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**Purchasing Behaviour of UMK Students Towards Natural  
Personal Care and Toiletries Products**

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**F15A0147**

**A thesis submitted in fulfilment of the requirements for the degree  
of Bachelor of Applied Science (Product Development  
Technology) with Honours**

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**Faculty of Agro Based Industry**

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**2018**

## DECLARATION

I hereby declare that the work embodied in this report is the result of the original research and has not submitted for a higher degree to any universities or institutions.

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I certify that the report of this final year project entitled “Purchasing Behaviour of UMK Students Towards Natural Personal Care and Toiletries Products” by Nur Hanisah Bt Zolkilee, matric number F15A0147 has been examined and all the correction recommended by examiners have been done for the degree of Bachelor of Applied Science (Product Development Technology) with Honours,

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## ABSTRACT

The growth of the natural personal care and toiletries products in Malaysia is still in infancy. The number of the conventional personal care and toiletries products is higher in the market compared to the natural personal care and toiletries products. Frequent usage of the conventional products is contributing to the environmental destruction and it causes adverse effect to human health. This research aimed to (i) study the demographic of respondents in purchasing the natural personal care and toiletries products in UMK and (ii) to determine the main factor that affecting the purchasing intention of the respondents towards the natural personal care and toiletries products. This study was conducted using a survey method. Research instrument, namely the questionnaire was used to collect the data. The target respondents for this study were 368 respondents from UMK students where they were selected by convenience sampling method. The reliability of the questionnaire was tested by using the Cronbach's Alpha before it was distributed to the respondents. Data gathered were analysed using the Statistical Package for Social Sciences (SPSS). The descriptive analysis was used to describe the demographic data. Multiple regression was applied to determine the main factors that affect the consumer purchasing behaviour towards the natural personal care and toiletries products. The most influential factor was health consciousness followed by appearance consciousness and environmental consciousness. This study is beneficial to the future entrepreneurs and manufacturers who intend to venture into the natural personal care and toiletries products industry. This is because the findings of this study enable them to understand and aware of the purchasing behaviour of consumer towards the natural personal care and toiletries products.

Keywords: Consumer Purchasing Behaviour, Descriptive Test, Multiple Regression, Natural Personal Care, Reliability Test, and Toiletries Products.

## ABSTRAK

Kadar pertumbuhan produk penjagaan diri dan kelengkapan mandian semulajadi di Malaysia masih di peringkat awal. Bilangan produk penjagaan diri dan kelengkapan mandian konvensional adalah lebih tinggi di pasaran berbanding dengan produk penjagaan diri dan kelengkapan mandian semula jadi. Penggunaan produk konvensional yang kerap akan menyumbang kepada kemusnahan alam sekitar dan akan mendatangkan kesan buruk kepada kesihatan manusia. Tujuan kajian ini adalah untuk (i) mengkaji demografik responden dalam membeli produk penjagaan diri dan kelengkapan mandian di kalangan pelajar UMK dan (ii) menentukan faktor utama yang mempengaruhi tingkah laku pembelian responden terhadap produk penjagaan diri dan kelengkapan mandian semula jadi. Kajian ini dijalankan dengan menggunakan kaedah tinjauan. Instrumen kajian, iaitu, soal selidik telah digunakan untuk mengumpul data. Responden sasaran untuk kajian ini ialah 368 responden dari pelajar Universiti Malaysia Kelantan, di mana mereka dipilih dengan menggunakan kaedah pensampelan mudah. Kebolehpercayaan soal selidik diuji dengan menggunakan Cronbach's Alpha sebelum diedarkan kepada responden. Data yang dikumpul dianalisis dengan menggunakan Pakej Statistik untuk Sains Sosial (SPSS). Ujian perihalan digunakan untuk menggambarkan data demografi. Faktor yang paling mempengaruhi adalah faktor kesihatan dan diikuti faktor kesedaran penampilan dan kesedaran alam sekitar. Kajian ini memberi manfaat kepada usahawan dan pengeluar masa depan yang berniat untuk menceburi industri produk penjagaan diri semula jadi dan peralatan mandian semula jadi. Ini kerana hasil kajian ini membolehkan mereka memahami dan menyedari kelakuan pembelian pengguna terhadap produk penjagaan peribadi dan kelengkapan semula jadi.

Kata kunci: Kelakuan Pembeli , Produk Penjagaan Diri, Kelengkapan Mandian Semula Jadi, Regresi Berganda, Ujian Perihalan, dan Ujian Kebolehpercayaan

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## CHAPTER 1 INTRODUCTION

### 1.1 Research Background

The personal care and toiletries products are including skin, hair and oral care products (Kumari, Devi, & Sujatha, 2014). Personal care products and toiletries have existed for a long time. These products are important in maintaining personal hygiene, improving attractiveness, skin and hair protection, and slowing down the ageing process. The usage of personal care and toiletries products always been essential part to the consumer lives (Matic & Puh, 2016). Besides, Kumari et al., (2014) discovered the personal care products and toiletries are increasing in popularity which can be attributed to the increasing importance given to maintaining beauty among women. However, current market showed that the personal care and toiletries products were not only focused on women. In Malaysia, a strong demand for personal care and toiletries products generated by men particularly those in urban areas.

They believe that the personal care and toiletries products will enhance their appearances (Swidi, Wie, Hassan, Hosam, & Kassim, 2010). In 2009, consumer's spending on personal care and toiletries products were increasing. It is growing at a rate of more than 40% which is valued about RM1.4 billion in 1995 to RM1.9 billion in 2007. Basic care products, such as hair care or bath products are the major products that the Malaysian buy.

As for the last few years, they started to buy a range of new grooming products and services. This is due to the growth of the disposable incomes for the last few years and increasing number of products became available in stores and shops (Swidi et al., 2010). In 2012, Malaysian External Trade and Development Corporation (MATRADE) reported that the total market for personal care valued at US\$98.2 million with imports of personal care and toiletries accounting for 72.3% of the domestic consumption. Essential oils and retinoids, perfumery, cosmetic and toilet preparations, make-up and skin care preparations, hair preparations and perfumes and toilet waters are among the high demand products.

MATRADE also reported that there is also a growing demand for natural and organic products as people become more aware of their surroundings and usage of chemicals in everyday products. Nowadays, there is increasing demand for health-related product which derived from the natural ingredients (Dimitrova, Kaneva, & Gallucci, 2009). Wide variety of products, such as herbal medicine, food supplements, additives for farm animals, personal care products, and cosmetics were created from processed natural ingredients (Nagasawa & Kizu, 2012). It was stated that natural personal care products bring awareness to the consumer in term of environmental concern, product safety, and human health (Ayob et al., 2016).

Ayob et al. (2016) also reported that most consumers realized that the chemical ingredients used in the cosmetics may harm them, but they had to stick with the conventional cosmetics products since the natural cosmetics products in Malaysia are expensive and hard to acquire especially in rural area. Besides price, there are many other factors that can affect the consumer purchasing behaviour of the natural personal care and toiletries products such as demographic, environmental consciousness, health consciousness and appearance. Due to the significant increase of green awareness

among people throughout the world, a tremendous implication on the cosmetics industry is created. In Malaysia, the market for green cosmetics and skin care is still in its infancy (Fairuz, Nor, & Hashim, 2015).

## **1.2 Problem Statement**

In present years, due to a serious environmental problem, an environment consciousness has been implemented by the consumers. Boxall et al. (2012) revealed that possible adverse effect of chemicals in personal care products from the manufacturing sites released to the environment or within usage released into sewage system has raised up a lot of concerns. The natural product is more environmentally friendly if compared with the non-natural product (Van Loo et al., 2013). There are a lot of studies that relating the environmental consciousness with the purchasing of other natural products. However, study on the natural personal care and toiletries products is uncommon in the literature to date.

Besides, the growth of health consciousness and consumers awareness towards the hazards of artificial chemical has caused the rapid growth of natural personal care and toiletries products to market. The safety of the product towards the body and skin is one of the important factors considered by the health-conscious consumer when purchasing the natural personal care and toiletries products. In addition, they are also very careful by the kinds of ingredient in the natural personal care products compared to the little health consciousness people (Johri & Sahasakmontri, 1998). The consumers' appearances are influenced by the personal care products and people use such products

to manage their appearances (Marcoux, 2000). People who try to improve their general appearance use natural, chemical free cosmetics and health products.

The importance of appearance consciousness as a forecaster in studying consumers' behaviour towards purchasing the natural personal care products were highlighted in a recent study by Kim & Chung (2011). The work of Kim & Chung (2011) revealed that there have been little researches conducted on the consumer purchasing intention towards the organic personal care products. Earlier study on the natural products were mostly focused on organiac food but not organic personal care products (Yadav & Pathak, 2016). The purpose of this research is to study the factors that affecting the UMK's student purchasing behaviour towards natural personal care and toiletries products.

### **1.3 Hypothesis**

Hypothesis one:

H<sub>0</sub>: Health consciousness has no relationship towards purchasing natural personal care and toiletries products among UMK students.

H<sub>1</sub>: Health consciousness has positive relationship towards purchasing natural personal care and toiletries products among UMK students.

Hypothesis two:

H<sub>0</sub>: Environmental consciousness has no relationship towards purchasing natural personal care and toiletries products among UMK students.

H<sub>1</sub>: Environmental consciousness has no relationship towards purchasing natural personal care and toiletries products among UMK students.

Hypothesis three:

H<sub>0</sub>: Appearance consciousness has no relationship towards purchasing natural personal care and toiletries products among UMK students.

H<sub>1</sub>: Appearance consciousness has positive relationship towards purchasing natural personal care and toiletries products among UMK students.

#### **1.4 Objectives**

1. To study the demographic of UMK students in purchasing the natural personal care and toiletries product.
2. To determine the factors that affecting the purchasing intention of UMK students towards the natural personal care and toiletries products.

### **1.5 Scope of Study**

The focus of this research is to study UMK's students who consumed and purchased personal care and toiletries products such as bath and body, skincare, hair products, etc in their daily lives. The products can be either made in local or imported from overseas which are sold in the market currently and they should be readily available for purchase. Besides, this study also focused on purchasing behaviour of the consumers in terms of health, environmental, and appearance consciousness towards the natural personal care and toiletries products. This study was conducted in three University Malaysia Kelantan (UMK) i.e, Pengkalan chepa, Bachok and Jeli campus. Students whose age range between 18 to 40 years old were selected as the target sample. The factors that affecting the purchasing intention towards the natural personal care and toiletries products were determined through a survey method. The data collected were analysed using some relevant statistical tests.

### **1.6 Significance of Study**

The main contribution of this study is to spread the knowledge regarding the natural personal care and toiletries products towards the consumer. In Malaysia, the awareness regarding the natural personal care and toiletries product is still in its early stages. The knowledge regarding the natural personal care and toiletries products among Malaysian is still low due to none of proper education and detailed information relating to the natural personal care and toiletries products. By conducting this study, it can help

increasing the awareness of the natural personal care and toiletries products and giving the information regarding these products to the consumers.

