

10th semester – Master Thesis

What affects green consumption in Slovakia?

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Abstract

This study contributes to findings of green consumer behavior in Slovakia and determines the effects of demographics, attitudes toward green consumption, knowledge of green consumption, internal and external moderators. Furthermore, this study examines whether these effects differ significantly among purchasing, using and recycling behaviors.

The present study draws on previous researches and investigate the impact of the factors that influence green consumer behavior on convenience sample of people living in Slovakia. Moreover, this empirical study does not treat green consumer behavior as an independent category but rather separately analyzes three aspects of such behavior (purchasing, using and recycling).

The assessed data are collected by a questionnaire survey made in Google Forms and additionally supplemented by several semi structured interviews based on findings from the survey. At first, the survey data were analyzed by correlation and stepwise multiple regression analyses. The results show that psychographic variables (knowledge, attitude, internal and external moderators) are more significant predictors of green consumer behavior than demographic variables (age, gender, education level, occupation category and income). When looking into purchasing behavior, the research indicated that purchasing behavior is affected by recycling behavior in the first place, followed by external moderators, knowledge of green consumption and age. Predictors for using behavior are recycling behavior and external moderators. In regards to recycling behavior, it is affected by purchasing behavior and using behavior.

Consequently, this study has a potential to produce more precise and reliable results, and to strengthen viable policy options for Slovak government, Slovak non-governmental agencies and Slovak marketers by replicating this research on larger random sample of respondents which will deliver more precise accuracy towards affection of green consumption in Slovakia.

"World needs more ecologists than economists." (Suvereno, 2012)¹

¹ Slovak hip hop singer, song Brana (2012)

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1. Introduction

Human consumption has become economic, social, political, cultural and health problem (Paluchova and Benda Prokleinova, 2013). Lifestyle of humanity based on unlimited consumption and ever-growing consumption, need to be replaced by behavior which is green, sustainable, and environmental. In recent years in Slovakia, environmental questions and concerns have come to the forefront of public interest (Paluchova and Benda Prokleinova, 2013). Such questions are not only in Slovakia but they arise also worldwide. Dabija et al. (2018) write that "improvements, preservation of resources and environmental protection are much debated issues in developed societies, being consistently adopted by most organizations in such societies within their market strategies." This interest is related to both environmental and green thinking, resulting in the green consumption of individuals, businesses, and government. Therefore, a question of what green consumption is arises.

According to Shibin et al. (2016) green consumption is "a way of consuming in a different and efficient way to have improved quality of life". Further Vermeir and Verbeke (2006) add on that "green or sustainable consumption is based on decision-making process that takes the consumer's social responsibility into account together with consumers wishes and desires". And why it is important to know how it is affected? Because it is important for society to know what factors and moderators affect its own behavior.

Zhao et al. (2014) state that profiling of green consumers can enable not only businesses, but also environmental organizations and governmental agencies to develop positioning and marketingmix strategies which would improve quality of all people's life and for future generations.

This research is dedicated towards finding answers to what affects green consumption in Slovakia. With such findings, people living in Slovakia can improve quality of their lives through better government, NGOs, and business understanding of their needs in order to behave green, sustainably and responsible. *"Environmental technologies, economic policies, and social initiatives are all important to economic sustainability, but their influence rests on achieving changes in actual consumption patterns and behavior"* (Peattie, 2010).

2. Problem Statement

Bryman (2012) states that there are several ways of formulating a problem statement. It can be by personal interest/experience, theory, research literature, puzzles, and new developments in society or social problem. In this case, the problem formulation is connected with personal interest and experience in finding out about what affects green consumption in Slovakia.

3. Problem Formulation

What affects green consumption in Slovakia?

This problem formulation is quite open and not specific therefore there is a need to narrow it down within specific angles. The specific aim of the problem is to look into the effects of demographics, attitudes toward green consumption, knowledge of green consumption, internal and external moderators and differences which are made by these effects towards selected behaviors of purchasing, using and recycling of people in Slovakia. The selection of these specific constructs is based on theoretical model presented by Zhao et al. (2014).

4. Limitation and delimitation

This section is divided into limitations and delimitations. Limitations focus is to describe the external aspects that might have an influence on the research. The limitations are factors that could be described as out of our control. Delimitations are the constraints that are related to our choices when it goes to conducting the research. These choices allow the focus of the thesis to be more precise in answering the formulated problem. The idea behind completing both of the above is to present the research area more precise to the reader as well as to present what has not been taken into account (Simon & Goes, 2011).

The biggest limitations in this paper are time and financial resources. As for any academic research conducted within few months period the time is the issue. It can be assumed that the research with larger amount of time can potentially bring better results and change the output of the

analyses. Another important factor is amount of available financial resources which would allow the researcher to travel and spend more time on the research with direct observations and collection of data.

A few delimitations should be taken into consideration. The first of all this research only covers Slovaks who permanently live in Slovakia. Secondly this research is based on convenience sample therefore, the results cannot be generalized to Slovak population. Thirdly when looking into theoretical model, Zhao et al. (2014) states that *"according to Davies et al. (2002), the complexity of integrated models makes them difficult to test for green consumer behavior"*. Therefore, there might be also other models by which the research might get different results with the same data. Additionally, for this research SPSS statistical program was used as only statistical tool for testing the data. Lastly this research investigated only certain types of behaviors, six types of green consumer behaviors were classified into three groups, namely purchasing, using and recycling. In this paper a purchasing behavior scale consisted of purchasing high efficiency light bulbs and household appliances. A using behavior scale comprised three items regarding using water, plastic and paper bags. A recycling behavior scale measured levels of recycling plastic or glass bottles.

5. Literature review

There are many different empirical studies on topic of green consumption that have pursued to discover the components that affect green behavior. Diamantopoulos et al. (2003) looked into demographics and green consumption; Chan (2001) researched environmental knowledge and attitudes in connection to green consumption; Ramayah et al. (2010) in his work investigate values with green consumption; and Rylander and Allen (2001) did analysis on internal and external moderators that affects green consumption.

