

Green Consumption Behavior: Influential Factors on EMU Students' Behavior toward Green Products

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ABSTRACT

Consumerism is one of the attributed adjectives for the recent humankind generation. Population growth and demand for more material and resources in addition to increasing pollution and wastes are the results of this concept. Since 2000 the green consumer behavior which briefly means inclining towards environmentally friendly products has become the main concern for scholars, governors, and businesses to encounter this problem. This study focuses on identifying factors that affect green consumption attitudes and measures the impact of these factors on green consumer behavior among Eastern Mediterranean University students.

The model of the study included constructs such as demographic traits, attitudes toward green products, internal and external moderators in analyzing their influences on the three aspects of green consumer behavior; more specifically on purchasing, using, and recycling behaviors. Correlation and multiple linear regression analyses are conducted on the data that is collected from the Eastern Mediterranean University students through a questionnaire.

The results identified relationships between demographic traits and attitudes. The attitude, internal and external moderators all had effects on EMU students' green behavior. The purchasing behavior is found to be influenced by attitude, consumer environmental concerns, and external factors. The using behavior is influenced by purchasing behavior, attitude, and consumers' perceived self-effectiveness while attitude and using behavior are found to be the most influential factors affecting the recycling behavior. When the factors influencing the overall green consumption

behavior is analyzed, it is found that attitude, internal moderators, external moderators, education and income levels of consumers can all influence Eastern Mediterranean University students' green consumption behavior.

Keywords: green consumer behavior, EMU students

ÖZ

Tüketicilik günümüz insanlarına atfedilen bir sıfattır. Artan kirlilik ve atıklar yanında, nüfus artışı ve daha fazla materyal ve kaynak talebi de bu kavramın sonucu olarak ortaya çıkmaktadır. 2000 yılından beri yeşil tüketici davranışı, yani çevre dostu ürünlere yönelme, bu problemin çözümü için işletmeler, yöneticiler, ve akademisyenlerin odak noktası olmuştur. Bu çalışma, Doğu Akdeniz Üniversitesi öğrencileri arasında, yeşil tüketim tutumlarını etkileyen faktörleri bulmaya ve bu faktörlerin Doğu Akdeniz Üniversitesi öğrencileri arasında yeşil tüketici davranışlarına olan etkilerini ölçmektedir. Bu çalışma modeli demografik özellikler, yeşil tüketici ürünlerine olan tutumlar, yeşil tüketici davranışının üç yönüne olan içsel ve dışsal düzenleyiciler, özellikle, alım, kullanım ve geridönüşüm davranışlarından oluşmaktadır. Korelasyon ve çoklu doğrusal regresyon, Doğu Akdeniz Üniversitesi öğrencilerine dağıtılan anketten toplanan verileri analiz etmede kullanılmıştır.

Sonuçlar demografik özellikler ve tutumlar arasında ilişkiler bulmuştur. Tutum, içsel ve dışsal moderatörlerin hepsi DAÜ öğrencilerinin yeşil davranışlarında etkin rol oynamışlardır. Satın alma davranışının tutum, tüketici çevre duyarlılığı ve dışsal faktörlerden etkilendiği görülmüştür. Kullanım davranışı, satın alma davranışı, tutum ve tüketicinin algıladığı kendi-etkinlik tarafından etkilenirken, tutum ve kullanım davranışının geridönüşüm davranışına en büyük etkide buldukları görülmüştür. Genel yeşil tüketim davranışını etkileyen faktörler analiz edildiğinde, Doğu Akdeniz Üniversitesi öğrencilerinin yeşil tüketim davranışı tüketicinin tutumu, içsel ve dışsal moderatörleri, eğitimi ve gelirinin düzeyi tarafından etkilenebilmektedir.

Anahtar Kelimeler: yeşil tüketici davranışı, DAÜ öğrenileri

DEDICATION

To the memory of my father, I would like to dedicate this study to whom helped and supported me to be here and graduated with the master degree. To my two older brothers, my mother, my sisters, and my best friend and partner, and finally to the newest and cutest member of the family: NIKAN

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Chapter 1

INTRODUCTION

The question of what really influences people's behavior is still under investigation. Complicated incidents occurred throughout the time especially since the extraordinary explosion happened in population growth. In recent centuries, alongside the great outbreaks in technology, the businesses followed the strategy of producing more (at lower costs) and selling more. Consequently, marketers did their best to convince people to have more and purchase more. This strategy, of course, made some changes in humankind behavior. After that, the "age of plastic" brought up the concept of durability, which helped consumers to have more and for a long time as well. These efforts lead us to extract more and more from the environment without giving back anything to the surrounding environment except emission pollution to the air, water, and soil (Liobikiene and Dagiliute, 2016; Liu et al., 2010).

After making many changes, which were most destructive in consumption behavior, in recent decades the issue of sustainability had been introduced to modify previous impact on the environment. Sociology, psychology, anthropology, genetics, and even other sciences that are likely unrelated to this issue have been trying to figure out the matter. In terms of economics and development, sustainability adjusted variety of attributing concepts and factors. The notion of sustainability pays attention to resources and its origin that is the environment; nonetheless, does not try to promote frugality nor reducing the production amount. To line up these favorable objectives,

sustainable development recommends purchasing products which are harmless and pro-environmental as well (Ritter et al. 2015; Elliott, 2013).

Producers, stakeholders, enterprises, and marketers were informed about the constraints and switched from “producing more and selling more” to “produce right products to be found by right customers”. Last decades of the 20th century was the time of the prevalence of issues like eco-labeling, eco-friendly or green product and green marketing. Kumar (2010), in his research, has related this incident to the deteriorations caused by the way consumers use the goods and dispose of the wastes.

Strategies considering the benefits of consumers, clients, partners, environment and society at whole become more popular by the businesses. To this end, a wisely assembled system of satisfying customers with the least harm to the environment must be considered. The best method for packaging the products, achieving high effectiveness in resource usage, and least emission of pollution are among the recommended strategies by green marketing (Majumdar and Swain, 2015). Products with fewer disadvantages for both human and environmental sanitation were entitled green products and promoting them has become a competitive superiority for firms to maneuver in the market. The good reputation of eco-friendly products and their interests for consumers made it a convincing value for buyers as well as producers (Coleman et al., 2011; Subhani et al., 2012; Kong et al., 2014). Nowadays, consumers have become financially and emotionally sensitive than ever. The value that is conveyed by each product has essential effect on their purchasing behavior. On the other hand, there is a gap between intention to act and the actual behavior. In other words, consumers in many cases believe in goodness and being valuable of a product but when making final choice usually they do not act based on previous beliefs (Young

et al., 2009). Because of these incompatibilities marketers, producers, and policymakers should try to gain a deeper insight of individual's purchase behavior; as well as understanding what other factors would come to account. With the arising concerns about the environment in recent decades many huge businesses decided to consider the value of being eco-friendly to show their respect for the consumers as well as environment. Nonetheless, the shortages and limitation of resources would force firms, consumers, and the society at large to pace towards the sustainability and sustainable development.

Consumer behavior at large and specifically consumer's green purchase behavior - similar to this study's objective- has been probed to find out the essential and intrinsic factors that are mostly related to the intention, emotion, and the attitudes toward the green products (Lin and Huang, 2012). As it has already been mentioned lifestyle and consumption patterns of people have changed throughout the recent decades, so it is the time to explore the consumer's purchasing habits toward green products. Internal and external moderators including concerns about the environment, the degree of individual's self-efficacy, promotions that are done by government, and availability of environmentally friendly products are all factors that influence consumers' purchase behavior (Arvola et al., 2008). Moreover, factors like knowledge, the act of leading groups, and personal characteristics are also among other influential elements. Laroche et al. (2001) claimed that being informed of the deteriorated condition of the environment would have an effect on all the stages of making the decision of buying the needed products. Regarding the demographic traits, age is the most argumentative issue about which there are different notions and a main question that finally which age range are more willing to adopt green behavior (Van Liere and Dunlap, 1980; Kanchanapibul et al., 2013). The level of education, income, gender, and even the

number of children are also among the debatable stimulating elements in this matter respectively. Education has a direct link to the knowledge about the environment; higher income would raise the probability of purchasing organic and green products and women are more eager to exhibit more sensitive behavior regarding the environment than men do. However, on the contrary, some research illustrates different results and proves the opposite (Diamantopoulos, et al. 2003; Roberts, 1996; Van Liere and Dunlap, 1980). Moreover, some researchers did not find any significant relationship between the demographic factors and green purchase behavior.

1.1 The Aim and Outline of the Study

In this study, the factors that are influential on green purchasing behavior are analyzed. More specifically, the research objective is to find out the effects of independent factors such as attitude, internal, and external moderators on the dependent variable which is green purchase behavior. Demographic traits have also been used as the bases of constructing the attitude in an individual's green purchase behavior. Therefore, the first research question of the study tries to identify the important factors which affect green purchasing behaviors of EMU students.