This study will also contribute to the growth of organic farming in Malaysia. The natural personal care and toiletries products consists of wide range of product. If the demands of final products are increasing, the growth of the organic farming will also be increasing. Besides, this study will help marketers and manufacturer to figure out the strategies that can be implemented to attract the consumers to buy the natural personal care and toiletries products over the conventional products.

The findings of this research can help the industry to know its consumer behaviour and thus helping the organization to use the correct methods to dominate their consumers to buy their natural personal care and toiletries products. It is crucial for the industries to offer an honest and clear information regarding the advantages of their natural products to guarantee the genuineness of natural product claims regarding health and safety while satisfying consumer's demands and needs.

### **1.7 Limitations**

This project is only given a year duration to complete the study. The size of sample dictates the amount of information and thus determines the precision that researchers have in their sample. In other words, the larger the sample size the more information researchers have and hence the uncertainty decreases. Due to time constraint this study will only focus on consumers who are a student from UMK. The cost for this study is also self-funded.

## CHAPTER 2

### LITERATURE REVIEW

#### 2.1 Natural Personal Care and Toiletries products

##### 2.1.1 History on the usage of natural plants in personal care and toiletries products.

Natural materials had been proved to be important as an ingredient for personal care and toiletries since the pre-historic time. During ancient time, usage of the natural plants was proved through the ancient Egypt people. The ancient Egyptians were a group of people that took great pride in their appearance and cleanliness (Jain & Chaudhri, 2009)

It was discovered ancient Egyptians had used oils and creams for their protection against the hot dry desert sun and winds. The basic ingredients of the oils and cream were consisting of myrrh, thyme (*Thymus L.*), marjoram (*Mentha L.*), chamomile (*Matricaria L.*) etc., (González-Minero & Bravo-Díaz, 2018). The plant species used are the basic ingredients of most perfumes.

Manniche (2009) also has described in his study that the composition of a body oil from the Egyptian period were based on sesame, castor oil, thron tree [*Balanites aegyptiaca (L.) Delile*], horseradish tree/moringa (*Moringa oleifera Lam.*), and olive oil.

Then, the Egyptian custom were transferred to Greece and Rome. Differ from the Egyptian, the Greece and Rome believed the body as a symbol of youth. At night, they applied the ointments composed of cypress, cedar, and incense resins. They also treated their face with lead acetate (white lead) and cinnabar (Hg) (Witkowski & Parish, 2001). In Rome, figs (*Ficus carica* L.) became very popular after the conquest of Carthage. They were mixed with banana (*Musa* L.), oats (*Avena* L.), and rose water to obtain a facial cream. Olive oil was used to clean the body, in general, and to combat wrinkles (Oumeish, 2001).

Based on traditional uses and ethnobotanical knowledge, humans have used natural resources empirically for skin care and modifying their physical appearance. However, in recent years, interest in health and skin care has become much more widespread, and there is now great demand for certain effective plant extracts. The dangerous chemicals such as mercury, lead, and arsenic were used for bleaching and firming up the skin, until they were banned due to their toxicity (Witkowski & Parish, 2001).

### **2.1.2 Current market for Natural Personal Care and Toiletries Products**

Nowadays, the products of natural origin are one the best-selling personal care and toiletries products in Malaysia. The increasing popularity of the natural origin products in our country, results in the entry of new brands such as Mary Kay and Stila in domestic market (Swidi et al., 2010). This brand caters to the changing tastes and lifestyles of Malaysian consumers. Hwang (2004) stated that many developed

countries use herbs and plant extracts in their natural cosmetics and toiletries manufacturing. He also mentioned that the products are popular in many developed countries.

Environmentally friendly and aromatherapy products are one of the best-selling cosmetics products in Malaysia. Besides, some multinational firms in Asia had developed cosmetics products from natural origin paired with anti-aging functions due to the consumer's rising demands for those products. Costa (2015) reported that the number of products in skincare sector with natural ingredients as main substances has increased from 900 in 2005 to approximately 6000 in 2012. A study conducted by Nasir & Setapar (2018) had stated that at present, more than 30% of the global share in 2015 was leading by U.S. organic cosmetic ingredient market, based on report by Global Market Insights Inc. (2016).

The trend for eco-conscious beauty was derived from consumer's desire. Gopal (2007) expressed that the natural cosmetics are facing exponential growth due to drastic increment of environmental consciousness among consumers. However, Chandrasekar, Sivagami, & Swapna (2016) stated that natural cosmetic is in trend due to several reasons which they are natural and free from harmful chemical which minimizes the chance of adverse health problems, safe to use, compatible with all skin types, no side effect and nutrients provided by natural sources. Technological advancement is another driver for market growth where the manufacturers are competitively researching on active constituents to meet customer expectation.

### **2.1.3 Natural Personal Care and Toiletries Products Label**

The natural personal care and toiletries from plant based or organic ingredients often labelled as ‘chemical-free’ by the manufacturer. United States Department of Agriculture had permitted the term ‘natural’ to be label to the products if the products contain no artificial flavour, colour, chemical preservative or any artificial or synthetic ingredient (Peng et al., 2014).

The manufacturer also labelled the natural products as chemical free to clear that it is lack or no potential harmful ingredients such as paraben and silicone in their products (Belova & Eilks, 2015). Since nowadays, there are no international definitions of natural personal care and toiletries products have been specified. Matthews (2007) had stated in his study, that the Natural Products Association (NPA) recognizes products as natural if it contains 95% or more of ingredients from natural source.

### **2.1.4 Categories of Personal Care Products**

The personal care products are a wide range of items that can commonly found in the health and beauty sections of drug and department stores. Personal care is however not a defined legal term. According to FDA (2018), the personal care products were categorised as cosmetics, drugs, both cosmetics and drugs. The personal care products also can include other items like medical devices, dietary supplements, and other consumer products.

The products in the drugs category is a product that was used for prevention or treating a disease. Besides, the product in this category also provide changes to the function and structure of the body. Treatment for hair loss or acne and sunscreen are the examples of product under the drug category. Next, as for the cosmetics and drugs category the products contain both functions of the cosmetics and drugs category. Products such as anti-hair falls, shampoos and moisturizers with SPF are included in this category (Yin & Loh, 2016)

### **2.1.5 Importance of University Students in Natural Personal Care and Toiletries market**

Among the Malaysian consumers segments, university students are representing one of the important segments. University students are an important market due to the size and characteristics of this market (Wong & Smith, 2002). This highly educated people are likely to be aware of eco-friendly products and have more knowledge on environment-related issues (Molina, Sáinz, & Olaizola, 2013).

Without consulting their parents, they usually make their buying decisions (Brougham, Lawson, Hershey, & Trujillo, 2011). Little researches had been carried out to study this group of consumers to date. To target this group of consumers, marketers need to develop some useful strategies. Studying and understanding the consumer's shopping behaviour is one of important to the marketers in developing these strategies.

Thus, a sustainable marketing strategy focusing on this important consumer groups can be developed, through a detailed-on understanding on their purchasing behaviour and factor most affecting them, therefore this study intended to study whether psychological factors, i.e., environmental consciousness, health consciousness and appearance consciousness have influenced the purchasing behaviour of UMK students towards natural personal care and toiletries products.

## **2.2 Theory of Planned Behaviour (TPB)**

Theory of Planned Behaviour (TPB) was first introduced by Fishbein and Ajzen in year 1980. Ajzen & Fishbein (1980) stated that this theory is an addition to the Theory of Reasoned Action (TRA). The addition was included because of the limitation of the original model in tolerating with people's behaviours.

The main factors of TPB, such as attitude, subjective norm, intention, and perceived behavioural control is meant to predict the behaviour of human being. Like the TRA, the central factor in TPB is the individual's intention to conduct a certain behaviour (Fishbein & Ajzen, 1975). Before behaviours can be performed, an individual must have intention for those behaviours. Since it directly affects the performance of behaviour, the intention factor has strong relationship with the behaviour. It means that the higher likelihood of the behaviour would be performed when there is a greater intention (Ajzen, 1991).

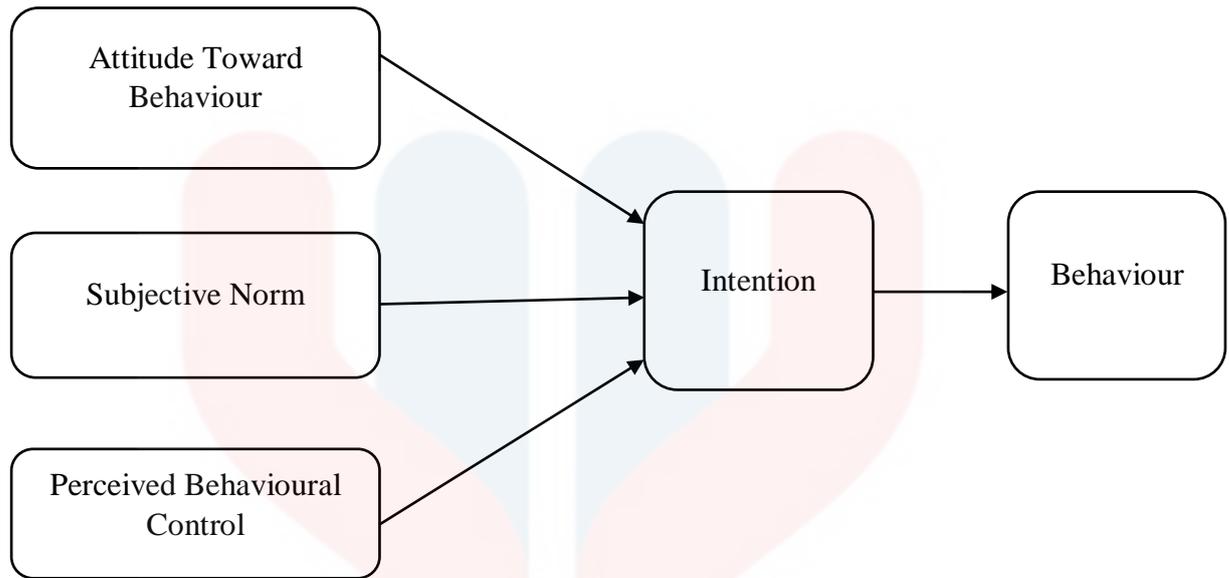


Figure 2.1: Theory of Planned Behaviour (TPB) given by Ajzen (1991).

However, the behaviour must be under a person's volitional control, or will to decide whether to perform or not. Some behaviours may meet this requirement well, at least to some aspects like the availability of necessary opportunities and resources are the examples of the nonmotivational factors that the performance of most behaviours depends to (e.g., time, money, skills). Mutually, when people required the opportunities and resources, their actual control over the behaviour and the degree of people intends to conduct the actual behaviour were represented by these factors (Ajzen, 1991).

### 2.2.1 Perceived Behavioural Control (PBC)

Perceived behavioural control (PBC) refers to the degree of control that an individual perceives over performing the behaviour (chen,2007). PBC is an important part of TPB. People's insight on difficulty or ease of conducting the desired behaviour are referring to the PBC (Kalafatis, Pollard, East, & Tsogas, 1999). As an element that has a direct and indirect effects towards behaviour by intentions, PBC is included in TPB. The indirect effect of PBC is referring to motivational indication for behavioural intentions that PBC has (Kalafatis et al., 1999).

