiainen & Sundqvist (2006) who both found no significant influence of perceived behavioural control on purchase intention in the organic product sector.

Both, the findings for the purchaser group and the non-purchaser are compatible with a study on green consumerism done by Nam et. al (2017). They found that perceived behavioural control has no influence for non-purchaser of green products but significant positive influence for the people who do purchase green products. Richetin, Connor & Perugini (2011) argued that the predictive utility of perceived behavioural control relies upon the motivation of individuals to actually carry out that specific behaviour. This could explain why perceived behavioural control is a significant predictor for the purchaser group but insignificant for the non-purchaser. Meaning for the non-purchaser, factors like price and availability might just play not an important role yet because they simply do not intent to purchase organic cosmetics in the future. Another explanation is that non-purchasers do not know about the actual prices and limited availability of organic cosmetics because they never actually looked out for organic cosmetic products

Another approach to explain the differences is that it needs to be taken into consideration that people who already purchased organic cosmetics take factors such as price and availability into account because they are already experienced that they are important factors when purchasing organic cosmetics in the past.

#### **Antecedents of Attitude**

In line with the proposed hypotheses, subjective knowledge about organic cosmetic benefits positively influences the attitude towards organic cosmetics for both groups of purchaser. In contrast, results of the linear regression show that the effect of attitude towards brand communication is non-significant for both groups of purchaser.

Looking closer at the results of subjective knowledge it can be said that the results support past research of Aertsens et al. (2011). They figured out that subjective knowledge has a significant positive impact on the attitude towards organic food. In addition, Recker & Saleem (2011) found that, among other variables, consumer knowledge exerts the greatest effect on attitude towards organic cosmetic products. Furthermore, an interesting finding outcome is the difference of the impact subjective knowledge has on attitude for the two groups of purchasers. For the group of organic

cosmetic purchaser, subjective knowledge is accountable for 28% of the variance of

attitude towards organic cosmetics. For the non-purchaser subjective knowledge only explains 7% of the variance. In their research on natural beauty products, Kim & Seock (2009) also found differences in perceived subjective knowledge between two groups of participants: people who stronger identity as health- and environmental conscious people also scored higher on the perceived knowledge scale. The present research supports that: the organic purchaser people scored higher on the health- and environmental scales and also scored higher on the subjective knowledge scale.

Looking at past research on attitude towards brand communication, the findings are consistent with Dimitrova et al. (2009). They ascertained that only a small percentage of people (16.5%) agree that good advertising is a motivation to purchase organic Bulgarian rose products. Moreover, the people in the group of the non-purchaser score both negatively on the attitude towards brand communication and purchase intention scale, however, have a slightly positive attitude towards organic cosmetic in general. This suggests that, right now, indeed, marketing efforts might not produce the desired effect of positively influencing consumers to purchase. It is possible that consumers in general rather not try to be influenced by marketing communication efforts about benefits of organic cosmetics even when it is from reliable certified organic cosmetic brands. Furthermore, the non-significance might be explained through the fact that, the group of organic cosmetic purchaser for instance gets their knowledge about the benefits of organic cosmetics and risks of conventional cosmetics from other sources than the brands. This would be in line with the negative score of the one sample t-test, which reveals that people who regularly purchase organic cosmetics do not think that organic cosmetic brands communicate the benefits of their products adequately. These people are likely to be interested in sustainable consumption in general as shown by their high scores on environmental- and health self-identity and hence actively looking for information they need to consider certain products above others, outside the general communication by the brands self.

#### **Research question**

Based on the findings mentioned above, the research question can be answered as followed: Attitude towards organic cosmetics and perceived behavioural control positively influence the intention to continue purchasing organic cosmetics for the purchaser-group. Besides, subjective knowledge about the benefits positively influences the attitude. For the group of non-purchasers, environmental self-identity, attitude towards organic cosmetics and subjective norm positively influence the intention to start purchasing organic cosmetics. Again, subjective knowledge influences the attitude.

#### 5.2. Limitations and future research directions

Despite several interesting results of the present study that contribute to the topic of consumer behaviour regarding organic cosmetic consumption, some limitations came up during the process of this research. These limitations will be further explained in the next paragraph as they might have influenced the results of this study. Additionally, future research recommendations will be drawn as these limitations can help to improve future research on this field.