With respect to the green purchase behavior, buying, using, and recycling components of behavior are used. Therefore, as the second research question of the study, the effects of these factors (e.g., attitude, internal, and external moderators) on purchasing, using and recycling behaviors will be analyzed. Since this study collected its data among EMU students who are living in Famagusta, a city in which very limited recycling activities are done, results have to be interpreted with extreme caution.

In this study, EMU students' green product purchasing behaviors are analyzed by using internal moderators such as environmental concern and perceived consumer effectiveness, external moderators such as promotion of government and availability of green products, and demographic traits.

In the first chapter, a brief outlook of the study is represented. In chapter two there is a well-documented survey throughout a variety of literature and then in chapter three, the method of gathering, measuring and analyzing the data are explained. Chapter four includes the data analysis with results illustrated in tables. Finally, in conclusion, the discussion about the factors influencing EMU students' green purchasing behavior, implications of the study and recommendations are presented.

Chapter 2

LITERATURE REVIEW

2.1 Green Purchase Behavior Theories, Green Consumer, and Green Product

In recent decades, the rising temperature of our planet and pollution/emission rates have been among the most debatable discussions. Green consumption, which briefly means inclining towards environmental friendly products, is an approach that can counter with global warming. To act eco-friendly, the procedure of production, utilization, and disposing of waste should be considered. Lowering the amount of purchase, consumption, and pollution through restricted daily regulations are the accomplishing methods (Gilg et al., 2005). Indeed, new patterns of consuming the products inevitably change the patterns of manufacturing. Green consumption behavior would be challenging since it aims people's habits and lifestyles. The right of preserving the environment for humankind may first be in contrast with their own resources (money, time, and convenience). As a result, it would be a problematic issue for consumers to adjust their habits in real life with new patterns of green consumption (Lin and Hsu, 2013).

Green consumption behavior like other behaviors can be explained by existing theories of consumption behavior. The *theory of reasoned action* (TRA) conducted by Ajzen and Fishbein (1980) highlighted the fact that beliefs and notions each person has in mind would result certain kind of actions or behaviors. The authors argued that

intentions would build the attitudes by which an individual decides how to behave. The individual's family and society are the root of these notions. The theory of reasoned action has been extended and called *theory of planned behavior* (TPB) which argues that people do not merely behave based on just their constructed opinions and attitudes however there are other variables like barriers and opportunities that control people's acts and behaviors (Ajzen, 1991). These two theories, known as cognitive theories, have two major assumptions. According to the first assumption, consumers' beliefs lead them to incline towards specific behaviors and finally adopt them. Secondly, it is assumed that controlling factors function as the mediators or moderators throughout this procedure of adoption of a behavior and finally, only practitioners intentionally select to behave in an specific manner to achieve special results. Thus, with respect to green consumption behavior, two aforementioned theories provided that the root of these beliefs, family and society, provide their members with adequate notions in this matter and make the external factors, controlling barriers and opportunities, helpful and stimulating. These all would lead to green consumption behavior practices that consumers are willing to act (Ozaki and Sevastyanova, 2011).

The review of the literature identified that, in addition to these theories, there are some other studies where green consumption is analyzed by simply asking "why consumers choose to buy or not to buy (or use or not use) a specific product, why consumers choose one product type over another." The theory of consumption introduced five values (functional, social, emotional, conditional, and epistemic) to consumers' purchasing choices (Sheth et al.1991). Applying this theory, Lin and Huang (2011) examined behavior toward green products and found that functional value, price, and quality are values that could be excluded from consumers' green product purchasing behaviors. However, Goncalvez et al. (2015) claim that functional values are needed

for a product and must be aligned with other values in order to be chosen by consumers. Three main premises of being the values independent, functioning differently in different situations, and combined function of values exist in term of consumption theory and its component values. Regarding to green consumption behavior and probing it through the consumption theory, results claim that psychological rewards, knowledge tendency, innovation enthusiasm, and special situations are among the core values for consumers to behave green (Lin and Huang, 2012).

The Norm Activation Theory (NAT), New Environmental Paradigm (NEP), and the theory of Value-Belief-Norm (VBNT) are also used to explain consumer behaviors. The first one discusses about the norms and limitations that social or environmental rules dictated to the people to act or behave morally (Schwartz, 1977). The NEP argues that values may adjust consumers' purchase behavior (Dunlap and Van Liere, 1978). The VBNT tries to make the residents of a society aware of the results of their behavior so that they would be willing to follow the existing norms and limitations in each community voluntarily. These three theories are known as normative theories and according to Stern et al. (1999), who discussed that if the performed green norms and limitations by society are valuable and acceptable, then the consumers would easily adopt them (NAT acceptance), and going further they would be more aware of the results of their green behavior, so the values of these results would add up to the norms and make it plausible to accept the new environmental patterns (NEP) and environmental responsibilities. This process of implementing the normative theories in a society leads the societal norms and limitations to be transformed to personal norms which would be followed up by voluntarily pro-environmental behaviors. This progress causes residents to be environmental citizens and conventional consumers to be green consumers (Ozaki and Sevastyanova, 2011).

Stern (2000) introduced another model of Attitude-Behavior-Context in which he probed the personal perceptions and attitudes in the presence of external variables such as existing resource limitations. This theory is another normative theory that claims as soon as the beliefs and values are examined in the context of other factors like expenses, physical barriers, and other groups' influences, then these values and beliefs might be altered and function differently. Thus, green contexts like green leading groups and recycling monetary rewards are able to expand the green consumers segments.

In addition to formerly mentioned theories which discuss the factors influencing beliefs, values, and attitudes on behavior, two more theories, socioemotional selectivity theory (SST) and time perspective (TP) considered age and time perception of consumers (Carstensen, Isaacowitz, & Charles, 1999). According to these theories people tend to obtain more knowledge when their perception of time is an open-ended concept which is applied among young generations and on the other hand, while they feel the time is limited then emotional goals would be prioritized (Carstensen, Isaacowitz, & Charles, 1999). So regarding these theories and green consumption behavior, providing youth with adequate information and increasing their knowledge about the environment and their behavior effects on it are the essential practices. Moreover, satisfying the elderlies through emotional values of green products is applicable.

Bandura (1982, 1986, 2006, 2007, 2008) who introduced the social cognitive theory argued that it is not only the society conducting its members towards specific "self" of him or her, but there is an intertwined relation between three concepts of environmental factors (norms and expectations) and self-concepts (control, esteem,

and preferences) and finally the behavior itself. This theory, using cognitive and normative theories, argues that consumers are simultaneously under the effect of a set of personal and social factors. On one hand personal effective elements like self-control, self-esteem, and individual's priorities lead to a concept of self-sanction and social elements like norms, regulations, laws, opportunities, and constraints would also make another concept of social-sanctions and on the other hand, so intertwined relationship between the two would cause the specific behaviors. In terms of green consumption behavior, Lin and Hsu (2015) argued that if the self-efficacy, which is considered to be the most essential outcome of self-concept is added up to other adequate elements of social-sanctions, then the results of the green behavior would be aligned with the individual's expectations and thus pro-environmental behaviors will be reinforced gradually.

All these theories or a combination of them try to explain the reasons of people's behaviors, in particular green purchase behavior. Research about green consumption or green purchase behavior is important for both finding the paths through which a consumer selects a green product and paves those paths properly, and revealing a mechanism for potential customers to make it easier and more applicable (Lin and Chen, 2016). As Lin and Chen (2016) mentioned, the idea of green consumption had been ignited in the fourth quarter of the twentieth century and bolded at the end of the century, and since then many development have happened (Gilg, 2005; Pattie, 2010).

There are three main stages in green consumption research; the concept definition of green consumption, the factors influencing green consumption and constraint factors analysis, and the discussion about guidance strategies at present (Chen and Lau, 2009). Carlson, Grove and Kangun (2007) explained the green consumption as a procedure

through which both environment and consumers gain a benefit; more favorable utilities for consumers and less harm to environment. Peattie (2010) defined the green consumption as a practical way; not exploiting the natural resources and reusing them as much as possible. Some researchers identified the green consumption as being more socially responsible, while others argued that it is the way of consumption leading to high-quality life for people and less toxic material to environment (Lin and Chen, 2016). De Moura et al. (2012) defined the green or sustainable consumption as using the products and services to satisfy our needs in a best way of consuming natural resources, emitting the least pollution and not making the process of satisfaction of the needs difficult or impossible for the next generation. According to Roozen and De Pelsmcker (2000) green consumption is utilization of environmental-friendly products with three main attributes of being recyclable, energy-saving, and organic. Lin and Hsu (2013) believed that green consumption is to practice lowering the amount of consumption, decreasing the accumulating wastes, and the least product purchasing on a daily basis regulation.