Next, measure of actual control as the PBC replacement can always be used. For an example, a person that think he is lacking compulsory opportunities or resources to conduct a behaviour are improbably to make a strong behavioural intent even though the subjective norm and attitude may be suitable (Kalafatis et al., 1999). Bandura (1980) reported that the people's action strongly affected by the individual capability to perform the specific behaviour.

Thus, due to the other major independent variables, the PBC is assumed to give benefits to the estimation of intention over and above the effects of the model and at the same time the influence on behaviour was intermediated through intention (Kalafatis et al., 1999).

### 2.2.2 Subjective norms

Subjective norms relate to the perceived social influences or pressures to fulfil or not to fulfil a given behaviour. Subjective norms reveal the beliefs of individuals about how they would be viewed by their reference groups if they perform a certain behaviour. Past studies have indicated that attitude is significantly related with subjective norms. Chang (1998) and Tarkiainen and Sundqvist (2005) have found in their studies that there exists a significant causal path between subjective norms and attitude leading toward behavior (buying intention).

### 2.2.3 Intention

The individuals' intention to engage in a certain behaviour is the focal point of TPB. TPB is regarded as quite useful in envisaging a large variety of behaviour (Sheppard et al., 1988). Intention is a subjective representation of an individual willingness in conducting a given behaviour, and is the first precedent of behaviour (Ajzen, & Fishbein, 1980). The intention also refers to the attitude towards the subjective norm, PCB for its importance in relation to the behaviour with each predictor weighted and population of interest and subjective norm (Ajzen & Fishbein, 1980).

They also stated that the behavioural intention has long been recognized as an important mediator in the relationship between behaviour and other factors such as attitude, subjective, and perceived behavioural control. Several past studies have applied

TPB to study the behavioural intentions of consumers related with organic products (Kalafatis et al., 1999; Saba & Messina, 2003; Tarkiainen & Sundqvist, 2005).

#### **2.2.4 Attitude Towards a Behaviour**

Attitude is shaped by cognition (thought), values (beliefs) and affection (emotions) toward an object (Hoyer and MacInnis, 2004; Dossey and Keegan, 2008). The point that the performance of the behaviour is valued as a positive or negative value is the attitude towards a behaviour and it is decided by the summation of the set of available behavioural beliefs relating the behaviour to many outcomes and other qualities (Ajzen & Fishbein, 1980). Besides, Raygor et al. (2016) reported that the attitude towards behaviour, comprises of those new experiences and beliefs whether it strengthens or weakens beliefs and it is rational to state that studying attitudes towards behaviour have explanation to find out intentions to act in a manner.

#### **2.2.5 Normative Belief**

Normative beliefs refer to beliefs of an individual that are accepted by specific people or groups and dictate whether behaving in a fashion is appropriate. The summation of set of available normative beliefs regarding the expectations of significant referents is expected to determine the subjective norm (Ajzen & Fishbein, 1980). It is more accurate to focus on social pressure when it comes to customers responsibility towards something for the first time or something that is not their specialty. It is

preferable that when it is the case of leisure services there are different effects on reference groups than if the individual is forced to use new services like in the workplace (Yadav & Pathak, 2016).

### **2.2.6 Behavioural Belief**

The association to expected outcomes of the actual behaviour of interest is the behavioural belief (Ajzen, & Fishbein, 1980). A given outcome will be produced by behaviour which it is a subjective probability. The individual might contain many behavioural beliefs, though only a quite small number are available readily. The accessible of belief decides the main attitude towards behaviour (Raygor, Peters, Professor, Wells, & Krejci, 2016).

### **2.2.7 Control Belief**

The specific belief that was provided in PBC is called as the control belief (Kalafatis et al., 1999). Ajzen (1991) stated that, the control belief is a set that compromises with the absence or presence of necessary resources and opportunities. Besides, control beliefs recognize and associate's factors that may ease or facilitate the actual behaviour.

The usual perceived behavioural determined by the control belief and the outstanding behaviour performance relied on agreeable purpose and acceptable behavioural control level to the point that PBC is exact, it may deliver as an

intermediary of actual control and can be used for the prediction of the actual behaviour (Ajzen, 1991). The anticipated impediments, obstacles, resources, and opportunities are the factors that reflect experience and the external factors which might affect the performance of the actual behaviour (Ajzen & Fishbein, 1980).

There are two factors that detect the possibility of run into factors that will ease or prevent the effective performance of the actual behaviour, judged by their recognized power to ease or prevent performance. The actual control may differ compared to the perceptions regarding ability. The feeling of control is very important especially when it comes to accommodate with new things (Ajzen, 1991).

### **2.3 Consumer Purchasing Behaviour**

Consumer purchasing behaviour is a study on how the products, services, ideas or experience are selected, purchased, used and disposed by the individuals, groups, and organizations to meet the consumer's demand. Purchasing behaviour can also be defined as a decision process and the way a person acts during purchasing and using the products which also includes both social and mental processes (Philip Kotler & Armstrong, 2010).

The aim of the study of consumer purchasing behaviour is to answer what, how, why, where, and when a person makes purchase towards a product (Khaniwale, 2015). Besides, it was declared by Engel, Blackwell, & Miniard (1993) that the consumption of products and services which are caused by decision making process before and after is directly related to the consumer behaviour. In term of narrow explanation, Engel et al.

(1993) expressed that the consumer buying behaviour is an exchange of goods or services in money.

A study by Ajzen & Madden (1986) found that there is a relation between trying to do a given behaviour and the actual results of the behaviour. The purchase, consumption goods and services that satisfy their intentions and the ultimate consumer buying behaviour are also referring to the consumer buying behaviour (Ramya & Ali, 2016). Consumer behaviour involved many different aspects. According to Ramachander (1988), consumer buying behaviour is a confluence of at least three streams of social science, i.e., individual psychology, social psychology and cultural Anthropology.

### **2.3.1 Factors Affecting Consumer Purchasing Behaviour**

Cultural, social, personal and psychological element are the most influential factors that affect the consumer purchasing behaviour (Kotler, 2003). These factors can be categorised into two groups which are external and internal factors. The internal consists of personal and psychological factors while the external factors are the cultural and social factors (Khaniwale, 2015).

### 2.3.1.1 External Factors

The first external factor is the cultural factor. According to Armstrong, Niinimäki, Kujala, Karell, & Lang (2015) if norms, financial and moral values, convictions, attitudes and habits developed and combined in time it is representing a culture. In a culture, the members of the society shared, and their behaviours were highly determined including their purchasing and consumption behaviours. They also stated that the individual's purchasing behaviour either can be viewed and copied or rejected by others.

Culture is the main reason of a person wants and behaviour which is part of every society. Due to influence of culture, each country has difference purchasing behaviours. A family, friends, cultural environment or society can influence an individual and they teach a value, preferences as well as common behaviours to individual own culture (Stavkova, Stejskal, & Toufarova, 2008).

Social is the second external factors. Consumer behaviour is affected significantly through the social factors. The buying behaviour of an individual can be influenced by someone around them. Family, reference group, status and role are the important social factors (Perreau, 2014). As an individual, every consumer is belonging to a group called membership group. Membership group is the group to one belongs, and reference group is a group used for evaluating selves of the group's achievements, attitudes or behaviour by comparing it with the others (Khaniwale, 2015).

Reference group influences the consumers and consumer's self-image behaviour. Besides, some points of comparison to consumers about their behaviour, lifestyle or habits are provided through reference groups. There are many families,

neighbours, close friends, workgroups or other people that associated with consumers forms the smaller reference group. However, the consumer can also be influenced by groups to which a consumer does not belong (Philip Kotler & Armstrong, 2010).

The individual or the family's purchases are greatly influenced by the preferences or opinion from the family members. Carrington, Neville, & Whitwell (2010) reported as for consumption, the habits are likely to be influenced by the family with a less significant role in relation to its traditional and modern functions due to the involvement of other social groups and institutions. The environment for an individual to acquire values, develop and shape personality is by the family itself. The possibility to develop attitudes and opinions towards several subjects such as social relations, society, and politics were offered by the environment. Thus, the first perception about brands or product and consumer habits are also created by the family (Philip Kotler & Armstrong, 2010).

#### **2.3.1.2 Internal Factors**

The first internal factor is the personal factors. Personal factors influenced buyer's purchasing behaviour and it is varied for everyone. Besides, the decision of a purchaser or consumer also affected by their own features specifically by age and the stage of the life cycle that the consumer crosses, sex, occupation, financial status, lifestyle, personality and opinion of sown elf (Radelescu, Cetiana, & Orzan, 2012).

Age and stage of life causes an alteration change on consumer's life and buying of products. Taste in food, clothing, recreation and furniture are the examples of age-related factors. The environment, values, lifestyle, hobbies and habits of the consumers

are evolving over time (Kotler & Armstrong, 2010). Clearly, the individual needs depend on his age. As a person's age changes, his wants and preferences change. Each stage of human life has a different needs and desires (Khaniwale, 2015).

How people live and relations with others is known as a lifestyle. Lifestyle can be described as a way of living person pattern of living as showed through activities, interests, and opinions. Compared to the personality traits, the lifestyle traits are more specific and are associating more directly through the purchasing, using, and dispositioning of goods and services (Richardson, 2012). Furthermore, the consumer life style also tells how the person lives and spends money. It is a combination of earlier experiences, current situation and congenital characteristics. The product choices that consumers made usually have relation to their lifestyle (Lautiainen, 2015).

However, how we see ourselves and the world around us as well as how other people see us are determined through the personality. Personality also can be built through the attitudes, values and people around us. However, when a person grows up and changes of surroundings the personality of an individual often prone to change (Wright, 2006). Khaniwale (2015) stated that the personality also related to the individual's characteristics which will determine the way an individual behave in situations and how he or she interacts with others not just about the appearance of the person. His or her purchasing behaviour influenced by individual personality. It is hard to identify relationship between personality of an individual and exhibited behaviour pattern.

Psychological factors are the second internal factor. The main physiological factors that affect the consumer purchasing behaviour are individual perception, motivation, learning, beliefs and attitudes (Khaniwale, 2015). The perception of a

situation is determined through a person act. Each person receives thousands of sensory stimuli like light, colour, sound, smell, taste and texture every day. The perception or meaningful picture of the world is formed through a process which the sensations are selected, organized and interpret (Kotler & Armstrong, 2010).

Even though the two people were exposed to similar marketing communication, each person may have different perception on the same product. Own experiences, beliefs and attitudes caused every individual to have different perceptions (Carrington et al., 2010). Selective distortion leads people to situations that are compatible with their beliefs and values. Next, motivation triggers people to be ready to act. Motive orientated human or consumer activities lead directly to the needs or achievement of the targeted aim. When people are motivated, they are ready to act (Armstrong et al., 2015).

The third psychological factor is learning. Learning requires action and it can illustrate change in a person behaviour that come from experience. Without having their own personal experience, people can also learn by observing others. Learning can also happen unconsciously (Kotler & Armstrong, 2010). Learning is taking place used while making any buying decisions. While making any decisions, the information is collected from several sources and utilized (Khaniwale, 2015).