First of all, the most prevalent limitation of the research is that it suffered from a high drop out rate. Originally, 319 people participated in the online questionnaire whereof only 256 could be used for further analysis. Meaning 63 participants needed to be excluded which makes up almost 20% of the original group of participants who started the questionnaire. Even though, online surveys are prone to high drop out rates, possible reasons need to be discussed. A potential explanation might be that the survey was perceived to be too long, so that people just quit after a few pages because they were under time pressure or just bored by filling in the survey.

To overcome this it might be reasonable to reward the participant at the end of the survey with some kind of reward, which could be financial by means of a voucher or likewise. In fact, the research conductor already tried to tackle this problem upfront by make use of the website *poll-pool* to gather participants. Here, random chosen participants need to finish a survey they started to fill in in order to get a code at the end of the survey. However, using the website is very time consuming which is why the research conductor did not gather all the participants that way. For future research, more time should be planned in in order to use tools as *poll-pool* and a reward for other voluntarily participants who need to be motivated to take the time to finish the complete survey.

Furthermore, after dividing the participants into two groups, the sample size was quite small for both groups, with n= 120 respectively n=136. The small representation makes generalisation to the population of German organic cosmetic purchaser and non-purchaser difficult. Even though the results give an idea of the current organic cosmetic purchase behaviour in Germany, it is advisable to gather a larger sample size in order to make a definitive generalization.

Moreover, females were overrepresented in the present study, with n=185 which made up 72,3% of the sample. Additionally no interaction effect of gender on the intention to purchase and the intention to continue purchasing was analysed because the sample sizes were too uneven distributed. For future research, it can be recommended to aim for getting even sample sizes in order to be able to compare purchase behaviour of different genders. Even though women are statistically the higher cosmetic purchaser group, men can be an interesting target group as well. Getting insights into differences of factors influencing the intention to purchase or to continue purchasing organic cosmetics based on gender can help marketers ones more to create effective and tailored marketing material for different target groups.

Another shortcoming of the research was discovered during analysis. As the regressions revealed, the variables that were used explained quite some degree of the variance for both the attitude and the purchase intention variable. Nevertheless, the numbers indicated that there are other factors that play a role when consumers consider their intention to purchase organic cosmetics. Additionally, the explained variance of variables differed between the purchaser- and the non-purchaser groups, as it was lower for the non-purchaser compared to the purchaser group. Therefore, future research should test the influence of other potential factors that influence the purchase intention combined with the factors that showed significant positive influence in the present research.

Nonetheless, the researcher only tested the model that was proposed at the beginning of the research in order to test the hypotheses. In order to get a better understanding of the organic cosmetic purchaser, it would be useful to measure the independent influence of all variables on the dependent variables. Then, it is also advisable to test to what extent the independent variables influence each other. For example, the present research only tested the influence of environmental self-identity on the intention to purchase or to continue purchasing organic cosmetics. As seen in past research, it is also possible that environmental self-identity influences the attitude towards organic cosmetics. Consequently, it can be recommended to also focus on interaction effects between the variables used in future research.

#### 5.3 Theoretical implications

A lot of research has focused on organic consumption in the past. However, it was mostly focused on organic food consumption. Even though research on organic cosmetic consumption exists, they are far less numerous. Therefore, the present research combined various predictors that were used in past research on organic cosmetic consumption and organic food consumption and introduced a new model. For instance, Kim & Chung (2011) used health- and environmental consciousness as consumers' internal values which influences attitude. The research conductor in this study focused on social identity theory and proposed that consumers' health- and environmental consciousness are part of their identity and directly influence their intention to purchase or to continue purchasing organic cosmetics. In addition, another study on organic cosmetic products introduced environmental literacy as an influential factor for organic cosmetics (Saleem & Recker, 2014). Another research on organic food consumption found subjective knowledge to be an important factors influencing attitude (Aertsens et al. 2011). Besides, present research combined this information and proposed that subjective knowledge about both environmental- and health related benefits regarding organic cosmetics positively influence the attitude towards organic cosmetics.

Furthermore, past research did include past behaviour as a variable influencing purchase intention directly. However, to the researcher's best knowledge, only one research yet included organic cosmetic purchaser and non-purchaser as two different groups to compare results. This distinction in participants offered some interesting new research insights as indeed, results of the analysis differ between the two groups of participants. Two main differences between purchaser and non-purchaser could be found. First of all, perceived behavioural control is an important factor when asking organic cosmetic purchaser about their intention to continue purchasing organic

cosmetics. Admittedly, for the non-purchaser, this factor is not of interest. Then, subjective norm is an important predictor of the intention to purchase organic cosmetics for the people who currently do not purchase them. For the organic cosmetic-purchaser, this factor showed to be non-significant for their purchase intention.