The research on green consumption has also involved applying established theories and models, most commonly those based on the theory of reasoned action (Ajzen and Fishbein, 1980) and the related theory of planned behavior (Ajzen, 1991). Numerous models attempt to incorporate both internal and external elements, including the model of environmental behavior (Hines et al., 1986), the attitude-behavior-context model (Stern, 2000), the models introduced by Rylander and

Allen (2001) and Bagozzi et al. (2002), and especially the model developed by Fishbein and Ajzen (2010). These models help to understand the structure of some intentional behaviors. In addition, several case studies helped to review contemporary model of the study such as case study from China by Zhao et al. (2014), case study from Romania by Dabija et al. (2018) and case study from Slovakia by Musova et al. (2018).

Current literature a research on the topic is very complex and has certain gaps especially when looking into Slovakia. Such conditions create a demand towards investigation of our selected research question of what affects green consumption in Slovakia. Further in theory section, there will be described each section of the structured model based on the previous mentioned empirical studies.

6. Theory

Concepts are the building blocks of theory and represent the points around which social research is conducted (Bryman, 2016). Kuada (2011) defines a theory as a phenomenon, which by clarifying the interconnection among distinctive elements, constitutes the totality. In terms to the theory, there was needed to define concepts of green consumption and components that affect green behavior in order to get understanding of the problem that is going to be researched and in order to acquire more in depth understanding of the phenomenon of the research and analysis.

The theories of green consumption and components that affect green behavior are explored and adopted to determine practices about environment, in order to present relevant statements and explain contemporary practices in the relation to the research question and to clarify the reality under the investigation including guidance to the research in a meaningful and focused manner (Kuada, 2011). The main aim is to investigate components that affect green behavior including theories behind personal influence which includes demographics and knowledge about environment, attitudes towards green consumption which include cognition and affection, internal and external factors which include environmental concerns and perceived consumer effectiveness and lastly green consumer behavior which includes purchasing, using, recycling behaviors.

6.1 Demographics and knowledge

In terms to demographics, McDonald and Dunbar (2004) employs diverse socio-demographic, geographic and personality components, with socio-demographic being main profiling variables. Therefore, Diamantopoulos et al. (2003) predominantly analyzed six socio-demographic variables (marital status, age, number of children, gender, social class and education) and recommended that higher educated and older people are more likely to perform recycling behavior. According to Kinnear et al. (1974) another positive predictor of green purchasing behavior is income. Nonetheless, the debate of Gilg et al. (2005) suggests that another large influence is income and age. Supporting, it is argued that green behavior is almost independent of age (Widegren, 1998). Some studies of Roberts (1996) and Samdahl and Robertson (1989) even showed negative relationship between environmental concern/green behavior and income. Such segmentation and profiling of green consumers can enable not only businesses, but also environmental organizations and governmental agencies to develop positioning and marketing-mix strategies Zhao et al. (2014)

Joshi & Rahman (2015) in their studies concluded that environmental knowledge is the most studied variable that affects individual intention toward sustainable behavior. Furthermore, environmental knowledge has frequently been assumed to be the main motivator of green consumer behavior (Peattie, 2010). Further according to Arbuthnot and Lingg (1975) and Cohen (1973) ecological knowledge might be a resolving variable for behavior and attitudes toward green consumption. The behavioral literature of Chan and Yam (1995); Hoch and Deighton (1989); Park et al. (1994); Bartkus et al. (1999) and Haron et al. (2005) conclude that there is positive relationship between knowledge and behavior. Despite this, Bartiaux (2008); Pedersen and Neergaard (2006) founded out that the importance of knowledge is conflicting, and heightened environmental knowledge does not naturally result in extra friendly behaviors towards environment. In general, Mostafa (2007) suggests that the previous empirical findings support the traditional aspect that behavior and knowledge are positively related. To supplement these findings, Arcury and Johnson (1987) state that environmental knowledge represents factual information that individuals have about the environment, the ecology of the planet, and the influence of human actions on the environment. Similarly, the knowledge has a great impact on

numerous aspects of an individual manner towards the action (Connell & Kozar, 2012). On the other hand, when looking towards knowledge and behavior, Thøgersen, et al., (2012) pointed out that a lack of environmental knowledge results in unsustainable decision making, which supports the idea that a heightened knowledge about environmental problems influence consumers to act in sustainable manner. Findings of Zsóka (2008), examined that such mixed empirical discoveries may admit very complicated relationship between behavior and knowledge. Therefore, knowledge is a significant factor.

6.2 Attitudes towards green consumption – cognition and affection

When it comes to attitudes toward green consumption Aizen and Fishbein (1980) claim that the attitudes reflect beliefs of individuals regarding the consequences of green consumer behavior. Further Aizen and Fishbien (1980) state that the behavioral intentions are function of beliefs or salient information which lead to the consequences. It is believed that intentions refer to readiness or willingness to engage in behavior under consideration which is then affected by attitudes and subjective norms (Paul et al., 2016). Individual intentions to make something done might be presented as a function of own attitudes and through subjective norms (Madden et al., 1992). Since intentions predict behavior, they also indicate toward the effort an individual put into the actual behavior, whereas that means the stronger the intention is to engage in any kind of a sustainable behavior, the likely outcome might be in favor. This supports research of Zsóka (2008), where it is suggested that attitudes determine substantial behavior only if all affecting conditions and factors are supportive and positive. Further, several past studies of Arslan et al. (2012); Barr et al. (2005); Gadennen et al. (2011); Tanner and Kast (2003) have observed that there is a compelling connection between attitudes and green consumer behavior. Despite, quite a lot of previous research on planned behavior and theory of reasoned action demonstrated a gap between behavior and attitudes (Ozaki, 2011; Pickett-Baker and Ozaki, 2008), Zhao et al (2014) concludes that attitudes evidently crucially determine pro environmental behavior. In addition, Gadennen et al. (2011) associated this disparity to the economic cost of green consumer behavior. Such consistency appears with the research of Kollmuss and Agyeman (2002) who presented theory that people favor the least economically costly pro environmental behavior.