Last psychological factor are belief and attitude. Belief and attitudes are acquired through learning and experiencing. The feelings and thoughts that one chooses to trust is called belief, while the individual positive and negative assessments regarding something is known as attitudes (Khaniwale, 2015). Both beliefs and attitudes are hard to change. Those are anchored deep in consumers mind and can be part of a person personality (Kotler & Armstrong, 2010).

## 2.4 The Effect of Health Consciousness on Purchasing Intentions

The advancement of health and medical sciences had caused the world becomes increasingly conscious on health and the health is considered as the basis of quality living, productive life (Hayakawa, 2017). Health consciousness is defined as consumers' interest in changing their behaviours to prevent from diseases and improve their health status.

According to Jayanti & Burns (1998), health consciousness is an evaluation in terms of personal health management characteristics for a degree where health concerns are integrating into a person's daily activities. The health consciousness shows consumer intrinsic motivation towards maintaining good health and reflecting their own responsibility (Dutta-Bergman, 2004).

Furthermore, Jayanti & Burns (1998) expressed people who are more health conscious tend to observe more preventive actions such as consume healthy food and do regular exercises. Individual who place much emphasis on health tends to change their behaviour to prevent from health hazards. Hong (2009) identified that health conscious people have the information searching behaviour. He also confirmed that health conscious individuals are talking more about health and reading more health-related articles, magazines and ingredient labels compared to low health conscious individuals.

During the past, the expensive natural ingredients was substituted with chemicals. Hence, the cosmetics are easily accessible and widely used. However, consumers perception and interest nowadays are significantly moving towards natural products (Matic & Puh, 2016). To have a healthy life, the health-conscious consumer is

worried about their desired health condition (Newsom, Rook, Nishishiba, Sorkin, & Mahan, 2005). So, this consumer is tending to purchase the natural products.

High health conscious consumers will grab the opportunity to involved in events that promotes a healthy life (Kim & Chung, 2011). In terms of cosmetics buying, the health-conscious consumers will ensure whether the products are harmless to body and skin. Therefore, the high health consciousness consumers are more aware towards product ingredients rather than low health consciousness consumers (Johri & Sahasakmontri, 1998). Sturrock & Pioch (1998) revealed that the factors that driving the consumption of the grooming's product towards men are the care for health and aged process. Most consumers have a perception that the natural products are better than other conventional products, due to the absence of chemical residues and pesticides which are good for their health.

Besides, it was found that exposure towards pesticides and antibiotic bacteria that cause health risks can be reduced through the consumption of organic product (Smith-Spangler et al., 2012). It was also found by Magnusson, Arvola, Hursti, Berg, and Sjöden (2002) that the most important issues that influencing consumer's attitude towards the organic food is the concern for their own family and personal health. Hence, the tendency that the health consciousness will have a close relationship towards purchasing the natural personal care product is highly likely.

## 2.5 The Effect of Environmental Consciousness on Purchasing Intentions

The point where people are conscious of difficulties relating to the nature and help or show the will to personally contribute to the answer is indicated as the environmental concern (Dunlap & Jones, 2002). Gil, Gracia, and Sanchez (2000) defined environmental concern as the attitudes and perceptions of customers which drive them towards the preservation of environment.

In the past few years, the attitudes of many consumers towards green goods have changed dramatically due to the negative environmental impacts of business activities (Paladino, 2005; Sharma & Bansal, 2013). Besides, Thieme, Royne, Jha, Levy, and McEntee (2015) found that environmental concern has impact on the formation of eco-friendly intentions and behaviours. Nowadays, consumers are more environmental concerned. they tend to make their purchasing decisions based on perceived negative or positive impact on the environment through their behaviours (Punyatonya, 2010).

Public is now ready to make their purchasing decisions to save the environment and this has caused most of the businesses pay much concern about environmental influence. To wit, many business activities focus on reducing the negative influences on environment as much as possible (Pedersen, 2000). More products which make less negative environmental impact are on high demand. According Boxall et al. (2012), chemical in personal care products provide a negative effect to the nature. The nature was affected either through the following use of the personal care products or due to the released of chemicals from the manufacturing sites. The use of personal care products causes the emission of chemical to the sewerage system into the environment and released of the chemicals from manufacturing sites have raised a potential concern.

Consumers concern on environment started to grow mainly due to the increasing negative consequences of environmental destruction along with the development process (Thieme et al., 2015). Pollutions of air, water, and soil resources result in numerous health hazards and caused death to numerous species and plants.

Van Loo et al. (2013) stated that in comparison with the conventional product, the natural products are more environmentally friendlier. The development of natural personal care products is the step taken by the personal care industry to reduce the environmental issues such as destruction of environmental surrounding due to harmful substances and the use of animal testing for ingredients and/or finished products (Prothero & McDonagh, 1992).

Paladino (2005), confirmed through his study that the environmental consciousness is the most important factors effecting consumer behaviour in purchasing organic products. It is also mentioned in the study of Pagiaslis & Krontalis (2014) that the consumer purpose to buy eco-friendly product are direct and left a positive impact on consumer's intention. A person awareness towards the environment is crucial in environmental research and it is related to the environmentally friendly behaviour (Hines, Hungerford, & Tomera, 1987).

## 2.6 The Effect of Appearance Consciousness on Purchasing Intentions

Scandell's (2001), study reported that the appearance consciousness is public self-consciousness which referring to one's concern with how others might think about specific physical appearance of an individual. Appearance conscious consumers attracted to somethings that showed a changed towards their image (Park & Kim, 2010).

Nowadays, modern consumers give high attention towards their physical appearance. It had been proven by Reingen & Kernan (1993) that the perception of body and physical appearance is one of the factors that influence an individual in their role as consumer. The body is seen as a visual self which leads to the growth of appearance concern and caused increasingly usage of beauty products (Gimlin, 2006).

Besides, Scholarworks & Todd (2004) stated that one of the purchasing behaviours that pleases an individual need for care and beauty of an individual appearance is through consumption of personal care products. Unlike food products, the skin or hair care has effects towards consumer's appearance and the products are used by the consumers to manage their appearances (Marcoux, 2000).

Social and self-image enhancement can be offered by using the personal care items (Miranda, 2009). Thus, the value of appearance consciousness is believed to influenced consumers' attitude on green personal care products. Consumers are more confident on the quality and performance of the product due to the use of natural, organic and environmental-friendly ingredients. Green cosmetic products are more likely to be chosen by appearance conscious individual as they believe these products can offer better skin and facial treatment. The use of natural products fulfilled the individuals desires for looking good. In fulfilling one's requirements in beauty and care

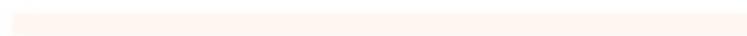
of their general appearance, the usage of personal care products is necessary to acquire an expectation (Shah & Amjad, 2015). Natural products are interesting to the consumers because these products are helpful in maintaining the desires of smart and youthful look.



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## **CHAPTER 3**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This study determined the factors that affect the purchasing behaviour of UMK's students towards natural personal care and toiletries products. The independent variables in this study were the environmental consciousness, health consciousness, and appearance consciousness.

In this study, research methodology was separated into theoretical framework, research hypothesis, design of research, methods of data collection, design of sampling, research and the measurement and scaling. The Social Package for the Social Sciences (SPSS) software was used in this study for analysing the collected data.

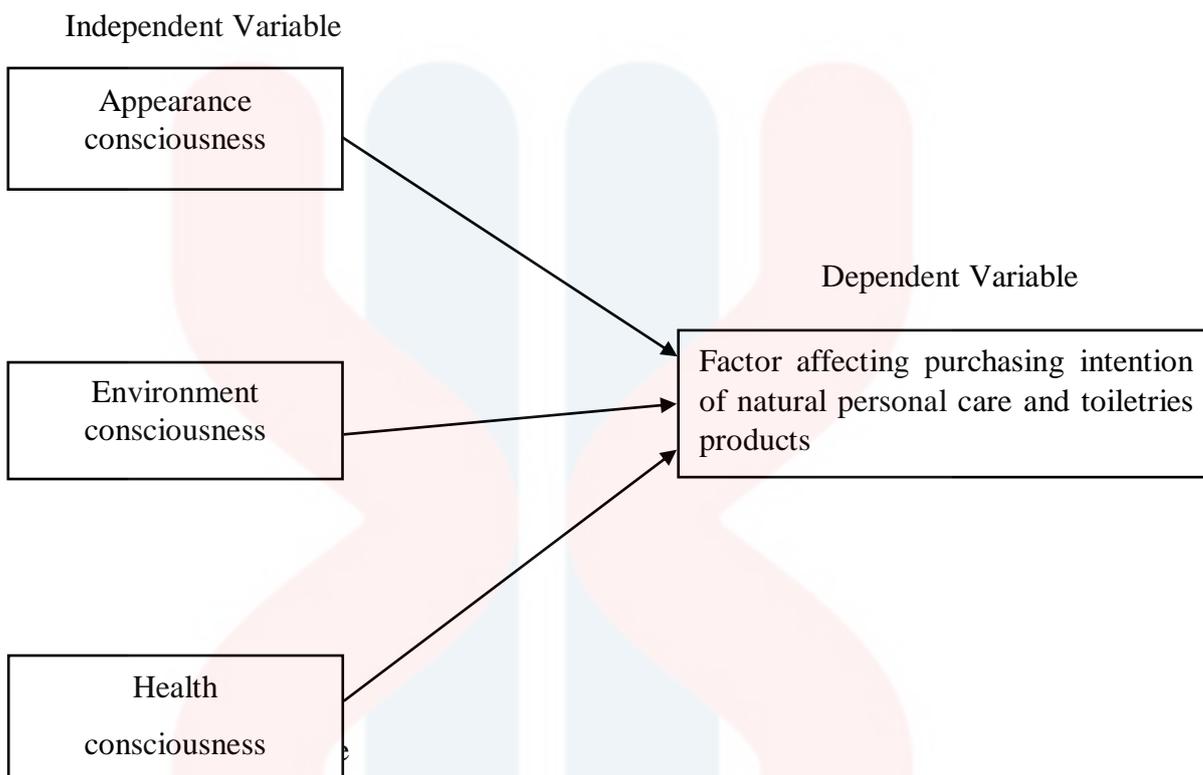
#### **3.2 Research Design**

Quantitative analysis is detailed towards survey and experimentation, as it builds upon existing theories (Leedy & Ormrod, 2001). According to Hopkins (2000) quantitative research design is used to study the association between independent variables and dependent variables in a population. Besides, quantitative research involved

a large number of respondents and the use of structural questions in which the respondents' options have been predetermined (Burns & Bush, 2002). Descriptive, and experimental studies are two types of the quantitative research design (Hopkins, 2000). This research used the descriptive study to determine the associations between variables. The descriptive research approach is a basic research method that examines the situation, as it exists in its current state. Descriptive research involves identification of attributes of a phenomenon based on an observational basis, or the exploration of correlation between two or more phenomena (Williams, 2007).

Correlation, observational studies, and survey research are some examples of the method that can be applied in the survey research. Survey method was used in this study where questionnaires were distributed to respondents from three UMK campuses which were Jeli, Bachok, and Pengkalan Chepa. The gathered data was analysed using the SPSS.