Green consumption behavior discussion and analyses also has motivational effect on producers and industries to think of notion of making green the procedure of both producing and consuming the products (Lin and Hsu, 2013; Zhao et al.2013). Changing the process of manufacturing the products and the usage patterns toward greenness, would bring up some other concepts such as green product and green consumer. A green or environmentally conscious consumer is the person who looks after what he or she is purchasing and consuming individually and its effect on others in general or in another words he or she tries to encourage societal modifications by his or her purchase pattern (Rahnama and Rajabpour, 2016). Rahnama and Rajabpour (2016) also mentioned that the growing environmental concerns resulted in socially

concerned people who decided to do their duty of preserving the surrounding environment by choosing a new lifestyle specifically in their consumption pattern (2016). With the upraising concerns about environment, consumers demonstrated this concern on what they decide to purchase and consume (Chamorro and Banegil, 2006). Green consumption pattern and behavior introduced the concept of green consumers and green products. Collins et al., (2007) defined green consumer as the person who puts the environmental performances of a product first. Electrical appliances that consume less energy, organic food, lead free paint, recyclable paper, and detergent without phosphate are considered to be as green or environment friendly products (Bhatia and Jain, 2013). Although there is no general agreement on what can be exactly defined as green product, Bhatia and Jain (2013) introduced some specific attributions by which a product would be recognized as green. Some of these characteristics are as follows.

Green products are energy and water efficient either during the production process or usage. They are safe and healthy with minimum emission of pollution. Environment friendly products are durable, recyclable, renewable, and biodegradable as well. Moreover, green products are reused products that are locally produced and certified to public by third party.

Zhui et, al. (2013) divided the green consumption behavior into three parts; purchasing, using, and recycling. Buying products that consume less energy or water, recycled papers either for writing or toilet, secondhand appliances to reuse, being careful about the amount of water and energy is used in daily basis life, public usage of products, and recycling the waste remaining after any product consumption are examples of the mentioned three parts of green consumption. These are activities that

can be named as environmental protection, green consumption, or sustainable consumption behavior that would protect the environmental resources on the one hand and lower the deteriorating effects on it on the other hand and would save the planet for the coming generation (Edvard Shih et al. 2017). Purchasing, using, and recycling the products are considered as a compacted dependent variable known as consumption behavior. In following section the factors influencing the green consumption behavior will be discussed.

2.2 Factors Influencing Green Consumer Behavior

2.2.1 Demographics

The basic knowledge to assess the consumers comes firstly from the demographic characteristics of a particular segment (Zhui, Hui-Hui, et al. 2013). The variables introduced to be the elements of dividing and classifying a community are age, gender, marital status, social class, education, and even the number of children (Diamantopoulos et al., 2003). Geography, culture, and personality traits are other influencing factors that can come into account in the demographic section (Diamantopoulos et al., 2003). Researches have been trying to find a practical framework between six dimensions of demographic characteristics and the dimensions of knowledge, attitude, and behavior in relation to environmentally friendly products but all of them are lacking such a comprehensive model (Diamantopoulos et al., 2003).

Some studies found that young, female, prosperous, high-educated, and liberals are the most potential green consumers (Heins et al. 1987; Olli et al. 2001). Some researchers argued that although males are more aware of environmental issues, females show more concerns about it and demonstrate more willingness to contribute to green activities (Mostafa, 2007). Since tackling environmental problems and providing

solution for is essentially involved with changing habits and altering some traditions, it was argued that youngsters are more attracted to green behavior than elders do (Van Liere and Dunlap, 1980). Nonetheless, old people, in reality, seek more green products than youth does. Young generation carry different type of values and beliefs affecting their choices, ecological effects and ecological knowledge definitely draw them towards actual green purchase (Kanchanapibul et al., 2013). Like age, income is another debatable issue about which opposing opinions exist. While Gilg et al. (2005) claim that more environmental conscious consumers are all among mature and rich people, some others have not found any connection between the two variables and even some report that people belong to high social class purchase less green products (Roberts, 1996). Many researchers agreed that well educated communities purchase more green products as well as recycle them appropriately and families with more children would behave more environmental cautious than others (Diamantopoulos, et al. 2003). A research conducted in the UK on older segment of society with a purpose of reducing the pollution by eighty percent until 2050, demonstrated that growing old is in accordance with using more green products, but no significance had been identified between the two (Wilson and Modi, 2015). According to the same study, personality traits played crucial roles. The first hypothesis that will be tested in this study is:

H₁: consumers' demographic traits influence attitudes toward green consumption

2.2.2 Attitudes

Exploring green purchase behavior like any kind of behaviors has something to do with attitudes toward given situation. Although Sears et al (1985) defined the attitude as an “enduring orientation” arising from a combination of three components (cognitive, affective, and behavioral) many researches showed that there is a doubt

about the quality of durability attributed to the attitude in the case of green purchase behavior. Zhao et al (2013) and Zsoka (2008) argued that attitude towards environmentally friendly products would be applicable if other influencing factors in the given situation are aligned with it and no unfavorable element exists. Otherwise there is a gap between what organizations and consumers claim as their attitude and willingness towards greenness on the one hand and the actual behavior in real life (Zsoka, 2008). After reviewing 80 papers from the literature, Liobikien and Bernatonien, (2017) found that among the factors influencing environmentally friendly product purchase behavior, attitude is the most repeated one and many of researchers have given a positive role to it in this matter. While Arslan et al. (2012) claimed that only consumers, whose attitude toward green products is supported by adequate knowledge, would follow their intentions and purchase environmental friendly products; Gadennen et al. (2011) argued that people would act upon their environmental concerns if there is no cost pressure on them. Ajzen and Fishbein (1980) defined attitude as the belief that would be synthesized after committing an action or behavior. This definition makes sense to realize why among Swiss people the most important factor influencing on green behavior is the personal attitude toward environmental protection (Tanner and Kast, 2003). Provided that attitude and behavior be combined and reframed as a new concept of conserving behavior, then it would influence purchasing behavior more strongly (Paco et al. 2013). Therefore, the following hypothesis will be tested:

H₂: consumer's attitude has positive influence on green consumer behavior.

2.2.3 Internal Moderators

In addition to socio-demographic characteristics, there are also psychological factors affecting consumer purchase behavior. Regarding the green consumption behavior these factors include perceived consumer effectiveness, self-efficacy, social responsibility, and the relation of price, quality, and brand loyalty (Gilg et al.2005). Perceived consumer effectiveness refers to the extent to which each individual would effect on surrounding areas, self-efficacy means how able he or she is to participate in the related activities. Social responsibility relates to consciousness and morality and brand loyalty is a combination of marketing mix evoking a specific notion of precious values into the person's mind. In general, two main groups of intrinsic and extrinsic factors impact on peoples' green behavior among which intrinsic ones can be considered as internal moderators. In terms of intrinsic factors the main elements include perceived consumer effectiveness and self-efficacy that can be translated into concepts of consumers' understanding of environmental responsibilities and consequently following up the related knowledge and tendency to act more conservative toward resources with less harm for environment (Kumer et al 2015). As before, in developing countries as well as Asian-African communities consumers attached greater importance to activities done by government and policy makers which means they would not rely on their own practices in terms of saving environment and acting as the green consumers. This difference is related to that although, both concepts of perceived consumer effectiveness and self-efficacy are functioning as internal moderators, but among them self-efficacy is more intrinsic concept and directly is related to psychographic traits and consumer perceived effectiveness pertains to sociographic elements more. Another issue here is that self-efficacy is essentially relevant to the degree to which a person feel self-confidence in related to achieve a

goal or accomplish a task in his or her real life practices. Obviously, this trait would not be improved unless an individual aims a target and commits all the necessary procedures to achieve the favorable results. Moreover, consumer perceived effectiveness can be defined as a notion, concern, or priority a person has in mind and it necessarily may not followed up by any specific action or behavior, but when it comes to self-efficacy an individual needs to act directly based on his or her belief or priority. Thus, in terms of green consumption behavior almost all respondents are concerned for the environment issues but, only consumers who are committed to act eco-friendly have faith in their behavior. So, self-efficacy can be defined as the faith a consumer has on the results of his or her behavior (Gilg et al. 2005). From here onwards, external factors should function properly in order to prepare a foundation of that saving the environment would be possible by every consumer's eco-friendly behaviors in order to reinforce the existing faith in each person's essence and help consumers to personalize the responsibility, another aspect of self-efficacy, toward the surrounding environment (Sparks and Shepherd, 1992). Finally, it worth mentioning that in terms of green consumption behavior, self-efficacy is the degree to which a consumer believe that he or she would be able to stimulate herself, recognize the situation and consequently act in a way to successfully perform her task in order to save the environment (Lin and Hsu, 2013).