#### **5.4 Practical implications**

Since the present research offered some new theoretical findings, the results should be used to draw some practical implications that could be implemented for a more effective marketing- and communication approach for organic cosmetic brands. First of all, it should be mentioned that the intention to purchase organic cosmetics drastically differs between organic cosmetic purchaser and non-purchaser. While the purchaser-group indicated a high intention to continue purchasing organic cosmetics, the non-purchaser did not. The non-purchaser scored beneath the median value of 3 on the purchase intention scale (with M=2.4), indicating that they rather do not intent to purchase organic cosmetics in the near future.

Therefore, marketers and organic cosmetic brands should primarily focus on getting the non-purchaser on board, to persuade them to become actual organic cosmetics user and buyer. Looking at the results of the analyses, it can be recommended to emphasize the environmental benefits of organic cosmetic products as a marketing strategy. For non-purchaser, environmental self-identity and subjective knowledge both played a significant role in the purchase intention process.

Consequently, marketing manager should make an effort of educating consumers about the benefits of using organic cosmetics instead of conventional cosmetics. Embedding not only vague claims but actual facts about the environmental friendliness can on the one hand, increase the subjective knowledge people perceive to have and on the other hand, increase their environmental self-identity when they actually understand the environmental benefits of using organic cosmetics. Additionally, it is advisable to communicate hard facts in a way that everybody can understand them. Meaning, when stating that a product does not consist out of microplastic and for example petroleum, it does not necessarily mean that people immediately recognize that micro-plastic pollutes the drinking water and that petroleum supports the mining of the rainforest. Information like that can be put on the package and should also be mentioned in other marketing efforts. Apart from that, subjective norm plays an important role for the non-purchaser. This suggests incorporating the role of individuals in society when it comes to sustainable consumption in marketing campaigns. This could be done by using a role-model people can identify with or by emphasising the general growth of organic cosmetic consumption in Germany. In line with the theory of subjective norm, people will be more likely to start purchasing organic cosmetics when their reference group shows a positive attitude towards that behaviour and also performs it already. The abovementioned marketing strategies also work towards creating a positive attitude towards buying and using organic cosmetic products.

With focus on the purchaser- group, perceived behavioural control becomes important next to attitude and subjective knowledge. This suggests that marketers should try to adjust consumers perception of high prices and limited availability to keep current customers in future. This change in perception can be triggered by different marketing strategies such as promotional activities (discounts, buy two- pay one) in newspaper advertisements and in store.

#### 5.5 Conclusion

The consumption of organic cosmetic products experienced a strong growth in the past decade and it is expected to continue growing. This is in line with the general steady growth of sustainable consumption in all kind of sectors like for example the organic food or renewable energy sector. Certainly, special research in the field of organic cosmetics is lacking. For this purpose, the present research was conducted in order to provide insights into this niche of organic consumption in order to develop effective and tailored marketing strategies for the two groups of consumer.

After analysing the results of the present research, comparing them to previous research, and giving practical and theoretical implications, a final conclusion with focus on the research question can be drawn. The research question was "What factors positively influence consumers' intention to purchase/ to continue purchasing organic cosmetic?"

It can be concluded that, for the organic cosmetic purchaser, attitude towards organic cosmetics and perceived behavioural control positively influence the intention to continue purchasing organic cosmetics. Additionally, subjective knowledge positively influences consumers attitude towards organic cosmetics. For the non-purchaser, environmental self-identity, attitude towards organic cosmetics and subjective norm positively influence the intention to purchase organic cosmetics. Again, subjective knowledge also positively influences the attitude towards organic cosmetics for the non-purchaser. Therefore it is crucial for marketers to distinct between purchasers and non-purchasers and to try to positively embed the influential factors mentioned above in future marketing attempts.

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# 7. Appendix

# Appendix A

Online questionnaire

**Start of Block: Default Question Block** 

Liebe Teilnehmerin, Lieber Teilnehmer, Vielen Dank, dass Sie an meiner Studie zum Kaufverhalten von Kosmetikprodukten unter Deutschen teilnehmen, welche ich im Rahmen meiner Masterarbeit am Lehrstuhl für Kommunikationswissenschaften an der Universität Twente durchführe. Die Teilnahme an dieser Umfrage wird ca. 10- 12 Minuten ihrer Zeit in Anspruch nehmen.