6.3 Internal and external factors

Rylander and Allen (2001) found out that different internal and external factors influence people in their attitudes and intentions towards pro-environment behaviors to such level that they fail to act on them. In this case, internal factors mainly consist of perceived consumer effectiveness and environmental concern. Kim and Choi (2005) claim that the environmental concern indicates the direction of an individual toward the environment and their level of concern with environmental issues. Barr (2003) and Lin and Huang (2012) add that it is more likely to be undertaken green purchasing behavior and waste recycling by an individual who demonstrates strong environmental concern. On the other hand, several past researches on the relationship between concern and behavior show low to moderate relationship (Mostafa, 2007). Such results are supported by Straughan and Roberts (1999) research which found out that the environmental concern illustrated only 1.1% of the variance in behavior. The perceived consumer effectiveness (PCE) concept measures the subject's judgment of the influence of individual consumers on environmental problems (Antil, 1984). This concept is similar to others as locus of control concept by Kollmuss and Agyeman (2002) or self-efficacy concept by Bandura (1986). When looking into perceived consumer effectiveness (PCE) measurement of Roberts (1996) and Straughan and Roberts (1999) in their researches, they both found out that high PCE results in greater levels of green consumerism.

Despite, Peattie (2010) states that green consumption research focuses on the nature of consumers and their actions as individuals, the external moderators do also influence behavior. Such situation occurs when governments and corporations promote a sustainable lifestyle which then positive or pro-environmental behavior occurs among affected population (Kollmuss and Agyeman, 2002). Such example could be seen in Scandinavian countries where governments openly promote sustainable lifestyle (Thøgersen, 2010). On the other hand, when there is low availability of green products, it may disrupt green consumer behavior as found out by Bonini and Oppenheim (2008). Besides governmental promotions of sustainable lifestyles and green products availability, situational factors also contribute to explaining pro environmental behavior. Hines et al. (1986) identified situational factors as economic constraints, social pressures and the choice of

available actions. Additionally, it was demonstrated that economic factors strongly influence people's decisions and behavior (Bartelings and Sterner, 1999).

6.4 Green consumer behavior – purchasing, using, recycling model

There is an increasing trend to exhibit green behavior today in general (Dabija et al., 2018). Reshmi and Johnson (2014) state that being green is a process requiring major changes on the part of individuals, changes which are not only related to environment protection but also include the implementation of actions with a positive impact on an individual's health. These individuals then seem to be more willing to bring green products into their regular consumption, for example Fair Trade or organic food products and Forest Stewardship Council (FSC) wood products. Furthermore, Reshmi and Johnson (2014) define green products as those items with low negative impact on the environment, which do not affect people's health and are often made of recyclable, organic and green materials or contain biodegradable components. This opinion is also shared by authors who believe that green products should be produced through processes with a very low environmental footprint (Sarkis et al., 2010). Individuals who are more concerned with environmental protection tend to be more addicted to purchasing green products, which contributes to the creation of green behaviors (Kirmani and Khan 2016). The purchase of green products depends on an individual's attitude to the environment and its protection (Dabija et al., 2018). Various studies have shown that there is a positive and quite strong relationship between individual satisfaction and individual's intention to purchase (Reshmi and Johnson, 2014). When individual is comfortable with the sustainability of a product, it will purchase that product and the satisfaction derived from purchasing and using it (Dabija et al., 2018). The connection between green attitudes and green behavior is split, which is best expressed in the 'all or nothing' approach adopted by some consumers (Johnstone and Tan, 2014). When making purchases consumers either follow the principle according to which all items should be environmentally friendly, or do not pay attention to issues like sustainability or concern for the environment (Dabija et al., 2018). An attitude towards and the desire to adopt a green behavior also depends on how it is assessed and appreciated by the individual's friends and the society in which lives (Dabija and Bejan, 2017). When green behavior is assimilated into society as a social norm (for example universally accepted as a common practice), its impact on consumers is greater (Dabija et al., 2018). Conversely, if

green behavior is not viewed as a common practice, consumers will not make changes to their life style to adopt this concept (Johnstone and Tan, 2014).

Despite green consumption is subtly intertwined with social and economic factors (Peattie, 2010), here in this model Zhao et al. (2014) assume that it is only tied to environmental issues. Zhao et al. (2014) got inspired to make this model by the work of Zhang et al. (2007) and Liu et al. (2009), whereas they divide green consumer behavior into three forms according to stage of the consumption process, namely purchasing, using and recycling behaviors. The proposed model of Zhang et al. (2007) in Figure 1 comes from the background of the model of Rylander and Allen (2001) that explains the motivations for green consumer behavior. The proposed model considers demographic and knowledge variables to be the factors that shape individual attitudes of cognition and affection toward environment friendly behavior. In this model attitudes towards green consumption do not undoubtedly influence behavior directly, and the effect is moderated by various internal and external variables, including perceived consumer effectiveness, environmental concern, promotions of government and enterprise, and availability of green products. The connection between behavior and attitudes might be the most questionable aspect of the proposed model according to Zhang et al. (2007). Since the research is based on both selfreported behavior of surveys and face to face qualitative interviews, this delicate aspect shall be limited.



Figure n.1 – Theoretical model (Zhao et al., 2014)

7 Methodology

The word methodology has its roots in a Greek word hodos, which means a way. Methodology in contemporary understanding concentrates on finding the best way to gain knowledge about the world (Denzin & Lincoln, 2005; Jarvie & Zamora-Bonilla, 2011). It deals with questions like "How should the inquirer go about finding out knowledge?" (Guba, 1990) or "How do researchers select their tools?" (Klotz & Lynch, 2007). Answers to these questions are affected by researcher's paradigmatic stance.

Firstly, there needs to be introduced to the reader the full structure of the project. The first parts of the thesis (Introduction, Problem Statement and Problem Formulation) open, explain and clarify the research problem. The second part (Methodology, Limitations, Literature Review and Theory) concerns methodological and theoretical framework of theory behind the research, theoretical considerations, data collection and data analysis stances. The third part of this thesis (Analysis and Discussion) continues with survey and interview analyses which were conducted in connection to the research to get empirical findings and the reasons, rationalizations and arguments within chosen model behind people's understanding of what affect the green consumption. The fifth part (Conclusion, and Managerial implications and further research) presents summary of the report and overall conclusion.