Akehurst et al. (2012) examined the socio-demographic and psychographic dimensions on consumers' green purchase behavior and the outcomes indicated that psychographic variables are more applicable in increasing the intention towards greenness. Probing social cognitive theory and the concept of self-sanction, they showed that each person has a self-concept of herself among which self-efficacy with much importance reinforcing with social regulations leads the manner an individual

act upon (Lin and Hsu, 2013). Researches in different communities (Turkey and Hong Kong, Asia, and Africa) have proved the significance of environmental concern and perceived environmental effectiveness variables on consumption behavior (Aydin, 2016; Lee, 2008; Ndubisi, 2013). In contrast in some developing countries consumers are more concerned about costs and their own benefit rather than environmental issues; in other words economy and savings have such importance that they are reluctant to risk for preserving environmental values (Carrete et al.2012). Nonetheless, refined deep cultural values still affect their purchasing behavior:

H₃: Environmental concern and consumer's perceived self-effectiveness (internal moderators) have positive influence on green consumption behavior.

2.2.4 External Moderators

The main external moderators affecting purchasing behavior are promotion of government and enterprise and availability of green products (Zhao et al., 2013). Some customers believe that only government and enterprises are the main role players of environmental protection (Chan, 2001). Others believe that it is not only the government that has the duty of saving the surrounding environment, but both government and institutions are the most important motivators in each society to make people choose, use, and behave green (Kollmuss and Agyeman, 2002). However Hale (2010) believed that political leaders never take appropriate and on time approach towards environment and unfortunately, government and corporations would not be able to counter and tackle the environmental problem. The lack of adequate green marketing strategies is another reason for not using the environmental friendly products.

Despite efforts and research done on this matter, green products have only obtained 4% of the market share (Ritter et al. 2015). This might be related to the gap existing

between attitude and actual purchase behavior (Zsoka, 2008) while other research attributed this shortage to the gap between customer perception and related marketing mix such as designing green products, indicating green segments, and positioning green goods (Spana and Desore, 2015). Specific traits should be designed to separate green products from conventional ones appropriately. Investigating on green consumption behavior is strongly aligned with health effects expected from utilizing green products; in spite of intense correlation between environmental consciousness and attitude and purchasing behavior, people put less weight on price and quality (Ritter et al. 2015). Because consumers have less access to green products, it is a barrier for green consumption (Bonini and Oppenheim, 2008). Information about environmental friendly products and point-of-sale availability would increase their market share (Maheshwari, 2014; Ritter et al.2015). Marketing and promotion of green purchasing can diminish the existing gap between intention and action toward green consumption. More representation and offering and pro-environmental traits would bring more reputation for green products. Health care concerns and perceived performance expectation can be addressed if the green products be released by well-known and reputed brands (Liobikiene and Bernatoniene, 2017; Maheshwari, 2014; Ritter et.al.2015).

Thus, considering the promotional activities taken into consideration by government and/or marketers as external factors, their impact on green consumption behavior will also be tested by the following hypothesis:

H₄: External moderators will positively influence green consumer behavior.

The model below is used to illustrate the important factors which affect green purchasing behavior. The model displays the relationships between green consumer

behavior (the dependent variable) and the important factors influencing green consumption behavior (independent variables) of the study.

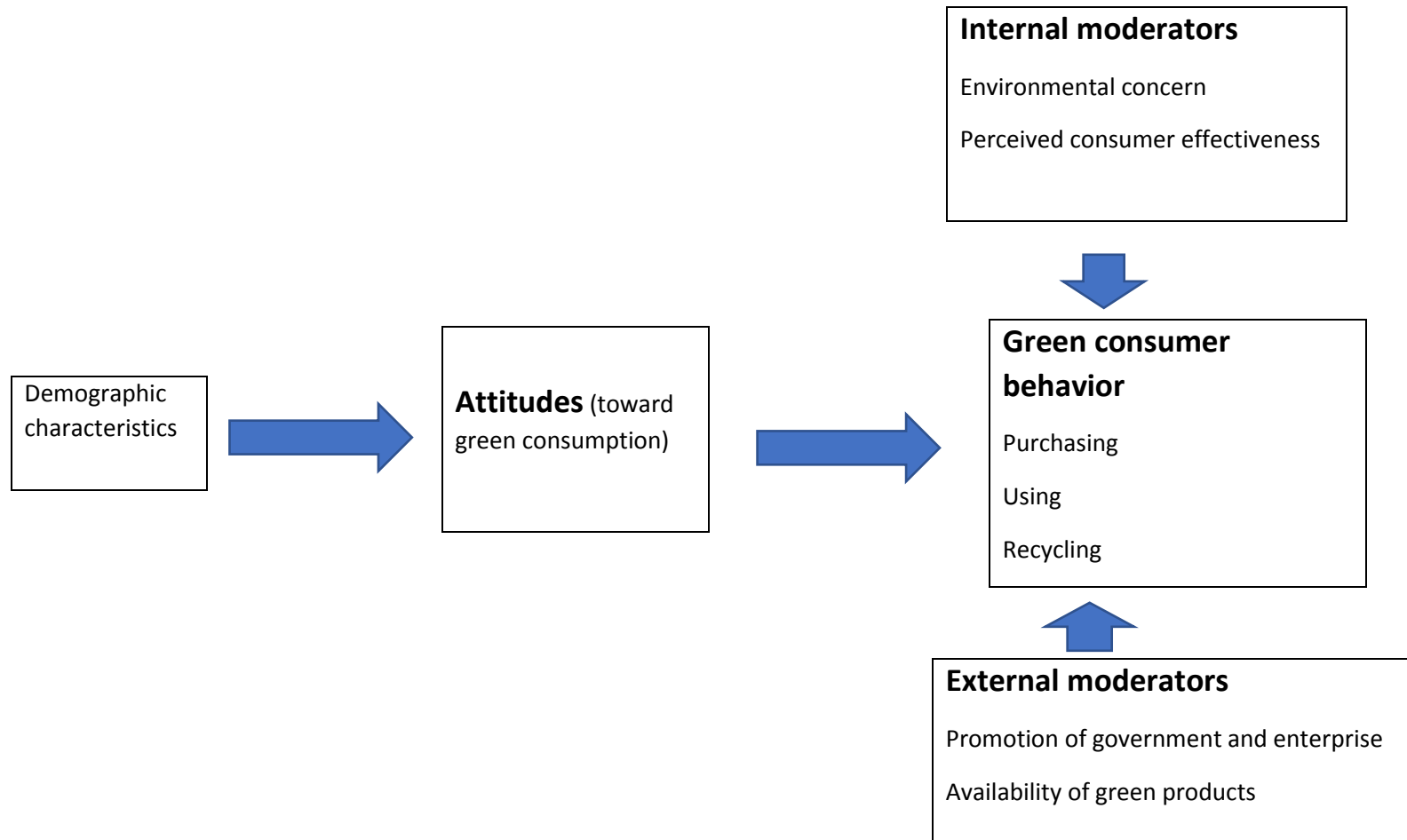


Figure 1: Factors influencing green consumer behavior

Chapter 3

METHODOLOGY

A framework that had been introduced by Rylander and Allen (2001) and also utilized by Zhao et al. (2013) is used in this study. This framework illustrates a sequence of motivators affecting green consumption behavior. The model of the current study is adopted from this framework and supported by the relevant literature (Zhao et al., 2013). As it is seen in Figure 1, demographic traits are considered as a fundamental element in directing a person to a particular action (behavior towards green products) by influencing the attitudes of consumers. In addition to the attitudes of consumers', internal and external factors also influence the green consumption behavior (see Figure 1). The attitude construct is composed of two sub-elements of cognition and affection. As this intention toward green consumption behavior is essentially a fragile concept and in many cases, a variety of inconsistencies have been observed between attitude and real behavior, so some internal and external moderators are applied to be examined whether or not they are applicable and function as reinforcing the individual's attitude. In terms of internal moderators, there are two subsections of the concern people show towards the environment as well as the extent to which they feel are able to do something for their concern. Regarding the external moderators, the role of government and marketing activities have been probed in this study.

3.1 Questionnaire

In order to answer the research questions of the study, a questionnaire is developed. In the first section of the questionnaire respondents were asked demographic questions

such as age, gender, students' educational level and monthly income. Six questions are adopted from Zhao et al.'s (2013) study for the attitude scale. Since this survey is based on every individual's self-claimed opinion about each of statements, to be precise and avoid probable dissonances, for three of these six questions reverse statements are used. Attitude, as mentioned before, is the most repeated factor affecting the green consumption behavior, thus indicating three reverse statements measured through reverse scale, would function as an adequate tool to extract the real intention each participant has towards utilizing green products.