Bevor Sie beginnen, möchte ich Sie noch auf folgendes hinweisen: Die Teilnahme an dieser Umfrage ist anonym. Es gibt keine richtigen oder falschen Antworten und es geht nur um ihre eigene Meinung. Die Resultate werden nur zu wissenschaftlichen Zwecken verwendet und daher nicht an Dritte weitergegeben.

Die Teilnahme ist freiwillig und kann zu jedem Zeitpunkt ohne Angabe von Gründen unterbrochen werden.

Wenn sie den oben genannten Bedingungen zustimmen, klicken Sie auf "weiter" um mit der Umfrage zu beginnen.

Page Break —

Als Kosmetikprodukte zählen in dieser Studie Produkte der folgenden Kategorien: Make-up, Körperpflege- und Beinigung, Gesichtspflege- und Beinigung

Make-up, Körperpflege- und Reinigung, Gesichtspflege- und Reinigung, Haarpflege- und Styling, Düfte und Parfüm.


#### Wie würden Sie sich selbst als Kunde beschreiben?

Bitte wählen Sie die Option aus, die ihrem Kaufverhalten am nächsten kommt.

Ein Kunde, der bewusst Naturkosmetika anstelle von konventionellen Kosmetikprodukten kauft. (1)

Ein Kunde, der neben konventionellen Kosmetikprodukten auch Naturprodukte kauft. (2)

Ein Kunde, der schon einmal Naturkosmetik gekauft hat, aber momentan nicht. (3)

Ein Kunde, der manchmal Naturkosmetik kauft ohne darüber nachzudenken.(4)

Ein Kunde, der keine Naturkosmetik kauft und wahrscheinlich auch in Zukunft keine Naturkosmetik kaufen wird. (5)

 Ich habe keine Kenntnisse darüber, ob die von mir gekauften Produkte Naturkosmetika sind. (6)

Page Break -

Als Kosmetikprodukte zählen in dieser Studie Produkte der folgenden Kategorien: Make-up, Körperpflege- und Reinigung, Gesichtspflege- und Reinigung, Haarpflege- und Styling, Düfte und Parfüm.

#### Bitte lesen Sie sich folgende Information sorgfältig durch:

Laut dem europäischen Naturkosmetik Zertifizierer COSMOS müssen in Naturkosmetik Produkten minimal 95% aller eingesetzten Inhaltsstoffe natürliche Rohstoffe aus kontrolliertem biologischem Anbau und/oder zertifizierter Wildsammlung sein. Maximal 5% aller Inhaltstoffe dürfen synthetischer Herkunft sein, mit ausdrücklichem Ausschluss von u.a. Paraffinen, Silikonen, Parabenen, PEG's sowie synthetischen Farb- und Duftstoffen.

Page Break —

Als Kosmetikprodukte zählen in dieser Studie Produkte der folgenden Kategorien: Make-up, Körperpflege- und Reinigung, Gesichtspflege- und Reinigung,

Haarpflege- und Styling, Düfte und Parfüm.

# Bitte geben Sie an, inwieweit die folgenden Aussagen auf Sie zutreffen:

	trifft nicht auf mich zu (1)	trifft eher nicht auf mich zu (2)	weder noch (3)	trifft eher auf mich zu (4)	trifft auf mich zu (5)
Ich bin nicht mit den gesundheitlichen Vorteilen von Naturkosmetik vertraut. (1)	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Mein Wissen über die gesundheitlichen Vorteile von Naturkosmetik ist besser im Vergleich zu anderen Menschen in Deutschland. (2)	$\bigcirc$	$\bigcirc$	0	0	$\bigcirc$
Ich weiß viel über die gesundheitlichen Vorteile von Naturkosmetik. (3)	$\bigcirc$	0	0	0	0
Ich weiß darüber Bescheid, wie Inhaltsstoffe in konventioneller Kosmetik meiner Gesundheit schaden können. (4)	$\bigcirc$	0	0	0	0