7.1 Ontology

Ontology deals with issues of existence (Guba, 1990; Denzin & Lincoln, 2005; Lincoln & Guba, 1985; Guba & Lincoln, 1989). It *"raises basic questions about the nature of reality and the nature of the human being in the world"* (Denzin & Lincoln, 2005) and gives answers to questions like *"What kind of being is the human being?"* or *"What is the nature of reality?"* in the researcher's eyes (Denzin & Lincoln, 2011). Bryman (2012) states that social ontology is concerned with the nature of social entities and that the central point of orientation here is the question of whether social entities can and should be considered objective entities that have a reality external to social actors, or whether they can and should be considered social constructions built up from the perceptions and actions of social actors therefore ontological considerations in this report are connected to author or writer of this project, in terms of how the author perceive the world or

reality around him/herself. The author of this project perceives the world like constructivists when looking at qualitative aspect of this research, since he asserts that social phenomena and their meanings are continually accomplished by social actors. This means that the social phenomena and categories are not only produced through social interaction, but that they are in constant state of revision and are socially constructed (Bryman, 2012). However, on the other hand, the author of this project perceives the world like objectivist when looking into quantitative part of this research since asserts that social phenomena and their meanings have an existence that is independent of social actors. It implies that social phenomena and the categories that we use in everyday discourse have an existence that is independent or separate from actors (Bryman, 2012).

7.2 Epistemology

The word epistemology originates from Greek word episteme, which means knowledge (Jarvie & Zamora-Bonilla, 2011). It *"deals with the origin, nature and limits of human knowledge"* (Guba & Lincoln, 1989). It asks questions like: *"How do researchers know what they know?"* (Klotz & Lynch, 2007) or *"What is the relationship between the inquirer and the known?"* (Denzin & Lincoln, 2011). Furthermore, every epistemology *"implies an ethical-moral stance toward the world and the self of the researcher"* (Denzin & Lincoln, 2005). Epistemology is concerned with the question of what is or ought to be held as acceptable knowledge in a given discipline or it can be defined as the study of knowledge as well as justified beliefs. The study of it is concerned with how the researchers can achieve it.

In this research, a survey and semi structured interviews will be used. Therefore, two different epistemological positions will be applied, positivism in regards to survey and constructivism in regards to interviews.

When looking into positivism as an epistemological position according to Bryman (2012) advocates the application of the methods of the natural sciences to the study of social reality and beyond. Further to describing positivism there are a few principles that can be applied. The first one is that only phenomena and hence knowledge confirmed by the senses can genuinely be warranted as knowledge – could be identified as phenomenalism. The second principle is that the purpose of theory is to generate hypotheses that can be tested and that will thereby allow explanations of

laws to be assessed – could be identified as deductivism. The third principle is that Knowledge is arrived at through the gathering of facts that provide the basis for laws - could be identified as inductivism. The fourth principle is that Science must and presumably can be conducted in a way that is value free - could be identified as objectivism. And the last principle according to Bryman (2012) is that there is a clear distinction between scientific statements and normative statements and a belief that the former is the true domain of the scientist. This last principle is implied by the first because the truth or otherwise of normative statements cannot be confirmed by the senses (Bryman, 2012). The positivist approach is applied when doing surveys whereas the data will be gathered as numbers and analyzed through certain levels of statistics.

From the paradigms discussed in previous statements, the second paradigm which is interpretivism includes the study of the social world, which requires different reasoning of procedures when it comes to researching. The interpretivism in this sense requires the researchers to embrace the concept of subjectivism and its view of social actions. When looking at the phenomenology aspects of it; the philosophy basically concerns itself with how people make sense of their surroundings or the world around them, and how the philosopher should build up preconceived ideas in that world. In other words, the process entails how an individual interprets the world and its phenomena and how the philosopher tries to see things from the person's own perspective (Bryman, 2012). In regards to this approach, the author was involved in getting subjective meaning of the studied phenomenon when gathering and analyzing semi structured interviews. The social reality was achieved by examining the people involved, which in this case were people who gave responses to interviews.

7.3 Research design

As Kuada (2010) explains the research design presents and clarifies the plan of the research and its logical arrangement in terms of how the research is conducted, which methods are used for conducting it, who are subjects of the research, what kinds of data are collected and why, how data are collected, and how are they analyzed. Further Bryman (2012) states that research design provides a framework for the collection and analysis of data. A choice of research design reflects decisions about the priority being given to a range of dimensions of the research process with aim

to expressing causal connection between variable, generalizing to larger groups of individuals than those actually forming part of the investigation, understanding behavior and the meaning of that behavior in its specific social context and having a temporal (that is, over time) appreciation of social phenomena and their interconnections. When it comes to this research the mixed method research design was applied in order to investigate connections by two separate research methods of quantitative nature for survey and qualitative nature for semi structured interviews, with quantitative research as priority and qualitative research as supplementary or subsidiary role as $QUAN \rightarrow qual$ (Bryman, 2012). The relationships among variables will be examined by survey statistical analysis of the gathered data. Further to supplement and enrich this research, semistructures interviews will be made. When it comes to a specific way of combining quantitative and gualitative research, completeness will be used in this case which refers to the notion that the researcher can bring together a more comprehensive account of the area of enquiry in which he or she is interested if both quantitative and qualitative research are employed. It implies that the gaps left by one method in this case, a quantitative one, can be filled by another in this case a qualitative one. So, by using mixed method research a more comprehensive picture would be generated (Bryman, 2012).

7.4 Data collection

The data were collected by two different methods, self-administered questionnaire and semi structured interviews.