Internal and external moderators are measured by adopting 8 questions from the Zhao et al. (2013) study. For environmental concern scale, 3 questions and for perceived consumer effectiveness scale 2 questions are used. A reverse statement is used in the scale of perceived consumer effectiveness. For external moderator scale 3 statements are used.

In the last section of the questionnaire where green consumer behavior is measured 7 questions are used. The scale is revised to reflect the possible behavior of EMU students and a statement saying "I always recycle plastic bottles/caps" is added. Respondents were asked to indicate to what extent they agree or disagree with 21 statements by using a 5-point Likert scale (1, strongly disagree; 2, disagree; 3, neutral; 4, agree; 5, strongly agree).

This research is conducted with the Eastern Mediterranean University students. Pilot testing is conducted with randomly selected 50 students. Since there were no major problems with the wording of the questionnaire no changes have been made on the questionnaire.

3.2 Participants

This study, by using convenience sampling technique, is conducted at the Eastern Mediterranean University where close to 18,000 students from 106 different countries meet (www.emu.edu.tr,2018). 260 respondents from different faculties (business, economics, finance, tourism, architecture, etc.), different nationalities and various programs (bachelor's, master's, and doctorate) completed the survey. Statistical analyses are conducted by utilizing SPSS (statistics version 23). A comprehensive descriptive statistic about respondents as well as the results of correlation and regression tests are presented in the next chapter.

Chapter 4

EMPIRICAL FINDINGS

4.1 Data Analysis

Reliability test results of the constructs that are displayed in Table 1 show that the items by which the variables are measured are all reliable. According to Landis and Koch (1977) these reliability scores are between the ranges of “necessary” (0.61-0.80) to “full-scale” (0.81-1.00). It should also be mentioned that the lowest score, score of perceived consumer self-efficacy could be due to the low number of items used measuring this sub-variable.

Table 1: Reliability test

Constructs	Cronbach's alpha
Attitude toward Green consumption	0.716
Internal moderators	0.746
• Concern toward environment	0.758
• Perceived consumer self-efficacy	0.578
External moderators	0.779
Green purchase behavior	0.855

4.2 Descriptive Analysis

The demographic profile of all respondents is represented in Table 2. Since this study has been conducted at the Eastern Mediterranean University, majority of respondents (74%) is between 18 and 27 years old. Less than 5% of respondents are 17 years old

or younger, 45% are between 18 and 22 years old, 29% are between 23-27 years old, 9% of respondents are between 28-32 years old and almost 13% of them are 33 years old or older. More than half of participants are undergraduate students (55%), 21% of them are doing their masters and almost 24% are Ph.D. students. Fifty seven percent of the respondents are male and 43% are female. In terms of income 44% of the respondents obtain less than \$300 per month, 32% of the respondents obtain \$301-600 monthly, while 7% of the respondents obtain \$601-900 monthly, 7% of the respondents obtain \$901-1200 monthly, and almost 9% gain more than \$1200 monthly.

Table 2: The profile of respondents (N=260)

	Number	percentage
Age		
17 and below	12	4.6
18-22	117	45
23-27	74	28.5
28-32	24	9.2
33 and above	33	12.7
Gender		
Male	147	56.5
Female	113	43.5
Education level		
Bachelor	144	55.4
Master	54	20.8
Doctorate	62	23.8
Income \$		
Less than 300	114	43.8
301-600	84	32.3
601-900	19	7.3
901-1200	19	7.3
1201-1500	2	0.8
More than 1500	22	8.5

The mean and standard deviation of the constructs of the study are presented in Table 3. According to table 3, respondents of the study agreed with the internal factors the most and indicated almost neutral with green consumer attitudes. When the components of internal factors are analyzed it is seen respondents agreed the most with concern toward environment rather than perceived consumer effectiveness (Table 3). In terms of internal factors, students are just worried about their surrounding environment and the mean of their concern about the environment (3.67) implies their dissatisfaction about what is happening for the nature, surprisingly enough they believe they cannot play an effective role in making it better or at least preventing more damage individually though. The mean of perceived consumer effectiveness (or self-efficacy) is 3.06. In other words, when it comes to worrying, they are concerned about the environment but dealing with the problem, they attach greater importance to government and promotional activities to moderate their real behavior in order to act more eco-friendly.

Green purchase behavior includes three subsections of purchasing, using, and recycling. In terms of green behavior, the respondents indicated that they agree the most with the purchasing behavior and indicated weaker agreement with using and recycling components of green behavior (Table 3). In other words, students intend to buy more efficient products to cut down their long-term costs of water and electricity (mean: 3.66) however, they would pay less attention to using behavior. For instance, they may sometimes use disposable tableware or not use both sides of a paper. And finally, the least score is given to recycling behavior (3.15) which implies students do not care that much about the wastes remaining after their usage. It is acceptable and somehow logical since here in Famagusta there is no specific promotional activity or strict legislations for gathering, separating, or reusing the wastes like empty bottles or

cans. Nonetheless, the score related to the attitude which is unexpectedly low (3.12) confirms this issue.

Table 3: Descriptive statistics of the constructs (N=260)

Variables	Mean	S. Deviation
Attitude toward Green consumption	3.12	0.72
Internal moderators	3.65	0.87
• Concern toward environment	3.67	0.96
• Perceived consumer self-efficacy	3.06	0.88
External moderators	3.50	0.94
Green behavior	3.38	0.81
• Purchasing behavior	3.66	1.12
• Using behavior	3.32	0.90
• Recycling behavior	3.15	1.02

4.3 Correlation Results

Tables 4-7 illustrate the results of relationships existing amongst demographics (Table 4), demographics and three aspects of green consumer behavior (GCB) (Table 5), demographics, green attitudes, green behavior (Table 6), and relationships of the study variables (Table 7).

According to correlation coefficients displayed in (Table 4) age is correlated with education level and income with the coefficients of 0.439 and 0.320 respectively. Education level shows a weaker relation with income with the coefficient of 0.179 ($p < .01$). Gender is not correlated with other demographic features.

Table 4: Correlation between demographics

	Age	Gender	Education level	Income
Age		0.006	0.439**	0.320**
Gender			0.090	-0.049
Education level				0.179**

** . Correlation is significant at the 0.01 level (2-tailed).

Among the demographic traits, age is positively correlated with education level, attitude, and GCB with the coefficient of 0.439, 0.331, and 0.337 respectively ($p < .05$). In terms of three aspects of GCB, age has statistically significant positive relationship between all green consumer behavior components but these relationships are all weak. However, the relatively stronger relationship exists between age and purchasing behavior (0.343, $p < .01$). Gender and income have weak positive correlations with attitude (Table 6). Education level has positive but very weak relationships with green attitude and green behavior ($p < .01$) (see Table 6). However, education level shows a relatively stronger correlation with green behavior (Table 6). As seen in Table 5, education level has the strongest relationship with using behavior among the three green consumer behaviors ($p < .01$). Attitude and green behavior has positive and strong relationship between them (Table 6, $r = .688$, $p < .01$).

Table 5: Correlation between demographics and three green behaviors

	Purchasing	Using	Recycling
Age	0.343**	0.301**	0.286**
Gender	0.047	0.178**	0.131*
Education level	0.194**	0.242**	0.162**
Income	0.089	0.018	0.025

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Table 6: Correlation between demographics, green attitude, and green behavior

	Attitude	Green behavior
Age	0.331**	0.337**
Gender	0.238**	0.119
Education level	0.166**	0.237**
Income	0.148*	0.053
Attitude	-	0.688**

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

All the variables of the study (attitude, environmental concern, perceived self-efficacy, external moderators), and three aspects of GCB are significantly correlated to each other ($P < 0.01$). Among the variables, attitude and environmental concern are statistically correlated to each other and have the highest correlations to other constructs too. The greatest observed correlation coefficient is between attitude and environmental concern (Table 7, $r = 0.678$, $p < 0.01$). When GCB categories are considered, environmental concern (Table 7, $r = 0.644$, $p < 0.01$) and attitude (Table 7, $r = 0.641$, $p < 0.01$) are significantly correlated with the using behavior respectively. Attitude also has a meaningful significant correlation with purchasing behavior ($r = 0.602$, $p < 0.01$) which implies that intrinsic tendency towards green products would play a positive role among students in order to prefer green products rather than the conventional ones.

The external moderators has positive medium correlation with purchasing ($r = 0.588$, $p < 0.01$) and using ($r = 0.582$, $p < 0.01$). Moreover, purchasing and using are significantly correlated ($r = 0.653$, $p < 0.01$) which means the students who are cautious about what they buy, are more possibly sensitive about the way of utilizing the green products.