### 3.3 Theoretical Framework



3.1: Theoretical framework of this study

The independent variables of the study are the subjective norm, attitude, and the perceived behavioural control. Ajzen (1985) stated that the attitude toward behaviour refers to personal evaluations whether being favourable or unfavourable to perform the behaviour. In this study, the appearance consciousness can refer to the personal evaluations whether being favourable or unfavourable to perform the behaviour. The subjective norm refers to the belief about what others think that he or she will perform (Ajzen, 1991). In this study, the environmental consciousness was the subjective norm. The perceived behavioural control acted as individual's perception of the extent which behaviour's performance is easy or vice versa (Ajzen, 1991). The health consciousness was used as the perceived behavioural control of this study.

### 3.4 Target Population

The target populations for this study were:

- Men and women
- Ages between 18 to 40 years old
- University of Malaysia Kelantan students
- All races

### 3.5 Sampling Method

Standard sampling methods comprises of two types as for example, the probability and non-probability sampling. The probability and non-probability are two categories of standard sampling methods. Probability sampling consists of four types which are simple random sampling, systematic random sampling, stratified random sampling, and cluster sampling.

This study used non-probability sampling to sample the data. The non-probability sampling technique uses non-randomized methods to draw the sample. Non-probability sampling method mostly involves judgment. Instead of randomization, participants are selected because they are easy to access. The non-probability sample is used to study existing theoretical insights or developing new ones. This method of sampling is considered less expensive, less complicated and easy to apply as compared to its counterpart.

Method that was selected for this study is the convenience sampling method. The convenience sampling method comprises going to a place of business such as mall, and restaurant, and surveying those people who are available are included in this method. It is suitable for researchers who wants to gather a sample with little cost. Besides, the convenience methods are widely used during exploratory phase of research study and is known as the best solution in getting information in a faster rate.

### **3.6 Sampling Size**

In any research study, the determination of sample size is an important step. Insufficient sample size causes results become less accurate and reliable. A small sample size prevents the researcher from making a reasonable conclusion, and the target population cannot be generalized.

Rules of thumb was proposed by Roscoe (1975) to determine the specific size of sample by just referring to the sampling size table. When using Roscoe's (1975) sampling size table, no calculation is needed to determine the sample size but and the only information needed is just the population size.

Rules of thumb given by Roscoe (1975) for determining the required sample size:

- i) Larger than 30 and less than 500 are appropriate sample sizes for most researches.
- ii) In multivariate research (including multiple regression analyses), the sample size should be several times (preferably 10 times or more) as large as the number of variables in the study.

iii) For simple experimental research with tight experimental controls, it is possible to use sample as small as 10 to 20 in sizes.

Besides sampling size, Roscoe's (1975) table helps researchers in easily finding out the sample size with 95% certainty was developed by Krejcie, & Morgan (1970). According to Krejcie, & Morgan (1970) table, 384 is enough for more than 10000000 population size. This study used the Krejcie & Morgan (1970) table to determine the sample size that can be generalized to the population. Table 3.1 shows the sample size value with respective population size given by Krejcie & Morgan (1970).

Table 3.1: Sample size value with respective population size given by Krejcie & Morgan

N	n	N	n	N	n
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	1000000	384

N= Population size  
n= Sample size

### **3.7 Data Collection Method**

One of the critical steps to the success of a study is the identification and collection of data. The ambiguities, biases and other types of error that may affect the data must be avoided. Primary, and secondary data were used in this study.

Primary data is a first-hand information gained. Panels of respondents and individuals that was specifically set up by the researcher are some examples of the primary data. Self-administered questionnaires were distributed to the targeted students who uses the natural personal care and toiletries products in UMK. Sekaran and Sekaran and Bougie (2009) reported that this method is affordable, can validate obtained information at early stage and gives information easily.

It was explained by Sekaran (2006) that the objective of using the secondary data is to collect descriptive information that will help researchers in making decisions. The examples of sources of secondary data are magazine, articles, and earlier researches reports. Note that, the literature review is considered as the secondary data. The use of online database such as the ScienceDirect, and ProQuest, etc., to search for relevant information is also considered as the secondary data.

### **3.8 Research Instrument Development**

Self-administered questionnaire was used in this study as the instruments for primary data collection. The questionnaire was selected since it is cheap, easy to manage, and responses can be collected within a short period. A set of questionnaires

consists of four parts were developed to collect the necessary data. Firstly, questions in section A used to collect data involving demographic factors that includes gender, races, educational level, campus, and place of origin. Next, section B comprised questions about the independent variable namely the subjective norm, behavioural attitude, and perceived behavioural control. Section C included questions on dependent variables in the framework which was the purchasing behaviour of the respondents towards natural personal care and toiletries products.

### **3.9 Measurement and Scaling**

Four levels of measurement in the social science research are nominal scale, ordinal scale, interval scale, and ratio scale (Garger, 2010). The types of measurement used in this study were the nominal and the ordinal. Nominal scale does not capture information other than whether the subject belongs or does not belong to a category. According to some common traits, it simply places individuals, perception, and etc into categories. In this study, the nominal scale was used in section A to identify the respondents' gender, race, educational level, campus, and places of origin.

Next, Garger (2010) reported that the ordinal scale ranks all the data from the lowest to the highest. The ordinal scale used in the survey was the Likert scale of five. The scale one represented "strongly disagree", scale two represents "disagree", scale three represent "uncertain", scale four agree, and number five "strongly agree".

### **3.10 Data Analysis**

SPSS was employed for analysing the data gathered in this study. The statistical tests used in this study were discussed comprehensively in sections 3.10.1 to 3.10.3.

#### **3.10.1 Descriptive Statistics**

Descriptive statistics is numbers that summarize the data. It limits generalization to a group of individuals observed (Thompson, 2009). The descriptive analysis in this study was used to determine whether there were differences between two or more samples where these differences were likely to be presented in the population of interest. In general, much simple action research involves descriptive analysis and it provides valuable information about the nature of the group of individuals (Best & Kahn, 1998).

#### **3.10.2 Reliability Test**

Reliability of an instrument is the ability of the instruments to measure the result without bias and error free. To study how the items in the instrument are correlated to each other, a reliability coefficient Cronbach's Alpha is used. Cronbach's Alpha of 0.6

is considered poor, 0.7 is acceptable and 0.8 is categorized as good. Table 3.2 displays the Cronbach’s Alpha test score proposed by Sekaran & Bougie (2010).

Table 3.2: The Cronbach’s Alpha test score proposed by Sekaran & Bougie (2010)

Cronbach’s Alpha	Internal consistency
$\alpha \geq 0.9$	Excellent
$0.9 > \alpha \geq 0.8$	Good
$0.8 > \alpha \geq 0.7$	Acceptable
$0.7 > \alpha \geq 0.6$	Questionable
$0.6 > \alpha \geq 0.5$	Poor
$0.5 > \alpha$	Unacceptable

### 3.10.3 Multiple Linear Regression Test

Multiple linear regression is a common form of linear regression analysis. As a predictive analysis, the multiple linear regression is used to explain the relationship between one continuous dependent variable and two or more independent variables. In this study, the multiple linear regression test was employed to determine the weightage of the environmental consciousness, appearance consciousness, health consciousness and the purchasing behaviour. The general formula for the multiple linear regression is given in Equation 3.1.

$$y_i = \beta_0 + \beta_1 x_{i1} + \beta_2 x_{i2} + \dots + \beta_p x_{ip} + \varepsilon_i \text{ for } i = 1, 2, \dots, n, \quad (3.1)$$

where,

$y$  is the predicted or expected value of the independent variable

$x_1 \dots x_p$  are  $p$  distinct independent or predictor variables.

$\beta_0, \beta_1 \dots \beta_p$  is the  $p$  regression coefficients

$\varepsilon_i$  is the standard error.

By means of multiple regression analysis, the strength or weight of the effect of each individual  $x$  to the  $y$  can be determined by looking at the standardized regression coefficients. Note that the standardized coefficients in any of the regression equation are measured using the same scale, with a mean 0 and standard deviation 1. They are thus comparable to one another, with the largest coefficient indicating which  $x$  has the most significant or impact on the  $y$ .

## **CHAPTER 4**

### **RESULTS AND DISCUSSION**

In this chapter, the results of this study were explained in a detailed manner. This research was a quantitative research where all data were collected primarily using self-administered questionnaire. The questionnaire contained close ended questionnaire in the first section followed by Likert scale in sections 2, 3, and 4. Reliability test, descriptive statistics and multiple regression results were deliberated comprehensively in this chapter.

#### **4.1 Response Rate**

The population in UMK are over 8000 people and 368 respondents were selected based on the Krejcie & Morgan's (1970) model to obtain more reliable data that can represents the whole population. The reliability of the questionnaire was tested by using pilot test before the real survey took place. A total of 30 respondents were selected for the pilot test. The respondents were sampled either from UMK Jeli, Bachok and Pengkalan Chepa campuses.

Table 4.1: Response rate of this study based on 368 respondents.

	<b>Number of Data</b>	<b>Percentage (%)</b>
<b>Valid</b>	368	100
<b>Excluded</b>	-	-
<b>Total</b>	368	100

Based on Table 4.1, all the 368 respondents managed to answer the survey questionnaire completely and all data collected were then recorded to SPSS for further analysis.

## 4.2 Demographic Profile of Respondents

Table 4.2: Demographic profile of 368 respondents considered in this study.

<b>Variable</b>	<b>Item</b>	<b>Frequency (n=368)</b>	<b>%</b>
<b>Gender</b>	Male	66	17.9
	Female	302	82.1
<b>Race</b>	Malay	333	90.5
	Indian	7	1.9
	Chinese	23	6.3
	Others	5	1.4
<b>Age</b>	20 and below	188	51.1
	21-25	176	47.8
	26-30	4	1.1
<b>Educational</b>	Bachelor's Degree	365	99.2
	Master's Degree	3	0.8
<b>Campus</b>	Jeli Campus	119	32.3
	Bachok Campus	131	35.6
	Pengkalan Chepa Campus	118	32.1
<b>Origin</b>	Rural	184	50.0
	Urban	180	48.9
	Others	4	1.1

The descriptive statistics of the respondents is illustrated in Table 4.2. Based on the respondent's demographic profile, majority of the sample consisted of female gender with 82.1% (302 respondents) of the sample. The percentage of the male respondents was 17.9% (66 respondents). This is considered normal as the female students are currently over-represented in most public universities

In terms of race, the sample was dominated by Malay where it comprises of 90.5% (333 respondents) followed by Chinese 6.3% (23 respondents), Indian 1.9% (7 respondents) and others 1.4% (5 respondents). In regard to age, most of the respondents were in 20 and below age group which consisting half of the sample with 51.1% (188 respondents). Trailing behind the group at 47.8% (176 respondents), were respondents whose ages between 21- 25 and the age group of 26-30 showed the lowest rate with only 1.1% (3 respondents).