A self-administered questionnaire or in other words a survey is intended to target an audience to answer questions by themselves (Bryman, 2012). Such instrument or method for collecting data was selected because of many advantages. First of all, according to Bryman (2012) it is cheap and easy way how to invite large number of individuals to participate in such data collection by structuring it on one of the free online platforms such us Google Forms (as in this case) or Survey Monkey and spreading a survey link through social media as Facebook or Twitter, or by sending it by emails. By this form, it favors potential participants to complete the self-administered questionnaire as they want and at the speed that they want to go. Furthermore, it is easier to administer this method as it targets very large quantities of audience at the same time (Bryman,

2012). Another advantage according to Bryman (2012) is that characteristics of interviewers (and respondents) may affect the answers that people give. While the findings from this research are somewhat equivocal in their implications, it has been suggested that characteristics such as ethnicity, gender, and the social background of interviewers may combine to bias the answers that respondents provide. Obviously, since there is no interviewer present when a self-completion questionnaire is being completed, interviewer effects are eliminated. However, this advantage probably has to be regarded fairly cautiously, since few consistent patterns have emerged over the years from research to suggest what kinds of interviewer characteristics bias answers (Bryman, 2012)

There are also several disadvantages, for example the participants of the survey are left by themselves without any support which might point into difficulties that could occur with the questions understanding, whereas additional interpretations of the questions cannot be done. This can be avoided by construction of questions where all should be constructed as explicit and clear as possible to avoid misunderstanding that might lead to irrelevant data collection or even discarded responses (Bryman, 2012). Next disadvantage that might occur is that if an online survey has many questions then respondents tend to get tired and bored very fast with do called "respondent fatigue" (Bryman, 2012).

The detailed description of the thesis survey construction is presented in section 6.6 Questionnaire.

The other method which is used in this research is semi-structured interview. Kvale (1996) describes research interview as a professional conversation which is based on the conversations of daily life. Bryman (2012) further defines an interview as conversation between the interviewer and the interviewee and selects two main types of interviews in qualitative research unstructured interview and the semi-structured interview. In this research there will be used semi-structured interviews. The semi-structured interview is, as the term suggests, a lesser or slightly lesser structured interview, unlike the unstructured interview that is a loose conversation without any guide to manage the conversation. With semi structured interviews, the researcher has a list of questions or fairly specific topics to be covered, often referred to as an interview guide, but the interviewee has a great deal of leeway in how to reply (Bryman, 2012). Questions may not follow

on exactly in the way outlined on the schedule and questions that are not included in the guide may be asked as the interviewer picks up on things said by interviewees (Bryman, 2012).

The qualitative semi-structured interviews (Longhurst, 2003) were considered to be suitable for this study to comply with purpose of capturing the best picture and enrich survey data. Semistructured interviews are more flexible than survey (Bryman, 2008; Longhurst, 2003) and allow the researcher to dig deeper in the areas, which are considered important.

The detailed description of the interview guide construction is presented in section 6.7 Interviews and interviewees.

7.5 Sampling techniques

According to Bryman (2012) a sample is an essential element for the research study development as it represents the segment of the population which is chosen for the research (Bryman, 2012). There are two main sampling techniques which decide what type of a sample is appropriate and relevant according to the purpose of the research study. These two techniques are made with whether probability or a non-probability approaches (Bryman, 2012). The probability approach involves a sample that has been selected using random selection so that each unit in the population has a known chance of being selected. It is generally assumed that a representative sample is more likely to be the outcome when this method of selection from the population is employed. The aim of probability approach involves sample that has not been selected using a random selection method. Essentially, this implies that some units in the population are more likely to be selected than others (Bryman, 2012).

When it comes to sample for survey, due to costs and time restrictions, convenience sampling in a form of snowballing sample was used. Such sample is one that is simply available to the researcher by virtue of its accessibility (Bryman, 2012). With this approach to sampling, the researcher makes initial contact with a small group of people who are relevant to the research topic and then uses these to establish contacts with others (Bryman, 2012). The problem with snowball sampling is that it is very unlikely that the sample will be representative of the population. Despite

snowballing sampling is not widely used with quantitative research, when the researcher needs to focus upon or to reflect relationships between variables, tracing connections through snowball sampling may be a better approach than conventional probability sampling (Coleman, 1958). The data will not allow definitive findings to be generated, because of the problem of generalization, but they could provide a springboard for further research or allow links to be forged with existing findings in an area which fits this part of the research (Bryman, 2012). The size of the sample group is influenced by the time, as the data collection should be gathered within maximum of few weeks to be able to analyze it and reflect on findings in a proper manner for meeting a deadline of the research study deadline. However, Bryman (2012) stated that increasing the size of a sample increases the likely precision of a sample, which suggests that errors, such as non-response or decline to participate in this study can be of a minor importance if a large number of a sample size would be reached.

When it comes to interviews, purposive sampling was used. According to Bryman (2012) purposive sampling is a non-probability form of sampling. The researcher does not seek to sample research participants on a random basis. The goal of purposive sampling is to sample cases/participants in a strategic way so that those sampled are relevant to the research questions that are being posed. Very often, the researcher will want to sample in order to ensure that there is a good deal of variety in the resulting sample, so that sample members differ from each other in terms of key characteristics relevant to the research question. Because it is a non-probability sampling approach, purposive sampling does not allow the researcher to generalize to a population. Although a purposive sample is not a random sample, it is not a convenience sample either. A convenience sample is simply available by chance to the researcher, whereas in purposive sampling the researcher samples with his or her research goals in mind. In purposive sampling, sites, like organizations, and people within sites are selected because of their relevance to the research questions. The researcher needs to be clear in his or her mind what the criteria are that will be relevant to the inclusion or exclusion of units of analysis. On the other hand, the researcher needs to be aware of certain weaknesses like generalizability, representation, validity, reliability, and errors in judgement (Bryman, 2012).

7.6 Questionnaire

In regards to construction of questionnaire, past research design of Zhao et al. (2014) of case study from Qingdao, China was used as basic framework for structuring questionnaire for Slovakia. Despite using it as base the whole questionnaire was revised, amended and translated to Slovak language. The revision was mostly done in questions which were connected to geographical and cultural aspect e.g. red tide was replaced by ozone layer depletion or environmental labels were amended to Slovak market. Further, legislation targets were changed to EU targets or questions were reformulated in more understanding way – using different wording.