\_ \_ \_

Bitte geben Sie an, inwieweit die folgenden Aussagen auf Sie zutreffen: trifft eher

	trifft nicht auf mich zu (1)	trifft eher nicht auf mich zu (2)	weder noch (3)	trifft eher auf mich zu (4)	trifft auf mich zu (5)
Ich bin mir bewusst, wie mein Konsum von kosmetischen Produkten die Umwelt beeinflussen kann. (1)	$\bigcirc$	0	$\bigcirc$	0	$\bigcirc$
Ich weiß darüber Bescheid, inwieweit Naturkosmetik besser für die Umwelt ist als konventionelle Kosmetik. (2)	0	0	$\bigcirc$	$\bigcirc$	0
Mein Wissen über die ökologischen Vorteile von Naturkosmetik ist besser im Vergleich zu anderen Menschen in Deutschland. (3)	$\bigcirc$	$\bigcirc$	0	0	$\bigcirc$
Ich denke, ich habe nicht genügend Kenntnisse über die ökologischen Vorteile von Naturkosmetik. (4)	0	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$

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Bitte geben Sie an, inwieweit die folgenden Aussagen auf Sie zutreffen:

-	trifft nicht auf mich zu (1)	trifft eher nicht auf mich zu (2)	weder noch (3)	trifft eher auf mich zu (4)	trifft auf mich zu (5)
Ich sehe Naturkosmetik als wertvoll an. (1)	$\bigcirc$	0	$\bigcirc$	$\bigcirc$	$\bigcirc$
Ich bin Naturkosmetik gegenüber positiv eingestellt. (2)	$\bigcirc$	$\bigcirc$	$\bigcirc$	0	$\bigcirc$
Ich finde Naturkosmetik gut. (3)	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Ich finde Naturkosmetik nicht wichtig. (4)	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Ich betrachte Naturkosmetik als relevant. (5)	0	0	$\bigcirc$	0	0
Page Break —					

Als Kosmetikprodukte zählen in dieser Studie Produkte der folgenden Kategorien: Make-up, Körperpflege- und Reinigung, Gesichtspflege- und Reinigung, Haarpflege- und Styling, Düfte und Parfüm.

Bitte geben Sie an, inwieweit die folgenden Aussagen auf Sie zutreffen:

,	trifft nicht auf mich zu (1)	trifft eher nicht auf mich zu (2)	weder noch (3)	trifft eher auf mich zu (4)	trifft auch mich zu (5)
Ich bin davon überzeugt, dass Naturkosmetik vorteilhaft für meine Gesundheit sein kann. (1)	0	$\bigcirc$	$\bigcirc$	$\bigcirc$	0
Ich glaube nicht, dass Naturkosmetik Gesundheitsrisiken reduzieren kann, die mit herkömmlichen Kosmetika verbunden sein können. (2)	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	0
Ich denke, dass Naturkosmetik gut für meine Haut sein kann. (3)	0	$\bigcirc$	0	0	$\bigcirc$
Ich bin davon überzeugt, dass Naturkosmetik keine schädlichen Inhaltsstoffe enthält, die in meinen Körper gelangen können. (4)	0	$\bigcirc$	$\bigcirc$	$\bigcirc$	0

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,	trifft nicht auf mich zu (1)	trifft eher nicht auf mich zu (2)	weder noch (3)	trifft eher auf mich zu (4)	trifft auf mich zu (5)
Ich glaube, dass Naturkosmetik weniger schädlich für die Umwelt ist als konventionelle Kosmetik. (1)	0	$\bigcirc$	$\bigcirc$	$\bigcirc$	0
Ich bin davon überzeugt, dass Naturkosmetik unsere Gewässer nicht verschmutzt. (2)	0	$\bigcirc$	$\bigcirc$	$\bigcirc$	0
Ich denke nicht, dass Naturkosmetik schonend für die Umwelt ist. (3)	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	0
Ich bin davon überzeugt, dass Naturkosmetik Produkte keine umweltschädlichen Substanzen enthalten. (4)	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	0