As for the educational variable, majority of the respondents were pursuing bachelor's degree education with 99.2% (365 respondents) and only 0.8% (3 respondents) were master's students. Among the three campuses, Bachok campus showed the highest respondent's percentage with 35.6% (131 respondents), followed by Jeli campus 32.3% (119 respondents) and lastly Pengkalan Chepa Campus 32.1% (118 respondents). As for origin variable, it showed that most of the respondents were from rural area with 50.0% (184 respondents). Meanwhile, 48.9% (182 respondents) was from urban and 1.1% (4 respondents) belonged to others origin.

### 4.3 Reliability Testing

Before conducting the full-scale survey, the Cronbach’s Alpha test was run. The Cronbach’s Alpha test is designed as a measure of internal consistency of items in the questionnaire. This test was used to check the reliability of all independent factors (environmental consciousness, health consciousness, appearance consciousness) and dependent factor (purchasing behaviour) considered in this study. It is important to highlight that Cronbach’s Alpha value varies between zero and one. The closer alpha to one, the greater the internal consistency of the items in the questionnaire. Total number of items in the questionnaire was 44 including 38 items using LIKERT scale and 6 items related to demographic.

Table 4.3: Cronbach’s Alpha test scores for the response rate in this study.

<b>Construct</b>	<b>Cronbach’s Alpha</b>	<b>Number of items</b>
<b>Environmental Consciousness</b>	0.910	10
<b>Health Consciousness</b>	0.900	10
<b>Appearance Consciousness</b>	0.927	10
<b>Purchasing Behaviour</b>	0.929	8

Referring to the reliability test in Table 4.3, appearance consciousness recorded the highest level of Cronbach’s Alpha which was 0.927, followed by purchasing behaviour, 0.927. Environmental consciousness came in third place with Cronbach Alpha’s value of 0.91. The lowest Cronbach’s Alpha could be seen on health

consciousness which was 0.900. George & Mallery (2003) stated that if the Cronbach's Alpha score is (i) more than 0.9, it means that the internal consistency is excellent, (ii) in a range that is more than 0.8 and less than 0.9 it is good, (iii) more than 0.7, it is considered as acceptable and (iv) less than 0.5 it is poor. Based on the reliability test, all the variables considered in this study were reliable and acceptable.

#### 4.4 Multiple Regression

A standard multiple regression was used in this study to determine the factors that affecting the purchasing behaviour of UMK students towards natural personal care and toiletries products by isolating the relationship between each independent variable and the independent variable. The independent variables were environmental consciousness, appearance consciousness, and health consciousness while the dependent variable was purchasing behaviour.

Table 4.4: Pearson's correlation analysis for independent variable (environmental, appearance, and health consciousnesses) in this study versus dependent variables (purchasing behaviour).

<b>Independent variable</b>	<b>Dependent Variable</b>	<b>Pearson's Correlation</b>
<b>Environmental consciousness</b>	Purchasing behaviour	0.618
<b>Appearance consciousness</b>	Purchasing behaviour	0.701
<b>Health consciousness</b>	Purchasing behaviour	0.773

Table 4.4 shows the Pearson correlation analysis for independent variables versus the dependent variables. The Pearson's correlation analysis shows whether the correlation between the variables are negative or positive correlation. According to the Table 4.4, all variables were positively correlated with the purchasing behaviour. Mindrila & Balentyne (2004) stated that the p-value which is lower than 0.5 was considered having a weak correlation, p-value between 0.5 to 0.7 showed moderate correlation, and p-value that was higher than 0.7 showed a strong correlation.

Based on Table 4.4, health consciousness and appearance consciousness were strongly correlated with the purchasing behaviour of UMK students towards natural personal care and toiletries products. Environmental consciousness shows the lowest Pearson's correlation coefficient value among the three independent variables, where it was moderately correlated to the dependent variable, i.e., the purchasing behaviour.

The correlation coefficients value among the independent variable can be used as first step to identify the presence of multicollinearity correlation. If the correlation coefficient value between two regressors is greater than 0.8 or 0.9 the multicollinearity is a serious problem (Midi, Sarkar, & Rana, 2010).

Tabachnick and Fidell (1996) stated that statistics problems created by multicollinearity occurs at much higher correlations which is 0.9 and higher. Table 4.4 portrays that the highest correlation coefficient value in this study was 0.773, which is below 0.9, so multicollinearity is not a concern and thus, all the variables were retained.

Table 4.5: Collinearity statistics of the independent variables (environmental, health and appearance consciousness) used in this study.

<b>Construct</b>	<b>Tolerance</b>	<b>VIF</b>
<b>Environmental consciousness</b>	0.485	2.063
<b>Health consciousness</b>	0.355	2.813
<b>Appearance consciousness</b>	0.484	2.065

Variance Inflation Factor (VIF) is a tool to measure and quantify how much the variance is inflated while the tolerance is the amount of variability in one independent variable that is not explained by the other independent variables. Tolerance and the VIF are two collinearity diagnostic factors that help to identify multicollinearity. Pallant (2005) stated that if either tolerance value falls below 0.10 or VIF exceeds 10, there can be a concern of multicollinearity. As shown in Table 4.5, VIF for each independent variable was below 10 and the impact of multicollinearity on this regression models can basically be neglected.

Table 4.6 Model Summary for purchasing behaviour of UMK students towards natural personal care and toiletries products.

<b>R</b>	<b>R<sup>2</sup></b>	<b>Adjusted R<sup>2</sup></b>	<b>Std. Error of the Estimate</b>	<b>Sig.</b>
<b>0.805</b>	0.648	0.645	0.34834	0.000

$R^2$  is a statistical measure of how close the data are to the fitted regression line. To be precise, it is the percentage of the response variable variation that is explained by a linear model. The value of the  $R^2$  is always between 0% and 100%. The value of 0% indicates that the model explains none of the variability of the response data around its mean. Meanwhile, 100% indicates that the model explains all the variability of the response data around its mean. The higher the  $R^2$  value, the better the regression equation will be predicted.

Table 4.6 shows the value of  $R^2$  is equal to 0.648. This indicated that 64.8% of the variation in purchasing behaviour was explained by the independent variables (environmental consciousness, appearance consciousness and health consciousness). The rest of 35.2% was caused by other factors that were not included in the regression equation. According to Pallant (2005), the value around 0.45 for the  $R^2$  is considered as a respectable results.

In this study, the value of adjusted  $R^2$  is 0.645 which was slightly lower compared to  $R^2$  value. The adjusted  $R^2$  value is a modified version of  $R^2$  value that has been adjusted for the number of predictors in the model. Field (2009) mentioned that adjusted  $R^2$  value helps researcher to understand how well a model can be generalized after running a regression analysis.

The adjusted  $R^2$  and  $R^2$  values were used under different conditions. The  $R^2$  value was used when sample was more than 60. Else the Adjusted  $R^2$  value was considered. Since the sample size for this study was 368 samples, one should look at the  $R^2$  value to determine how well the data had fitted the regression model.

Besides, the regression output also shows the value of the correlation coefficient, R. According to Table 4.6, R value was 0.805. This implies that there were strong relationships between dependent and independent variables.

Table 4.7: ANOVA Table for purchasing behaviour of UMK students towards natural personal care and toiletries products.

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	81.419	3	27.140	223.664	0.000
Residual	44.168	364	0.121		
Total	125.588	367			

F-value was examined to determine whether the independent variables (environmental, health, and appearance consciousness) have influences on the dependent variable (UMK students purchasing behaviour towards natural personal care and toiletries products). From Table 4.7, it is shown that the F value was 223.664 with P value 0.000. Since the F value is 223.664 which is greater than the 2.62 at  $\alpha = 0.05$ , then  $H_1$  in this research is accepted, implying that all the independent variables (environmental, health, and appearance consciousness) have significant effect towards

the dependent variable (UMK students purchasing behaviour towards natural personal care and toiletries products).

Table 4.8: Coefficient value for Purchasing Behaviour of UMK students towards natural personal care and toiletries products.

Model	Unstandardized Coefficients		Beta	Standardized Coefficients	
	B	Std. Error		T	Sig.
Constant	0.501	0.140		3.581	0.000
Environmental consciousness	0.101	0.046	0.098	2.198	0.029
Health consciousness	0.519	0.055	0.494	9.479	0.000
Appearance consciousness	0.269	0.041	0.293	6.567	0.000

Table 4.8 shows the coefficient values that were obtained from the multiple regression. The coefficients values were shown as unstandardized coefficients and standardized coefficients in Table 4.8. In this study, the most important factor was determined by using the standardized coefficients. The standardized coefficients were used to compare the strength of the effect of each individual independent (environmental consciousness, appearance consciousness, and health consciousness) variable to the dependent variable (purchasing behaviour of UMK students towards natural personal care and toiletries products). Meanwhile, unstandardized coefficients were used to form a model which can be used for prediction.

The relationships of the independent variables with the purchasing behaviour of the consumer were determined by their sig. value. If the variables have a sig value lower than 0.05, therefore it has significant relationships towards the consumer purchasing behaviour. Based on Table 4.8, the environmental consciousness was found to be significant at 0.0129 (with t-value = 2.198,  $p = 0.029 < 0.05$ ). So were the health

consciousness (t-value = 9.479,  $p = 0.000 < 0.05$ ) and appearance consciousness (t-value = 6.567  $p = 0.000 < 0.05$ ). This indicated that these three independent factors had relationships towards the consumer purchasing behaviour.

By referring to Table 4.8, a multiple linear regression equation showing the relationships between independent variables (health, appearance, and environmental consciousness) and dependent variables (purchasing behaviour of UMK students towards natural personal care and toiletries products) can be established by referring to the unstandardized coefficients. The multiple linear regression equation is shown in equation (4.1).

$$y = 0.501 + 0.101 EC + 0.519 HC + 0.269 AC + \varepsilon \quad (4.1)$$

Here

y is the purchasing behaviour,

EC is the environmental consciousness,

HC is the health consciousness,

AC appearance consciousness,

$\varepsilon$  is the standard error.

#### 4.5 Hypothesis Testing

Hypothesis testing was conducted to either accept or reject the proposed hypotheses, as shown in Chapter 1. The decision to accept or to reject the hypothesis is made by comparing the P-value of the test to the level of significance set by the

researchers. The P-value is the probability of observing a test statistic as extreme as assuming the null hypothesis is true. If the P-value is less than the significance level, the null hypothesis is rejected.

#### 4.5.1 Health Consciousness

Hypothesis one:

H<sub>0</sub>: Health consciousness has negative relationship towards purchasing natural personal care and toiletries products among UMK students.

H<sub>1</sub>: Health consciousness has positive relationship towards purchasing natural personal care and toiletries products among UMK students.

H<sub>0</sub> rejected if P-value < 0.05.

Table 4.9: Relationship between health consciousness and purchasing behaviour of UMK students towards natural personal care and toiletries products.

Hypothesis	P < value	Results
Health consciousness purchase behaviour	0.000 < 0.05	H <sub>1</sub> is supported

The P-value shown in Table 4.6 indicated that the health consciousness has a positive relationship towards natural personal care and toiletries (P-value < 0.05). Fairuz, Nor, & Hashim (2015) also found the significant relationship between health consciousness and the purchasing behaviour of green products in their study. This findings is in line with the work of Arvanitoyannis, Krystallis, & Kapirti (2004) where

they revealed that majority of the organic product buyers believe that natural products are healthier than the conventionally products and hence about one half of them are willing to pay more for the natural product.