The online questionnaire/survey was developed in March/April 2019, which was built with the use of the Google Forms (2019). This tool allows to build a web survey where questions are separated from each other so that respondents can focus on one question at a time, as well as to divide survey to several pages and control the order of questions appearance. Furthermore, to ensure that the survey is understood in the intended manner, simple and easy to comprehend words were chosen. Also, a short description about its purpose was provided to avoid respondents' confusion, which might result in having a misleading information. The main research tool was questionnaire comprising closed questions with pre-selected answers. Such pre-coding allows to process answers easier than with open questions where coding needs to apply in extensive manner. Another advantage of closed questions is that they enhance the comparability of answers meaning that with post-coding there is always a problem of knowing how far respondents' answers that receive a certain code are genuinely comparable. As previously noted, the assignment of codes to people's answers may be unreliable where checks are necessary to ensure that there is a good deal of agreement between coders and that coders do not change their coding conventions over time. Closed questions essentially circumvent this problem. (Bryman, 2012). Furthermore, closed questions are easier for interviewees to complete and reduce the possibility of variability in the recording of answers. However, on other hand there are a few disadvantages where in closed question there is a loss of spontaneity in respondents' answers and there may be variation among respondents in the interpretation of forced-choice answers. Closed questions may be irritating to respondents when they are not able to find a category that they feel applies to them (Bryman, 2012).

The questionnaire has three sections. The first section acquires basic information on green consumption, as following:

1. Have you ever heard of green consumption?

The first question was asked to find out whether people ever heard of green consumption in order to measure data about their awareness about the topic. By this first yes and no question the research will be able to distinguish between people who are familiar with the topic and who are not familiar with the topic.

2. How do you obtain information about green consumption?

The second question was asked in order to find out how do respondents acquire or source information about green consumption whereas they had several choices to choose from as TV, advertisement, newspaper, internet, family or friends, and others.

3. Which price is more acceptable when purchasing green products?

The last question from the first part was about what price level is acceptable when concerning purchase of green products whereas the aim was to investigate willingness to pay for green products and purchasing behavior of the respondents.

The second part attempted to discover respondents' knowledge of green consumption, attitudes toward green consumption, internal and external moderators and green consumer behavior.

The knowledge of green consumption was measured by 8 knowledge questions with preselected answers where only one answer is correct and others were false. The actual questions are in appendix with correct answers but as well in online survey form as screenshot. The purpose of knowledge questions is to test respondents' knowledge in an area (Bryman, 2012). The questions were concerning knowing actual meaning of green consumption, recognizing a sign of environment-friendly products, knowing consequences CO2, knowing consequences of prohibition of freon detergents, knowing main objective of banning of sales of old ordinary lamps, knowing main objective of garbage classification, knowing what means EU Energy label on white goods and knowing EU energy saving target on electricity by 2030 compared to today's level.

In terms to other variables of attitudes toward green consumption, internal and external moderators and green consumer behavior Likert scale in horizontal format was applied. The Likert scale is essentially a multiple-indicator or multiple-item measure of a set of attitudes relating to a particular area (Bryman, 2012). The goal of the Likert scale is to measure intensity of feelings about the area in question. According to Bryman (2012), in its most common format, it comprises a series of statements (known as 'items') that focus on a certain issue or theme. Each respondent is then asked to indicate his or her level of agreement with the statement. Usually, the format for indicating level of agreement is a five-point scale going from 'strongly agree' to 'strongly disagree', but seven-point scale and other formats are used too (Bryman, 2012). There is usually a middle position of 'neither agree nor disagree' or 'undecided' indicating neutrality on the issue. Each respondent's reply on each item is scored, and then the scores for each item are aggregated to form an overall score. Normally, since the scale measures intensity, the scoring is carried out so that a high level of intensity of feelings in connection with each indicator receives a high score (for example, on a five-point scale, a score of 5 for very strong positive feelings about an issue and a score of 1 for very negative feelings). There are also variations on the typical format of indicating degrees of agreement are scales referring to frequency (for example, 'never' through to 'always') and evaluation (for example, 'very poor' through to 'very good') (Bryman, 2012).

Further Bryman (2012) suggests that there are several points to bear in mind about the construction of a Likert scale. The following are particularly important.

- The items must be statements and not questions.
- The items must all relate to the same object (in this research case selected constructs).
- The items that make up the scale should be interrelated

In this research when using Likert scale, 5-point scale measurement is applied where respondents are being asked to indicate their level of agreement or disagreement with each statement by indicating whether they: Strongly Disagree as 1, Disagree as 2, are Undecided as 3, Agree as 4, or Strongly Agree as 5. The actual questions are in appendix but as well in online survey form as screenshot.

The attitude towards green consumption was measured by 6 attitude questions. These 6 attitude questions were built as statement to which respondent needs to agree or disagree with the statement on Likert scale. The statements in this variable are concerning household electrical appliances, pollution and consumption, affecting/influencing others, control of consumption, promotion of green behavior and green legislation. The actual questions are in appendix but as well in online survey form as screenshots.

The environmental concern was measured by 3 attitude questions. These 3 attitude questions were built as statement to which respondent needs to agree or disagree with the statement on Likert scale. The statements in this variable are concerning balance of nature, mankind harming environment, attitude toward pollution issue. The actual questions are in appendix but as well in online survey form as screenshot.

The perceived consumer effectiveness was measured by 2 attitude questions. These 2 attitude questions were built as statement to which respondent needs to agree or disagree with the statement on Likert scale. The statements in this variable are concerning control of pollution and individual purchasing behavior on environment. The actual questions are in appendix but as well in online survey form as screenshot.

The external moderators were measured by 3 attitude questions. These 3 attitude questions were built as statement to which respondent needs to agree or disagree with the statement on Likert scale. The statements in this variable are concerning marketing campaign towards purchasing, government campaigns towards caring for environment, and availability of green products. The actual questions are in appendix but as well in online survey form as screenshot.