Table 7: Correlation between variables

	Environmen tal concern	PCE	Extern al M.	Purchasi ng	Using	Recycli ng
Attitude	.678**	.624* *	.676**	.602**	.641**	.463**
Environmental Concern		.563* *	.642**	.599**	.644**	.354**
PCE			.578**	.444**	.494**	.328**
External M.				.588**	.582**	.418**
purchasing					.653**	.465**
Using						.584**

** . Correlation is significant at the 0.01 level (2-tailed).

PCE: perceived consumer effectiveness

4.4 Regression Results

GCB has three components of purchasing, using, and recycling behavior. In order to find out which factors have influence on purchasing, using, and recycling behavior, three regression analyses are run (Tables 8-10). All of the models are found to be statistically significant indicating that they are correctly conducted.

According to Table 8, almost 46% of the variation in purchasing behavior is due to the environmental concern (B=.271, t=4.07, p<.00), attitudes towards green consumption (B=.255, t=3.689, p<.00) and external moderators (B=.241, t= 3.632, p<.00).

Table 8: Regression of purchasing behavior

	Beta	T	sig
Attitude	0.255	3.689	0.000
Environmental concern	0.271	4.073	0.000
External M	0.241	3.632	0.000
F-statistic	72.121	R-squared	0.458
Model significance			0.000

According to table 9, attitude, perceived consumer effectiveness, and purchasing behavior influence using behavior. Close to 54% of the variation in using behavior is due to the purchasing behavior ($B=.372$, $t=6.6$, $p<00$), attitudes towards green consumption ($B =.355$, $t=6.4$, $p<.00$), and perceived green effectiveness ($B=.135$, $t=2.6$, $p<.01$).

Table 9: Regression of using behavior

	Beta	t	Sig
Attitude	0.355	6.411	0.000
PCE	0.135	2.633	0.009
Purchase	0.372	6.605	0.000
F-statistic	98.261	R-squared	0.535
Model significance			0.000

PCE: perceived consumer effectiveness

As displayed in table 10, attitude and using behavior are the only two factors influencing the recycling behavior. Recycling behavior is strongly influenced by using behavior. Close to 35% of the variation in recycling behavior is due to the using behavior ($B=.487$, $t=7.5$, $p<00$) and attitudes towards green consumption ($B =.150$, $t=2.3$, $p<.05$).

Table 10: Regression of recycling behavior

	Beta	t	Sig
Attitude	0.150	2.302	0.022
Using behavior	0.487	7.457	0.000
F-statistic	70.386	R-squared	0.354
Model significance			0.000

Table 11 illustrates the results of the last regression analysis that is run on the overall GCB with all of the scales of the study. Little bit more than 62% of the variation in green consumer behavior is influenced by internal moderators (B=.382, t=6.97, p<.00), attitudes towards green consumption (B=.321, t=5.66, p<.00), external moderator (B=.166, t=2.91, p<.00), educational level (B=.135, t=3.39, p<.00) and income (B=.101, t=-2.52, p<.05). The internal moderator and attitude are the most affective factors on overall green consumer behavior.

Table 11: Regression of GCB

	Beta	t	Sig
Educational level	0.135	3.388	0.001
Income	0.101	-2.519	0.012
Attitude	0.321	5.660	0.000
Internal M	0.382	6.967	0.000
External M	0.166	2.911	0.004
F-statistic	83.312	R-squared	0.621
Model significance			0.000

Chapter 5

DISCUSSION AND CONCLUSION

5.1 Discussion

This study examined two main research questions: 1) what are the factors influencing green consumption behavior of EMU students and (2) to what extent each of these factors is effective on green consumption behavior. For the first question, after reviewing the relevant literature, a model including 5 constructs of the most repeated and common variables are proposed. These factors include demographics, attitudes toward green consumption, internal and external factors. Following the discussions in the literature, it is argued that (1) demographic traits, as the basic characteristics upon which people act (or react), influence EMU students' attitudes toward green consumption; (2) attitudes, internal and external moderators influence green consumer behavior of EMU students.

In this study, while the internal construct included environmental concern of the consumers and perceived consumer effectiveness; the external construct included promotion of government and availability of green products. In order to answer second research question of the study in detail, three components of green consumer behavior is used. The dependent variable of the study, green consumption behavior, is operationalized by purchasing, using, and recycling behaviors. Purchasing is almost about the expenses customers bear while using behavior is under the effect of individual's habits and lifestyle, and recycling is an advantageous and rewarding

practice by which a consumer achieves either emotional and beneficial results (Wang, 2010). Different motivators are controlling these three behaviors that are explained in detail in this section. In this research purchasing behavior is operationalized by buying the energy saving appliances that are used at home such as high efficiency light bulbs and etc. Using behavior is operationalized by less water consumption, reusing of paper or plastic bags, using both sides of a paper, and using disposable tableware. Recycling behavior is operationalized by gathering plastic water bottles and their caps.

High mean scores achieved for environmental concern and purchasing behavior imply that students are eager about their surrounding environment and they are for instance willing to buy high efficient light bulbs and energy saving household appliances which are in accordance to research done by Akehurst et al (2012). A medium score of external moderators and using behavior would indicate that students are willing to change their using habits and lifestyle provided that some extrinsic promotions or laws stimulate or put pressure on them (Kollmuss and Agyeman, 2002). For instance, using both sides of the papers would be applicable if professors encourage the students in this matter or water consumption or using the disposable products would decrease if their prices increase.

Demographic features, as a base for the green attitude and behavior indicate relatively low correlations according which all demographic traits are correlated with the attitude. Age and gender are more influential elements of forming the attitude while for the green behavior educational level and income are significant. Age does have the greatest correlation with GCB and since almost 80% of respondents are below 27 years old, so it can be concluded that young generation is more concerned about the

environment and interested in the green products which are a proof for the study was done by Van Liere and Dunlap(1980).

There is a strong correlation between attitude and green behavior while demographics seem to contribute less in promoting positive green attitude and behavior, therefore, it is essential to figure out other possibly incentive factors to be implemented in order to incline the students towards the greenness. In terms of attitude, it seems to be effortful to conduct a comprehensive, stimulating practice to induce an international community with different cultures, beliefs, and backgrounds. Whereas, properly scheduled programs and training in addition to preparing facilities and capacity for the recycling activities might be helpful to boost the level of individual's perceived self-effectiveness in terms of saving the environment.

There is also strong relationship between attitude and green behavior and as Sears et al. (1985) attributed durability to the consumers' intentions, the results in this study proved that entering other factors would influence more on consumers' green behavior though. This is in accordance with Zsoka (2008) who denoted a gap exists between attitude and behavior that should be filled by utilizing other elements such as internal and external factors.

Students who are more concerned about the environment intend to behave more eco-friendly but the extent to which they feel self-effectiveness might function as a barrier in terms of going for greenness. As Aydin (2016), Lee (2008), and Ndubisi, (2013) emphasized that in Asian and African societies, environmental concerns and consumers' self-efficacy are among the most important variables on consumption behavior, thus applying practices in order to enhance students' self-confidence

regarding saving the environment seems vital. They should be aware of each and every person's effects on the surrounding area by the choices they make especially in terms of purchasing and recycling behavior.

Results show that external moderators are more correlated with purchasing and using behavior as they are significantly influential on purchasing behavior which is, in fact, acceptable in real life, therefore, government and marketers should pay more attention to green products' promotion and expansion of the point-of-sale in this regard.

Lastly, three aspects of green behavior among students are influenced differently by entering various predictors into the regression models. Environmental concern, attitude, and external moderators are respectively significant and more influential factors. Considering T- values for each, improvement and investigations on extrinsic elements would affect on students' intentions toward green behavior specifically in terms of purchasing the green products which are consonant with research done by Spana and Desore (2015); Maheshwari, (2014); and Ritter et al. (2015).

Using behavior is directly under the effect of purchasing behavior, attitude, and perceived consumer effectiveness. Student intentions and perceived self-efficacy have a significant influence on green using behavior. Thus the obvious inductive result is that working on students' self-perceived effectiveness would rise their green using behavior significantly.

Attitude has its own reinforcing effect, though clearly, the purchasing behavior is the most influential factor in this matter. It clearly means that if students' attitude is moderated in terms of their green purchase behavior through stimulating factors like

environmental concern and external optimizations, then their self-confidence would be exalted and would increase their intention to demonstrate green using behavior consequently (Kim and Choi, 2005; Tran, 2017). Nonetheless, according to Chan, (2001) and Huang et al. (2006) making improvement in peoples 'self- perceptions like attitude which are somehow intertwined factors would need an endeavor.

In regard to recycling behavior, using behavior alongside the attitude are the determinant factors. It implies that students who are cautious about their using patterns are more willing to contribute to recycling activities. Indeed, in such communities that consumers (students) are highly price sensitive, then recycling practices accompanied by monetary rewards such as pay back for empty bottles and cans would be highly enthusiastic. Lack of needed infrastructures is the reason for only the using behavior and attitude being significant factors in this regard.