\_ \_ \_ \_ \_ \_

	trifft nicht auf mich zu (1)	trifft eher nicht auf mich zu (2)	weder noch (3)	trifft eher auf mich zu (4)	trifft auf mich zu (5)
Meine Familie und Freunde denken, dass ich Naturkosmetik anstelle von herkömmlicher Kosmetik kaufen sollte. (1)	0	$\bigcirc$	$\bigcirc$	0	$\bigcirc$
Den meisten Leuten, die mir wichtig sind, ist es egal, ob ich Naturkosmetik oder konventionelle Kosmetik kaufe. (2)	0	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Meine Familie und Freunde würde den Kauf von Naturkosmetik begrüßen. (3)	0	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Menschen, deren Meinung ich schätze, würden wollen, dass ich Naturkosmetik kaufe. (4)	$\bigcirc$	$\bigcirc$	$\bigcirc$	0	$\bigcirc$

	trifft nicht auf mich zu (1)	trifft eher nicht auf mich zu (2)	weder noch (3)	trifft eher auf mich zu (4)	trifft auf mich zu (5)
Meine Familie und Freunde würden eher Naturkosmetik anstelle von konventioneller Kosmetik kaufen. (1)	$\bigcirc$	$\bigcirc$	$\bigcirc$	0	$\bigcirc$
Menschen in meiner Umgebung kaufen Naturkosmetik anstelle von konventioneller Kosmetik. (2)	$\bigcirc$	0	$\bigcirc$	0	$\bigcirc$
Menschen in meiner Umgebung kaufen eher keine Naturkosmetik. (3)	$\bigcirc$	$\bigcirc$	$\bigcirc$	0	$\bigcirc$

U	trifft nicht auf mich zu (1)	trifft eher nicht auf mich zu (2)	weder noch (3)	trifft eher auf mich zu (4)	trifft auf mich zu (5)
Ich kann es mir leisten, Naturkosmetik zu kaufen. (1)	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Ich denke, dass ich in der Lage bin, Naturkosmetik zu kaufen, wenn ich es möchte. (2)	$\bigcirc$	$\bigcirc$	$\bigcirc$	0	$\bigcirc$
Naturkosmetik gibt es in Geschäften in meiner Nachbarschaft. (3)	$\bigcirc$	$\bigcirc$	$\bigcirc$	0	$\bigcirc$
Ich kann Naturkosmetik kaufen, wann immer ich will. (4)	$\bigcirc$	$\bigcirc$	$\bigcirc$	0	$\bigcirc$
Ich kann Naturkosmetik kaufen, wo immer ich will. (5)	$\bigcirc$	$\bigcirc$	0	$\bigcirc$	$\bigcirc$

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Als Kosmetikprodukte zählen in dieser Studie Produkte der folgenden Kategorien: Make-up, Körperpflege- und Reinigung, Gesichtspflege- und Reinigung, Haarpflege- und Styling, Düfte und Parfüm.

Bitte geben Sie an, inwieweit Sie den folgenden Aussagen zustimmen:

	trifft nicht zu (1)	trifft eher nicht zu (2)	weder noch (3)	trifft eher zu (4)	trifft zu (5)
Firmen, die Naturkosmetik verkaufen, vermitteln die gesundheitlichen Vorteile von Naturkosmetik. (1)	$\bigcirc$	0	$\bigcirc$	0	0
Naturkosmetika enthalten ausreichend Information über gesundheitliche Vorteile auf dem Produkt/der Produktverpackung. (2)	$\bigcirc$	0	$\bigcirc$	0	0
Insgesamt bin ich damit zufrieden, wie Naturkosmetikmarken auf schädliche Inhaltsstoffe in Kosmetik aufmerksam machen. (3)	$\bigcirc$	0	0	0	0
Naturkosmetikmarken informieren nicht genug über die Vorteile der Naturkosmetik für die Haut. (4)	$\bigcirc$	0	0	0	0

Bitte geben Sie an, inwieweit Sie den folgenden Aussagen zustimmen:

	trifft nicht zu (1)	trifft eher nicht zu (2)	weder noch (3)	trifft eher zu (4)	trifft zu (5)
Firmen, die Naturkosmetik verkaufen, vermitteln nicht, inwieweit Naturkosmetik weniger schädlich für die Umwelt ist als konventionelle Kosmetik. (1)	$\bigcirc$	$\bigcirc$	0	0	$\bigcirc$
Naturkosmetik Marken enthalten genügend Information darüber, warum Naturkosmetik ungefährlich für unsere Gewässer ist. (2)	$\bigcirc$	$\bigcirc$	0	$\bigcirc$	0
Insgesamt bin ich mit der Menge an Information, die mir über die Umweltvorteile von Naturkosmetik vermittelt werden zufrieden. (3)	$\bigcirc$	$\bigcirc$	0	$\bigcirc$	0
Naturkosmetik Marken informieren darüber, inwieweit Naturkosmetik auf umweltschädliche Substanzen verzichtet. (4)	$\bigcirc$	$\bigcirc$	0	0	$\bigcirc$