The green consumer behavior was measured by 6 attitude questions. These 6 attitude questions were built as statement to which respondent needs to agree or disagree with the statement on Likert scale. The statements in this variable are concerning usage of plastic bags, buying high efficiency light bulbs, buying energy efficient household appliances, reusing paper or plastic bags, using less water, and bringing back plastic/glass bottles to pant machines. The actual questions are in appendix but as well in online survey form as screenshot.

There are several reverse score questions which tries to avoid bias. Webb et al. (1966) suggested that the structured interview is particularly prone to the operation among respondents of what

they call 'response sets', which they define as 'irrelevant but lawful sources of variance'. This form of response bias is especially relevant to multiple-indicator measures, where respondents reply to a battery of related questions or items, of the kind found in a Likert scale (Bryman, 2012). The idea of a response set implies that people respond to the series of questions in a consistent way but one that is irrelevant to the concept being measured. The point of including such reverse questions is to identify people who exhibit response sets, like acquiescence which refers to a tendency for some people consistently to agree or disagree with a set of questions or items (Bryman, 2012). If someone were to agree with all eighteen items, when some of them indicated lack of job satisfaction, it is likely that the respondent is affected by a response set, and the answers are unlikely to provide a valid assessment of job satisfaction for that person (Bryman, 2012)

The final part of the questionnaire gathered demographic information, including age, gender, employment, education level and income.

7.7 Interviews and interviewees

The interviews were made as supplementary to surveys to go in depth into selected findings which survey found out. Once the data from surveys were analyzed, then based on the findings interview questions were made. The interview questions were made on 3 strongest connections among constructs and variables from survey. The strongest connection was found among attitude towards green consumption and education level, again attitude toward green consumption and perceived consumer effectiveness, and connections among 3 behaviors of recycling, using and purchasing. Based on these 3 topics the questions were made to find out how the interviewees perceive such connections. The interview questions were asked as below:

Interview questions guide:

Education level and attitudes towards green consumption

- 1. What is your attitude towards green consumption?
- 2. In what way do you think education affected your attitude towards the green consumption?

Attitudes towards green consumption and perceived consumer effectiveness

- 1. How do you think you personally can change environment?
- 2. How does your attitude towards green consumption affect your personal position of whether you personally can change anything about environment you live in?

Recycling behavior, purchasing behavior and using behavior

- 1. Do you think green when purchasing products or services? Why, yes? Why, not?
- 2. Do you recycle? Why yes? Why not?
- 3. How do you think recycling affects your purchasing and using products and service?

When looking into choice of interviewees, the researcher of this paper chose 3 interviewees out of his network who completed online survey questionnaire. They also answered yes to a question whether they have ever heard about term green consumption. Since the data from survey showed that education level and age as demographic variables influence some of the psychographic variables, these 2 demographic criteria were chosen to target interviewees. In regards to education level, one interviewee of each category of high school, bachelor and master degree was chosen. In regards to age, one interviewee of each category of 21-30, 31-40, 41-50, 51-60 and 61+ was chosen. These 7 specific categories from both education level and age were selected due to being the most represented in the questionnaire data. The interviewees are presented below in Table n. 1.

Interviewees						
	Name	Gender	Age	Education level		
Interviewee 1	Maria	Female	2	25 Bachelor degree		
Interviewee 2	Michal	Male	3	84 Master degree		
Interviewee 3	Pavol	Male	4	3 High School		
Interviewee 4	Anna	Female	5	57 High School		
Interviewee 5	Marek	Male	6	6 Master degree		

Table n.1

The interviews were done through Skype conference calls during May 2019 in Slovak language. The interviews were translated and transcribed. All of the interviews are located in Appendices section. As Bryman (2012) states *"despite it was an arduous and very time-consuming task,* transcribing offered great benefits in terms of bringing researcher closer to the data, and encouraging researcher to start to identify key themes, and to become aware of similarities and differences between different participants' accounts". The length of the interviews and number of chosen interviewees were limited due to time limitation.

8 Analysis

The analysis starts with survey analysis part where there are several subparts with detailed explanation of data examination and characteristics; reliability test; descriptive statistics including constructs under study with mean score and standard deviation, public understanding of green consumption with sample size vs score, channels of getting information of green consumption with source vs sample, willingness to pay for high-priced green products and score of purchasing behavior with bid level vs sample size/score of related behaviors; correlation analyses between demographics, knowledge - attitudes – behavior, demographics and constructs; and regression analyses between purchasing behavior, using behavior, recycling behavior.

The second part of the Analysis part includes analysis of interviews where three strongest connections among variable and construct from survey analysis would be investigated. These strongest connections are among attitude towards green consumption and education level, again attitude toward green consumption and perceived consumer effectiveness, and connections among 3 behaviors of recycling, using and purchasing.

8.1 Survey analysis

The survey was carried out by one researcher who collected the data by online survey made in Google Forms from April 18th to April 30th, 2019, the attached excel file with data is attached to this research. Since the survey was online and the target audience was selected through convenience sample, only people living in Slovakia were targeted. Out of 86 collected questionnaires, all 86 were valid, yielding an effective response rate of 100%. This was achieved by locking questions in the Google Forms so invalid or interfered answers were not recorded.