With respect to green consumption behavior as a whole concept, all the predictor constructs, as well as educational level and income, are significantly influential. Internal moderators and attitude are still the most affecting elements but the interesting fact is that when it comes to considering the compact impact of constructs, education level would play even the stronger role than external factors.

Eventually unlike the findings of China by Zhao et al. (2014), students in Eastern Mediterranean University are more careful about their purchasing behavior rather than using and recycling activity. Lack of facilities to recycle the remaining of products and low degree of self-efficacy can be the reasons in these matters.

5.2 Conclusion and Recommendations

Based on a model represented in this study, the relationship between main constructs of demographic and psychographic variables including attitude, internal and external scales are measured. Correlation and regression results clarified the pattern of these relationships. The impact of each scale and the various bundle of them on green consumption behavior as well as its three aspects (purchase, use, recycle) were discussed and explicitly explained. New enterprises and potential businesses can take them into account and be informed of influential factors on consumers' behavior would provide them strategies to make a differentiation.

Scrutinizing the students' purchasing behavior advantageous for marketers. In addition to providing consumers with an appropriate marketing mix, working on their attitude toward green products and educating them in order to elevate their perceived self-effectiveness in regard to environment seem inevitable. In such international societies aiming the right intrinsic points which are common among humankind like their environmental and health concerns, as well as consonant beliefs, can be a feasible solution.

To promote eco-friendly products indicating a specific section for green customers in the hypermarkets would be an accurate and smart strategy for market segmentation and even applicable to expand this market by encouraging conventional consumers towards greenness. Informing new generation of consumers like students even with less income and environmental and health concerns and making them aware of green behavior effects in long-term periods would be possibly convincing. Marketers should also aim students' lifestyle and regular habits to achieve the green loyalty in a long

run. Based on previous studies low market share for green products across the world (only 4%) is due to less information about them as well as their unavailability (Ritter et al. 2015; Bonini and Oppenheim, 2008). This is also true for the students that can be resolved through public campaigns and be offering green products at their best convenience.

Lowest mean scores for recycling behavior, attitude, and perceived self-efficacy denoted that either the students do not care about reusing/ recycling the paper/plastic bags or they think these kind of activities are not practical. It also shows that they are keen or intended to go for these helpful behaviors.

This issue can be taken under the consideration by the policy makers, producers, and more importantly by educators. For instance, in the case of this study's area investigating on recycling machines and installing them in different departments as well as the campus would be encouraging and beneficial for both students and the university. Regarding using habits and altering them for the better, professors can play an essential role as the leading groups and be embedding some relative courses to each program would be helpful. Professors in the university also are able to change some of students' using habits. For instance, utilizing the technology as a tool to consume less educational materials like papers for teaching and encouraging the students to use both sides of the papers for their assignments in case the hard copy is needed are among the recommended solutions. Indeed, adhering to such activities would influence the purchasing behavior as the first circle of the green behavior chain. Governors in the society as whole and managers in the Eastern Mediterranean University should be aware that in such communities, provided that the predominant culture and regulations

were rich and strong, then all the members regardless their previous habits and lifestyles would be more willing to be obedient.

Policy makers and governors should focus on using and recycling parts of citizen behaviors. Practical regulation and laws aligned with public facilities would help residents to change their using habits and contribute to recycling practices. Educating people about the surrounding environment and encouraging them to act eco-friendly can be beneficial for the environment, every individual, and the society at whole.

In the community of students and the city of Famagusta where the shortages in terms of external factors are obvious, then education level would be translated to environmental knowledge and function as the more influential issue. Therefore, investment on extrinsic incentives aligned with extra training to enhance students' environment knowledge and making them aware of their consumption pattern effects on the environment are among the best-recommended strategies to be taken into the consideration.

Indeed the model represented in this study includes shortcomings in terms of introduced constructs and the items by which these constructs are measured. Moreover, as it mentioned before in such international community with the variety of cultures, rituals, and backgrounds there are limitations to define a comprehensive method to subtly clarify the variables like attitude. Indeed, to get better results larger samples could be considered. In addition to more detailed structure, further studies should consider indigenous constructs and factors as well as the different and larger sample of permanent residents to obtain pervasive requirement results in regard to green consumption behavior.

REFERENCES

- Ajzen, I. (1991). The theory of planned behavior. *Organizational behavior and human decision processes*, 50(2), 179-211.
- Akehurst, G., Afonso, C., & Gonçalves, H. M. (2012). Re-examining green purchase behaviour and the green consumer profile: new evidences. *Management Decision*, 50(5), 972-988. doi:10.1108/00251741211227726
- Arvola, A., Vassallo, M., Dean, M. (2008). Predicting intentions to purchase organic food: the role of affective and moral attitudes in the theory of planned behavior. *Appetite*, 50 (3), 443e454.
- Bhatia, M., & Jain, A. (2013). Green marketing: A study of consumer perception and preferences in India. *Electronic Green Journal*, 1(36).
- Carrete, L., Castaño, R., Felix, R., Centeno, E., & González, E. (2012). Green consumer behavior in an emerging economy: confusion, credibility, and compatibility. *Journal of Consumer Marketing*, 29(7), 470-481.
- Carstensen, L. L., Isaacowitz, D. M., & Charles, S. T. (1999). Taking time seriously: A theory of socioemotional selectivity. *American psychologist*, 54(3), 165.
- Chamorro, A., Rubio, S., & Miranda, F. J. (2009). Characteristics of research on green marketing. *Business Strategy and the Environment*, 18(4), 223-239.

- Chan, R. Y. (2001). Determinants of Chinese consumers' green purchase behavior. *Psychology & marketing*, 18(4), 389-413.
- Chan, R. Y., & Lau, L. B. (2000). Antecedents of green purchases: a survey in China. *Journal of consumer marketing*, 17(4), 338-357.
- Coleman, L.J., Bahnan, N., Kelkar, M., & Curry, N. (2011). Walking the walk: how the Theory of Reasoned Action explains adult and student intentions to go green. *Journal Applied Business Research*, 27.
- Collins, C.M., Steg, L., & Koning, M.A.S. (2007). Customers' values, beliefs on sustainable corporate performance, and buying behavior. *Psychology and Marketing* 24 (6), 555–577.
- Dunlap, R., & Van Liere, K. (1978). The "new environmental paradigm": A proposed measuring instrument for environmental quality. *Social Science Quarterly*, 65, 1013-1028.
- Elliott, R. (2013). The taste for green: The possibilities and dynamics of status differentiation through "green" consumption. *Poetics*, 41(3), 294-322.
- Eze, U. C., & Ndubisi, N. O. (2013). Green Buyer Behavior: Evidence from Asia Consumers. *Journal of Asian and African Studies*, 48(4), 413-426.
- Fishbein, M., & Ajzen, I. (1980). Understanding attitudes and predicting social behavior.

- Furlow, N. & Knott, C. (2009). Who's reading the label? Millennials' use of environmental product labels. *The Journal of Applied Business and Economics*, 10, 1–12.
- Gadenne, D., Sharma, B., Kerr, D., & Smith, T. (2011). The influence of consumer's environmental beliefs and attitudes on energy saving behaviours. *Energy Policy*, 39(12), 7684-7694.
- Gilg, A., Barr, S., & Ford, N. (2005). Green consumption or sustainable lifestyles? Identifying the sustainable consumer. *Futures*, 37(6), 481-504.
- Gonçalves, H. M., Lourenço, T. F., & Silva, G. M. (2016). Green buying behavior and the theory of consumption values: A fuzzy-set approach. *Journal of Business Research*, 69(4), 1484-1491.
- Gordon-Wilson, S., & Modi, P. (2015). Personality and older consumers' green behaviour in the UK. *Futures*, 71, 1-10. doi:10.1016/j.futures.
- Hale, S. (2010). The new politics of climate change: why we are failing and how we will succeed. *Environmental Politics*, 19(2), 255-275.
- Hines J., Hungerford H., & Tomera, A. (1987). Analysis and synthesis of research on responsible environmental behavior: a meta-analysis. *Journal of Environmental Education*, 18, 1–8.