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	trifft nicht auf mich zu (1)	trifft eher nicht auf mich zu (2)	weder noch (3)	trifft eher auf mich zu (4)	trifft auf mich zu (5)
Ich habe die Absicht, in den nächsten Wochen Naturkosmetik zu kaufen. (1)	0	$\bigcirc$	$\bigcirc$	0	0
Ich plane, in naher Zukunft, regelmäßig Naturkosmetik zu kaufen. (2)	0	0	$\bigcirc$	0	0
Das nächste Mal wenn ich Kosmetika kaufe, ist es wahrscheinlich, dass ich zu Naturkosmetik greifen werde. (3)	0	0	$\bigcirc$	0	0
Es ist wahrscheinlich, dass ich weiterhin Naturkosmetik kaufen werde. (4)	$\bigcirc$	$\bigcirc$	$\bigcirc$	0	$\bigcirc$

Bitte geben Sie an, inwieweit die folgenden Aussagen auf Sie zutreffen:

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Als Kosmetikprodukte zählen in dieser Studie Produkte der folgenden Kategorien:

Make-up, Körperpflege- und Reinigung, Gesichtspflege- und Reinigung, Haarpflege- und Styling, Düfte und Parfüm.

Bitte geben Sie an, inwieweit die folgenden Aussagen auf Sie zutreffen:

	trifft nicht auf mich zu (1)	trifft eher nicht auf mich zu (2)	weder noch (3)	trifft eher auf mich zu (4)	trifft auf mich zu (5)
Das Kaufen von Naturkosmetika stimmt mit meinen moralischen Prinzipien überein. (1)	$\bigcirc$	$\bigcirc$	0	$\bigcirc$	0
Ich finde, dass ich eine ethische Verpflichtung habe, Naturkosmetik zu kaufen. (2)	$\bigcirc$	$\bigcirc$	0	$\bigcirc$	$\bigcirc$
Ich habe ein schlechtes Gewissen, wenn ich nicht wenigstens manchmal Naturkosmetik kaufe. (3)	0	$\bigcirc$	$\bigcirc$	$\bigcirc$	0

bitte geben sie an, in	trifft nicht auf mich zu (1)	trifft eher nicht auf mich zu (2)	weder noch (3)	trifft eher auf mich zu (4)	trifft auf mich zu (5)
Ich sehe mich selbst als jemanden, der sich mit "grünen" Themen beschäftigt. (1)	0	0	0	0	0
Ich sehe mich selbst als einen umweltfreundlichen Verbraucher. (2)	0	0	$\bigcirc$	$\bigcirc$	$\bigcirc$
Ich bin eine Person, die sich um den Zustand der Umwelt sorgt. (3)	0	$\bigcirc$	$\bigcirc$	$\bigcirc$	0
Ich sehe mich selbst als eine Person, die um ihre Gesundheit besorgt ist. (4)	0	0	$\bigcirc$	0	0
Ich denke, ich bin eine Person, die viel über ihre eigene Gesundheit reflektiert. (5)	0	0	0	0	0
Ich bin eine Person, die immer nach Wegen sucht, um ihre Gesundheit zu verbessern. (6)	0	0	0	0	0
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Wie alt sind Sie?

Wa	is ist Ihr Geschlecht?
	O männlich (1)
	O weiblich (2)
Wa	is ist Ihre höchste abgeschlossene Ausbildung?
	○ Kein Abschluss (1)
	O Hauptschulabschluss (2)
	O Realschulabschluss (3)
	O Fachhochschulreife (4)
	O Allgemeine Hochschulreife (5)
	O Berufsausbildung (6)
	O Bachelor (7)
	O Master (8)
	O Anderer Hochschulabschluss (z.B. Magister oder Diplom) (9)
	$\bigcirc$ nicht zutreffend (10)

Vielen Dank für Ihre Teilnahme!

Bei Fragen oder Anliegen bezüglich dieser Untersuchung kontaktieren Sie mich gerne via i.adels@student.utwente.nl

Klicken Sie bitte auf "weiter" um die Umfrage zu beenden.

# VALIDIERUNGSCODE FÜR POLLPOOL-BENUTZER (WWW.POLL-POOL.COM): BZCCL

End of Block: Default Question Block