#### 4.5.2 Environmental Consciousness

Environmental hypothesis:

H<sub>0</sub>: Health consciousness has negative relationship towards purchasing natural personal care and toiletries products among UMK students.

H<sub>1</sub>: Health consciousness has positive relationship towards purchasing natural personal care and toiletries products among UMK students.

H<sub>0</sub> rejected if P-value < 0.05

Table 4.10: Relationship between environmental consciousness and purchasing behaviour of UMK students towards natural personal care and toiletries products.

Hypothesis	P < value	Results
Environmental consciousness purchase behaviour	0.029 < 0.05	H <sub>1</sub> is supported

Table 4.10 shows that the P-value for environmental consciousness was 0.000, which is lower than the significant value of 0.05. Therefore, H<sub>0</sub> was rejected, indicating that environmental consciousness has significant relationship with the consumer purchasing behaviour towards natural personal care and toiletries products. This results

matches the finding of previous study of Ahmad, Omar, & Hassan (2016), where the environmental consciousness found to have a significant relationship with the purchasing behaviour of the natural products. In additions, Kim & Chung (2011) highlighted that the environmental consciousness has significant effect in predicting purchasing behaviour of the consumers in Malaysian context.

### 4.5.3 Appearance Consciousness

Appearance hypothesis:

H<sub>0</sub>: Appearance consciousness has negative relationship towards purchasing natural personal care and toiletries products among UMK students.

H<sub>1</sub>: Appearance consciousness has positive relationship towards purchasing natural personal care and toiletries products among UMK students.

H<sub>0</sub> rejected if P-value < 0.05

Table 4.11: Relationship between appearance consciousness and purchasing behaviour of UMK students towards natural personal care and toiletries products.

Hypothesis	P < value	Results
Appearance consciousness purchase behaviour	0.000 < 0.05	H <sub>1</sub> is supported

Table 4.11 shows that the P-value for appearance was 0.000, which is lower than the significant value of 0.05. Therefore, H<sub>0</sub> was rejected, signifying that appearance has

significant relationship with consumer purchasing behaviour towards natural personal care and toiletries products. Many studies have been conducted to study the relationship between appearance and the purchasing behaviour (Kim & Chung, 2011). Ahmad et al. (2016) also obtained a significant relationship between appearance consciousness and purchasing behaviour through their study. Another study by Mahiny (2007) also had confirmed that women who have high desire on improving their physical appearance will have high score on appearance consciousness.

**4.6 The Most Important Factor in Purchasing Behaviour of Natural Personal Care and Toiletries Products.**

In determining the most important factor in influencing the UMK students purchasing behaviour of natural personal care and toiletries products, the standardized coefficients, Beta was used. Note that an independent variable with a larger Beta value will have a greater effect on the dependent variable.

Table 4.12: Standardized Coefficients for Independent Variable (environmental, appearance, and health consciousnesses).

Standardized coefficients	
Model	Beta
Constant	
Health consciousness	55.8%
Environmental consciousness	11.1%
Appearance consciousness	33.1%

From Table 4.12, the highest Beta value was the health consciousness with value of 55.8%, meaning that it can account for 55.8% of the influence on purchasing behaviour. The second important factor was the appearance consciousness with 33.1% and environmental consciousness is the least influential factor with 11.1%. This finding appeared to contradict the Kim & Chung's (2011) claims, where the environmental consciousness was found to be the most significant factor in predicting consumer purchasing behaviour towards organic personal care products. This is logical as different targeted respondents and location were considered in Kim & Chung's (2011) work.

This study's outcome also contrast with the previous study conducted by Ahmad et al. (2016). According to their study, the environmental consciousness was the most important factor for the natural beauty products. Fairuz et al. (2015) also found a similar finding to Ahmad et al. (2016) work in their study on green cosmetic and skin care products. Wahid, Rahbar, & Shyan (2011) stated that the results are expected to be varied because the complexity in consumer's green purchasing behaviour that depending on the different cultures, time and geographical context.

## CHAPTER 5

### CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Conclusions

Personal care and toiletries products are essential items for human. Nowadays, the market for the natural personal care and toiletries products are worldwide. Based on the results obtained in the research, the health (55.8%) had the most significant influence towards UMK students purchasing behaviour towards natural personal care products, followed by the appearance (33.1%), and environment consciousnesses (11.1%). In other word, the main factor that caused the UMK student to purchase the natural personal care and toiletries products is the health consciousness. The results was contrast with the work of Kim & Chung (2011) who found environmental consciousness was the main driver for the consumer to purchase the natural beauty products. This is perhaps due to different targeted respondent considered in this study. In short, this study had confirmed that UMK students intends to buy the natural personal care and toiletries products if they have a higher concern on their health, appearance and the environment. Besides looking at the actual effect of each variable considered, a multiple regression equation had been formed to explain the relationships between independent variables (health, appearance, and environmental consciousness) and dependent variables (purchasing behaviour of UMK students towards natural personal care and toiletries products).

## 5.2 Recommendations

Future research can be done by covering a greater number of university students from various local public and private institutions. Next, the same study can be extended to overseas university students to examine whether students purchasing behaviour of natural personal care and toiletries products is depending on other factors besides appearance, environment and health due to different cultures and geographical contexts. Focusing on other product categories to obtain more variations in natural products pattern behaviour and enhancing the green marketing will be an interesting future research. Next, the sample fixed used in this study was only 368, larger sample size should be considered for future research in order to produce a less biased but accurate results.

As the group of respondents in this study are UMK students, it is recommended for further research to choose different targeted respondent, not only limited to students. Each group of respondents might have different purchasing behaviour towards natural personal care and toiletries products. Besides, researchers can consider using other statistical tests in analysing the gathered data. Note that, factor analysis is one of a set of methods used to reduce the dimensionality of one's data in such a way that the resulting set groups similar data points in the original set as single components or factors. Finally, the researcher can also use the formed multiple regression model to do a prediction in their study.

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## APPENDIX A

**Table A. 1 Response rate for questionnaires table**

		Statistics							
		Gender	Race	Others_Race	Age	Educational	Campus	Origin	Others_Origin
N	Valid	368	368	368	368	368	368	368	368
	Missing	0	0	0	0	0	0	0	0

**Table A.2 Cronbach's Alpha test for Health Consciousness factor**

### Reliability Statistics

Cronbach's Alpha	N of Items
.900	10

**Table A.3 Cronbach's Alpha test for Environmental Consciousness factor**

### Reliability Statistics

Cronbach's Alpha	N of Items
.910	10

**Table A.4 Cronbach's Alpha test for Appearance Consciousness factor**

### Reliability Statistics

Cronbach's Alpha	N of Items
.927	8

**Table A.5 Descriptive Table for Gender**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	66	17.9	17.9	17.9
	Female	302	82.1	82.1	100.0
	Total	368	100.0	100.0	

**Table A.6 Descriptive Table for Race**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Malay	333	90.5	90.5	90.5
	Indian	7	1.9	1.9	92.4
	Chinese	23	6.3	6.3	98.6
	Others	5	1.4	1.4	100.0
	Total	368	100.0	100.0	

**Table A.7 Descriptive Table for Age**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20 and below	188	51.1	51.1	51.1
	21-25	176	47.8	47.8	98.9
	26-30	4	1.1	1.1	100.0
	Total	368	100.0	100.0	

**Table A.8 Descriptive Table for Educational**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Bachelor's Degree	365	99.2	99.2	99.2
Master's Degree	3	.8	.8	100.0
Total	368	100.0	100.0	

**Table A.9 Descriptive Table for Campus**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Jeli Campus	119	32.3	32.3	32.3
Bachok Campus	131	35.6	35.6	67.9
Pengkalan Chepa Campus	118	32.1	32.1	100.0
Total	368	100.0	100.0	

**Table A.10 Descriptive Table for Origin**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Rural	184	50.0	50.0	50.0
Urban	180	48.9	48.9	98.9
Others	4	1.1	1.1	100.0
Total	368	100.0	100.0	

**Table A.11 Multiple Regression**

**Correlations**

		MeanPB	MeanEC	MeanHC	MeanAC
Pearson Correlation	MeanPB	1.000	.618	.773	.701
	MeanEC	.618	1.000	.712	.572
	MeanHC	.773	.712	1.000	.712
	MeanAC	.701	.572	.712	1.000
Sig. (1-tailed)	MeanPB	.	.000	.000	.000
	MeanEC	.000	.	.000	.000
	MeanHC	.000	.000	.	.000
	MeanAC	.000	.000	.000	.
N	MeanPB	368	368	368	368
	MeanEC	368	368	368	368
	MeanHC	368	368	368	368
	MeanAC	368	368	368	368

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.805 <sup>a</sup>	.648	.645	.34834

a. Predictors: (Constant), MeanAC, MeanEC, MeanHC

b. Dependent Variable: MeanPB

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.501	.140		3.581	.000
	MeanEC	.101	.046	.098	2.198	.029
	MeanHC	.519	.055	.494	9.479	.000
	MeanAC	.269	.041	.293		6.567

Dependent Variable: MeanPB

## APPENDIX B



**FACULTY OF AGRO BASED INDUSTRY**

**(FIAT)**

**PRODUCT DEVELOPMENT TECHNOLOGY (SBP)**

Survey on Purchasing Behaviour of UMK's Students Towards Natural Personal care  
and Toiletries Product

The purpose of this survey is to identify the factor that affecting consumer to purchase natural personal care and toiletries products. You are cordially invited to complete this questionnaire. Your views are very vital for this research. The information acquired will solely be used for academic purpose. Thank you for your co-operation.

Name: Nur Hanisah Bt Zolkiflee

Matric Number: F15A0147

**Part 1**

**1) Demographic Section**

Please tick **ONLY 1 BOX** for each of the question below:

## 1. Gender

 Male Female

## 2. Race

 Malay Indian Chinese Others \_\_\_\_\_

## 3. Age group

 20 years and below 21 – 25years 26 – 30 years 31- 35 years 36 – 40 years

## 4. Educational Level

 Bachelor's Degree Master's Degree PhD's Degree

## 5. Campus

Jeli Campus

Bachok Campus

Pengkalan Chepa Campus

6. Place of origin

Rural

Others \_\_\_\_\_

Urban

**2) Environmental consciousness**

<b>1 (low)</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5 (high)</b>
<b>Strongly disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly agree</b>

Please tick ONLY 1 choice for each of the question below:

	1	2	3	4	5
1. I am worried about the worsening quality of the environment in Malaysia that caused by conventional personal care and toiletries products.					
2. I often check to see if the personal care and toiletries products are					
3. I choose natural personal care and toiletries products because it is better for the environment than conventional products.					
4. When I buy personal care and toiletries products, I try to consider how my use of them will affect the environment and other consumers.					
5. I would be willing to stop buying products from companies guilty of polluting the environment, even though it might be					

inconvenient for me.					
6. I buy natural personal care and toiletries products because I am concerned about the environment.					
7. I have switched certain products for ecological reasons before.					
8. I like personal care and toiletries products which are safe for the environment.					
9. I believe natural personal care and toiletries products consumption contributes to protect the environment.					
10. I am well informed about environmental issues in Malaysia.					