- Huang, P.S., Zhang, X.L., & Deng, X.D. (2006). Survey and analysis of public environmental awareness and performance in Ningbo, China: a case study on household electrical and electronic equipment. *Journal of Cleaner Production* 14 (18).
- Kim, Y., Choi, S.M. (2005). Antecedents of green purchase behavior: an examination of collectivism, environmental concern, and PCE. *Advances in Consumer Research*, 32 (1).
- Kong, W., Harun, A., Sulong, R.S., & Lily, J. (2014). The influence of consumers' perception of green products on green purchase intention. *International Journal of Asian Social Sciences*, 4.
- Kumar, P., & Bhimrao M. (2015). "Factors affecting consumers' green product purchase decisions." *Marketing Intelligence & Planning* 33(3), 330-347.
- Kumar, P., & Ghodeswar, B. M. (2015). Factors affecting consumers' green product purchase decisions. *Marketing Intelligence & Planning*, 33(3), 330-347.
- Landis, J.R., Koch, G.G., 1977. The measurement of observer agreement for categorical data. *Biometrics* 33 (1), 159-174.
- Lee, K. (2008). Opportunities for green marketing: young consumers. *Marketing Intelligence & Planning*, 26(6), 573-586. doi:10.1108/02634500810902839

- Lin, D., & Chen, H. (2016). A Review of Green Consumer Behavior Based on the Social Perspective. *Theoretical Economics Letters*, 6(05), 1088.
- Lin, H., & Hsu, M. (2013). Using Social Cognitive Theory to Investigate Green Consumer Behavior. *Business Strategy and the Environment*, 24(5), 326-343. doi:10.1002/bse.1820
- Lin, P., & Huang, Y. (2012). The influence factors on choice behavior regarding green products based on the theory of consumption values. *Journal of Cleaner Production*, 22(1), 11-18. doi:10.1016/j.jclepro.2011.10.002
- Liobikienė, G., & Bernatoniene, J. (2017). Why determinants of green purchase cannot be treated equally? The case of green cosmetics: Literature review. *Journal of Cleaner Production*, 162, 109-120. doi:10.1016/j.jclepro.2017.05.204
- Liobikienė, G., & Dagiliutė, R. (2016). The relationship between economic and carbon footprint changes in EU: the achievements of the EU Sustainable Consumption and Production policy implementation. *Environ. Sci. Policy*, 61.
- Liu, J., Wang, R., Yang, J., & Shi, Y. (2010). The relationship between consumption and production system and its implications for sustainable development of China. *Ecol. Complex*, 7.
- Majumdar, S., & Swain, S.C. (2015). Identification and analysis of factors influencing preferences for green products: a study in and around Kolkata (India).

International Journal of Business Quantitative Economics and Applied Management Research, 1 (9).

Mostafa, M. M. (2007). Gender differences in Egyptian consumers? Green purchase behavior: the effects of environmental knowledge, concern and attitude. *International Journal of Consumer Studies*, 31(3), 220-229.

Narula, S. A., & Desore, A. (2016). Framing green consumer behavior research: opportunities and challenges. *Social Responsibility Journal*, 12(1), 1-22.

Olli, E., Grendstad, D., & Wollebark, D. (2001). Correlates of environmental behaviors: bringing back social context. *Environment and Behavior*, 33, 181-208.

Ozaki, R., & Sevastyanova, K. (2011). Going hybrid: An analysis of consumer purchase motivations. *Energy Policy*, 39(5), 2217-2227.

Paço, A. D., Alves, H., Shiel, C., & Filho, W. L. (2013). Development of a green consumer behaviour model. *International Journal of Consumer Studies*, 37(4), 414-421. doi:10.1111/ijcs.12009

Peattie, K. (2010). Green consumption: behavior and norms. *Annual Review of Psychology and Marketing*, 18 (4).

Pinto de Moura, A., Cunha, L. M., Castro-Cunha, M., & Costa Lima, R. (2012). A comparative evaluation of women's perceptions and importance of

sustainability in fish consumption: An exploratory study among light consumers with different education levels. *Management of Environmental Quality: An International Journal*, 23(4), 451-461.

Rahnama, H., & Rajabpour, S. (2017). Identifying effective factors on consumers' choice behavior toward green products: the case of Tehran, the capital of Iran. *Environmental Science and Pollution Research*, 24(1), 911-925.

Ritter, M., Borchardt, M., Vaccaro, G. L., Pereira, G. M., & Almeida, F. (2015). Motivations for promoting the consumption of green products in an emerging country: exploring attitudes of Brazilian consumers. *Journal of Cleaner Production*, 106, 507-520. doi:10.1016/j.jclepro.2014.11.066

Roozen, I., & De Pelsmacker, P. (2000). Polish and Belgian consumers' perception of environmentally friendly behaviour. *International Journal of Consumer Studies*, 24(1), 9-21.

Rylander, David H., Allen, C. (2001). Understanding green consumption behavior: toward an integrative framework. In: *American Marketing Association Winter Educators' Conference Proceedings*.

Schwartz, S. H. (1977). Normative influences on altruism. *Advances in experimental social psychology*, 10, 221-279.

Sheth, J. N., Newman, B. I., & Gross, B. L. (1991). Why we buy what we buy: A theory of consumption values. *Journal of business research*, 22(2), 159-170.

- Sparks, P., & Shepherd, R. (1992). Self-identity and the theory of planned behavior: Assessing the role of identification with "green consumerism". *Social psychology quarterly*, 388-399.
- Stern, P. C. (2000). New environmental theories: toward a coherent theory of environmentally significant behavior. *Journal of social issues*, 56(3), 407-424.
- Subhani, M.I., Hasan, S.A. & Osman, A. (2012). The crux of green marketing: an empirical effusive study. *European Journal Social Sciences*. 27 (3).
- Sutton, P. (2004). A perspective on environmental sustainability. *Paper on the Victorian Commissioner for Environmental Sustainability*, 1-32.
- Tran, A. H. (2017). Consumers' behavior towards green purchase intention. *Actual Problems in Economics*, (188), 151.
- Vicente-Molina, M. A., Fernández-Sáinz, A., & Izagirre-Olaizola, J. (2013). Environmental knowledge and other variables affecting pro-environmental behaviour: comparison of university students from emerging and advanced countries. *Journal of Cleaner Production*, 61, 130-138.
- Wang, J.M. (2010). Consumers' Resource-saving & Environment-protecting Behavior and Its Mechanism. China Social Science Press, Beijing.

Young, W., Hwang, K., McDonald, S., & Oates, C. (2009). Sustainable consumption: green consumer behavior when purchasing products. *Sustainable Development* 18 (1).

Zhao, H. H., Gao, Q., Wu, Y. P., Wang, Y., & Zhu, X. D. (2014). What affects green consumer behavior in China? A case study from Qingdao. *Journal of Cleaner Production*, 63, 143-151.

About EMU. (2018). Retrieved from <https://www.emu.edu.tr/north-cyprus-universities>

APPENDIX

Appendix A: Questionnaire

This questionnaire aims to generate information for my thesis in marketing management. All responses are anonymous so please answer as honestly as possible. The questionnaire will only take five to ten minutes to complete. For ethical reasons, if you start to feel uncomfortable at any point of the questionnaire, feel free to quit. Please be informed that your participation constitutes consent. Your feedback is important. Thank you for participating.

ALI HASSANZADEH SHARKANLO

Age	3-27 <input type="radio"/>	8-32 <input type="radio"/>	3 and above <input type="radio"/>	17 and below <input type="radio"/>	18-22 <input type="radio"/>	
Gender	Male <input type="radio"/>	Female <input type="radio"/>				
Program	Bachelor's <input type="radio"/>	Master's <input type="radio"/>	Doctorate <input type="radio"/>			
Personal monthly income(\$)	more than 500 <input type="radio"/>	1000-1500 <input type="radio"/>	1200 <input type="radio"/>	501-900 <input type="radio"/>	301-600 less than 300 <input type="radio"/>	

		Strongly disagree	Dis-agree	Neutral	Agree	Strongly agree
No	Please rate your satisfaction with the following statements	1	2	3	4	5
1	It is more convenient to buy new household electrical appliances than to repair them.					
2	The resource consumed by myself is very less and it won't cause any pollution to the environment.					
3	It is no need to persuade others to get involved in green behavior.					
4	It seems very attractive to center on water and electricity conservation for household products.					
5	It is very important to stage a vigorous drive for the green behavior.					
		Strongly disagree	Dis-agree	Neutral	Agree	Strongly Agree
No	Please rate your satisfaction with the following statements	1	2	3	4	5
6	I am supportive for the system of "pay for using plastic bag".					
7	The balance of nature is very delicate and easily upset.					
8	Mankind is severely abusing the environment.					
9	The whole pollution issue has upset me.					
10	I can do nothing to help control pollution of the environment.					
11	My behavior can have a positive effect on the environment by purchasing green products.					

12	The publicity campaign of green products has effect on my purchasing.					
13	The awareness of government will promote me to care about environment protection.					
14	I can buy green products with great convenience.					
15	I always use the disposable tableware.					
16	I try to buy high efficiency light bulbs to save energy.					
17	I try to buy energy efficient household appliances.					
18	I always use both sides of an exercise book.					
19	I always reuse the paper bag or plastic bags.					
20	I always reduce the amount of water consumption.					
21	I always recycle plastic bottles/caps.					