### 3) Health consciousness

Please tick ONLY 1 choice for each of the question below:

1 (low)	2	3	4	5 (high)
Strongly disagree	Disagree	Neutral	Agree	Strongly agree

	1	2	3	4	5
1. I am using natural personal care and toiletries products because it has health promoting effect.					
2. I have impression that conventional personal care and toiletries products are not very healthy.					
3. I always worry about the healthiness of the personal care and toiletries products.					
4. I believe that the natural personal care and toiletries products are good for ensure our health.					
5. I am consuming natural personal care and toiletries products because it can extend my					

life.					
6. The natural personal care and toiletries contains more vitamin and nutrients that are good for me.					
7. I'm using natural product because my health is worth more than my appearance.					
8. I am concerned about harmful ingredients in the personal care and toiletries products.					
9. I consider myself very health conscious when choosing the personal care product.					
10. I believe that the natural personal care and toiletries products are safer to consume and contain less health risk.					

#### 4) Appearance consciousness

Please tick ONLY 1 choice for each of the question below:

<b>1 (low)</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5 (high)</b>
<b>Strongly disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly agree</b>

	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
1. I am careful to buy personal care and toiletries products that will make me look my best.					
2. I use natural personal care and toiletries products to improve my physical appearance.					
3. I use natural personal care product and toiletries because I'm usually aware of my appearance.					
4. I take special care with my hair grooming.					
5. I use natural personal care and toiletries product because I feel ashamed of myself when I haven't made the effort to look my best.					
6. I use natural personal care and toiletries product because I am concerned about what					

other people think of me.					
7. I use natural personal care and toiletries product because how I look is an important part of my life.					
8. I use natural personal care and toiletries products to look just as I wish.					
9. I use natural products to maintain and keep up youth look.					
10. I have my own skincare routine.					

### 5) Purchasing Behaviour

Please tick ONLY 1 choice for each of the question below:

<b>1 (low)</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5 (high)</b>
<b>Strongly disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly agree</b>

	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
1. I choose to purchase products that are environmentally-friendly.					
2. I have a high intention to buy natural personal care and toiletries product.					
3. I will tell every positive aspect about the natural personal care and toiletries products towards other people.					
4. I will still use natural personal care and toiletries products as my first choice for the future.					
5. I will encourage my friends and family to use natural personal care and toiletries products.					
6. I will still use natural personal care and toiletries products for upcoming years.					

7. I am willing to make sacrifices to protect the environment by using natural personal care and toiletries.					
8. I believe that natural personal care and toiletries are one of the trustable products.					

**THANK YOU FOR YOUR COOPERATION.**

UNIVERSITI  


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MALAYSIA  


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KELANTAN



UNIVERSITI  
MALAYSIA  
KELANTAN

**FAKULTI INDUSTRI ASAS TANI  
(FIAT)**

**TEKNOLOGI PEMBANGUNAN PRODUK (SBP)**

Tinjauan mengenai Kelakuan Pembelian Pelajar UMK Terhadap Produk Penjagaan diri dan Kelengkapan Mandian Semulajadi.

Tujuan kajian ini adalah mengenalpasti faktor yang mempengaruhi pengguna untuk membeli produk penjagaan diri dan kelengkapan mandian semulajadi. Anda dijemput untuk melengkapkan soal selidik ini. Pandangan anda sangat penting untuk penyelidikan ini. Maklumat yang diperoleh akan digunakan untuk tujuan akademik semata-mata. Terima kasih atas kerjasama anda.

Name: Nur Hanisah Bt Zolkiflee

Martric Number: F15A0147

## Bahagian 1

### 1) Seksyen Demografik

Sila tandakan HANYA 1 petak untuk setiap soalan di bawah:

1. Jantina

Lelaki       Perempuan

2. Bangsa

Melayu       India

Cina       Lain-lain \_\_\_\_\_

3. Kumpulan Umur

20 tahun dan keabawah       21 – 25 tahun

26 – 30 tahun       31- 35 tahun

36 – 40 tahun

4. Tahap pendidikan

Ijazah Sarjana muda

Ijazah sarjana

Ijazah Doktor Falsafah

5. Kampus

- Kampus Jeli
- Kampus Bachok
- Kampus Pengkalan Chepa

6. Tempat asal

- Luar bandar       Lain-lain \_\_\_\_\_
- Bandar

**2) Kesedaran alam-sekitar**

1 (rendah)	2	3	4	5 (tinggi)
Sangat tidak setuju	Tidak setuju	Tidak pasti	Setuju	Sangat setuju

Sila tandakan HANYA 1 pilihan untuk setiap soalan di bawah:

	1	2	3	4	5
1. Saya bimbang tentang kualiti alam sekitar yang semakin buruk di Malaysia yang disebabkan oleh produk penjagaan diri dan kelengkapan mandian konvensional.					
2. Saya sering periksa untuk mengetahui sama ada produk penjagaan diri dan kelengkapan mandian adalah mesra alam.					
3. Saya memilih produk penjagaan diri dan kelengkapan mandian semulajadi kerana ia lebih baik untuk alam sekitar berbanding produk konvensional.					
4. Apabila saya membeli produk penjagaan diri dan kelengkapan mandian, saya cuba untuk mempertimbangkan bagaimana penggunaan saya terhadap produk tersebut akan menjejaskan alam sekitar dan pengguna lain.					

5. Saya akan sanggup berhenti membeli produk dari syarikat-syarikat yang bersalah mencemarkan alam sekitar, walaupun ia mungkin menyusahkan saya.					
6. Saya membeli produk penjagaan diri semula jadi dan produk kelengkapan mandian kerana saya prihatin terhadap alam sekitar.					
7. Sebelum ini, saya telah menukar kepada produk tertentu untuk sebab ekologi.					
8. Saya suka produk penjagaan diri dan produk kelengkapan mandian yang selamat untuk alam sekitar.					
9. Saya percaya penggunaan produk penjagaan diri semula jadi dan kelengkapan mandian menyumbang untuk melindungi alam sekitar.					
10. Saya dimaklumkan tentang isu-isu alam sekitar.					

### 3. Kesedaran kesihatan

Sila tandakan HANYA 1 pilihan untuk setiap soalan di bawah:

1 (rendah)	2	3	4	5 (tinggi)
Sangat tidak setuju	Tidak setuju	Tidak pasti	Setuju	Sangat setuju

	1	2	3	4	5
1. Saya menggunakan produk penjagaan diri dan kelengkapan mandian semulajadi kerana ia mempunyai kesan menggalakkan kesihatan.					
2. Saya mempunyai tanggapan bahawa produk penjagaan diri dan produk kelengkapan mandian konvensional tidak begitu sihat.					
3. Saya selalu bimbang tentang kesihatan produk penjagaan diri dan kelengkapan mandian.					

4. Saya percaya bahawa produk penjagaan diri dan kelengkapan mandian semula jadi adalah baik untuk memastikan kesihatan kita.					
5. Saya menggunakan produk penjagaan diri dan kelengkapan mandian semula jadi kerana boleh memanjangkan hayat saya.					
6. Penjagaan diri dan kelengkapan mandian semula jadi mengandungi lebih banyak vitamin dan nutrien yang baik untuk saya.					
7. Saya menggunakan produk semula jadi kerana kesihatan saya lebih bernilai daripada penampilan saya.					
8. Saya prihatin terhadap bahan-bahan berbahaya dalam produk penjagaan diri dan kelengkapan mandian.					
9. Saya menganggap diri saya sangat mempunyai kesedaran diri apabila memilih produk penjagaan diri dan kelengkapan mandian.					
10. Saya percaya bahawa produk penjagaan diri dan produk kelengkapan mandian semula jadi adalah selamat untuk digunakan dan mengandungi risiko kesihatan yang kurang.					

**4) Kesedaran penampilan:**

Sila tandakan HANYA 1 pilihan untuk setiap soalan di bawah:

<b>1 (rendah)</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5 (tinggi)</b>
<b>Sangat tidak setuju</b>	<b>Tidak setuju</b>	<b>Tidak pasti</b>	<b>Setuju</b>	<b>Sangat setuju</b>

	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
1. Saya berhati-hati membeli produk penjagaan diri dan kelengkapan mandian yang akan membuat saya kelihatan lebih baik.					

2. Saya menggunakan produk penjagaan diri dan kelengkapan mandian semulajadi untuk memperbaiki penampilan fizikal saya.					
3. Saya menggunakan produk penjagaan diri dan kelengkapan mandian semula jadi kerana saya biasanya sedar akan penampilan saya.					
4. Saya mengambil penjagaan khas dengan rambut saya.					
5. Saya menggunakan produk penjagaan diri dan kelengkapan mandian semulajadi kerana saya berasa malu dengan diri saya jika saya tidak berusaha untuk kelihatan lebih baik.					
6. Saya menggunakan produk penjagaan diri dan kelengkapan mandian semula jadi kerana saya prihatin dengan pendapat orang lain tentang saya.					
7. Saya menggunakan produk penjagaan diri dan kelengkapan mandian semula jadi kerana rupa saya adalah bahagian penting dalam hidup saya.					
8. Saya menggunakan produk penjagaan diri dan kelengkapan mandian semula jadi untuk kelihatan seperti yang saya kehendaki.					
9. Saya menggunakan produk semulajadi untuk mengekalkan dan meneruskan wajah yang muda.					
10. Saya mempunyai rutin penjagaan kulit saya sendiri.					

MALAYSIA

KELANTAN

### 5) Tingkahlaku Pembeli

Sila tandakan HANYA 1 pilihan untuk setiap soalan di bawah:

<b>1 (rendah)</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5 (tinggi)</b>
<b>Sangat tidak setuju</b>	<b>Tidak setuju</b>	<b>Tidak pasti</b>	<b>Setuju</b>	<b>Sangat setuju</b>

	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
1. Saya membeli produk penjagaan diri dan kelengkapan mandian semula jadi walaupun mereka lebih mahal daripada produk biasa.					
2. Saya mempunyai niat yang tinggi untuk membeli produk penjagaan peribadi dan kelengkapan mandian semula jadi.					
3. Saya akan memberitahu setiap aspek positif mengenai produk penjagaan peribadi dan kelengkapan mandian semula jadi kepada orang lain.					
4. Saya masih akan menggunakan produk penjagaan diri dan kelengkapan mandian semula jadi sebagai pilihan pertama untuk masa depan.					
5. Saya akan menggalakkan rakan-rakan dan keluarga saya untuk menggunakan produk penjagaan diri dan kelengkapan mandian semula jadi.					
6. Saya masih menggunakan produk penjagaan diri dan kelengkapan mandian semula jadi untuk beberapa tahun yang akan datang.					
7. Saya bersedia untuk membuat pengorbanan untuk melindungi alam sekitar dengan menggunakan penjagaan diri dan kelengkapan mandian semula jadi.					
8. Saya percaya bahawa penjagaan diri dan kelengkapan mandian semula jadi adalah salah satu produk yang boleh dipercayai.					

**TERIMA KASIH ATAS KERJASAMA ANDA.**