8.1.1. Internal reliability

Before testing the model, reliability tests were conducted on each construct, see Table n. 2. When it comes to using Likert scale or a multiple-indicator measure, the items that make up the scale should be interrelated and consistent as earlier mentioned in methodology in questionnaire part. Reliability refers to the consistency of a measure of a concept (Bryman, 2012). According to Bryman (2012) the key issue is whether the indicators that make up the scale or index are consistent — in other words, whether respondents' scores on any one indicator tend to be related to their scores on the other indicators. This meaning of reliability applies to multiple-indicator measures. When there is a multiple-item measure in which each respondent's answers to each question are aggregated to form an overall score, the possibility is raised that the indicators do not relate to the same thing; in other words, they lack coherence. The researcher needs to be sure that all its designerism indicators are related to each other. If they are not, some of the items may actually be unrelated to designerism and therefore indicative of something else (Bryman, 2012). Nowadays, most researchers use a test of internal reliability known as Cronbach's alpha (Bryman, 2012). Cronbach's alpha is a commonly used test of internal reliability. It essentially calculates the average of all possible split-half reliability coefficients. A computed alpha coefficient will vary between 1 (denoting perfect internal reliability) and 0 (denoting no internal reliability). The figure 0.80 is typically employed as a rule of thumb to denote an acceptable level of internal reliability, though many writers work with a slightly lower figure (Bryman, 2012). For example, Landis and Koch (1977) set up these lower figures of reliability statistics values of Cronbach alpha as 0,61-0,80 as "substantial" and 0,81-1,00 the stricter values as "almost perfect". The results of this research showed in Table n. 2 five constructs within substantial range from lowest value of 0,687 in green consumer behavior, following by 0,696 in perceived consumer effectiveness, 0,769 in knowledge of green consumption, 0,770 in environmental concern, and 0,779 in attitudes toward green consumption. One construct with highest value of 0,815 appeared in external moderators which fits into almost perfect range. This means that the questionnaire results have high reliability.

Reliability test				
Constructs	Cronbach's alpha			
Knowledge of green consumption	0,769			
Attitudes toward green consumption	0,779			
Environmental concer	0,770			
Perceived consumer effectiveness	0,696			
External Moderators	0,815			
Green consumer behavior	0,687			

Table n. 2

8.1.2. Descriptive statistics

Statistical analysis of the questionnaire data was done by several ways. First of all, descriptive statistics was used to present subjects profile with demographic table with number and percentage of each category. The demographic composition of the sample is shown in Table n. 3. Among the 86 respondents, 48,8% were male and 51,2% were female. 7% of the respondents were aged between 10 and 20 years old, 33,7% between 21 and 30 years old, 12,8% between 31 and 40 years old, 25,6% between 41 and 50 years old, 11,6% between 51 and 60 years old, and 9,3% 61 years old and above. Regarding educational attainment, the largest group of respondents (32.6%) had a master or engineer degree or above education, followed by high school education (31.4%), bachelor degree (23,3%), and primary school (12,8%). The data in Table n. 3 reveal two strong employment category of the respondents, with unemployed or student category being the largest group (22,1%), closely followed by higher managerial, administrative, or professional group (20.9%), with the rest of categories fairly distributed as scientific researcher and educational, medical worker (10,5%), self-employed (10,5%), trade and service worker (9,3%), other (9,3%), pensioner (7%), farming, forestry, animal husbandry and fishery worker (5,8%), and machinery operator and driver (4,7%). The monthly income level is as well fairly distributed among respondents with income less than 550 EUR (30,2%) (which is half of average wage in Slovakia according to Tradingeconomics.com (2019)), equaling by group earning 1101 EUR – 2200 EUR (30,2%), followed by group earning 551 EUR - 1100 EUR (26,7%) and a group earning 2201 EUR or more (12,8%).

The profile of subjects (N = 86)					
	N (number)	Percentage			
Gender					
Male	42	48,8			
Female	44	51,2			
Age					
10-20	6	7,0			
21-30	29	33,7			
31-40	11	12,8			
41-50	22	25,6			
51-60	10	11,6			
61+	8	9,3			
Education level					
Primary school	11	12,8			
High school	27	31,4			
Bachelor degree	20	23,3			
Master/Engineer degree or above	28	32,6			
Employment category					
Higher managerial, administrative, or professional	18	20,9			
Scientific researcher and, educational, medical worker	9	10,5			
Machinery operator and driver	4	4,7			
Trade and service worker	8	9,3			
Self-employed	9	10,5			
Scientific researcher and, educational, medical worker	9	10,5			
Farming, forestry, animal husbandry and fishery worker	5	5,8			
Pensioner	6	7,0			
Unemployed/student	19	22,1			
Income level					
Less than 550 EUR	26	30,2			
551 EUR – 1100 EUR	23	26,7			
1101 EUR – 2200 EUR	26	30,2			
2201 EUR or more	11	12,8			

Table n. 3

8.1.2.1 General survey information

The second part of descriptive analysis is looking into public awareness of green consumption, sources from where the respondents get the information about it and willingness to pay for green products. The first question was regarding whether they have ever heard of green consumption, 66 out of 86 respondents selected "yes" which makes it 76,7% for yes and 23,3% for no. This implies that most people have become aware of green consumption.

86 responses

1. Have you ever heard about terms called green consumption? (Už ste niekedy počuli o termíne zelena spotreba?)

Yes (Áno)
No (Nie)



Responses to the question concerning the source of information on green consumption used a multi-choice format. The main channel for obtaining information is the Internet with 45,3%, followed by TV with 30,2%, and family and friends 12,8%. The internet has been becoming an essential and main path for distributing environmental information (Zhao et al., 2014). TV is still relevant in obtaining the green consumption information and family and friends' dissemination can also help residents better understand green consumption.

2. From what sources do you obtain information about green consumption? (Z akých zdrojov získavate informácie o zelenej spotrebe?)

86 responses









Willingness to pay was also investigated. The results show that 43% of the respondents are willing to pay for only minimum increase of maximum 10% for green products, following by 27,9% respondents willing to pay 11-20% increase, 20,9% of the respondents are not willing to pay any increase and 8,1% of the respondents willing to pay 21-50%, there weren't any respondents willing to pay more than 51%. Such outcome is similar to previous findings of studies (Benda-Prokeinova,

2015; Kubelaková & Košičiarová, 2016; Krizova & Buday, 2015) whereas Slovak consumers are very much price sensitive.

3. What is the maximum price increase that is acceptable when you would purchase green products? (Aký maximál...platiť za nákup zelených produktov?) ⁸⁶ responses





The third part of the descriptive analysis is looking into means of the construct and overall answers from the survey for each question within each construct. This will allow to find out average score of each construct among respondents and find a level of each construct. Such summarizing allows to take many questions scores, put them together and see whether the value lies. The average summated mean scores and the corresponding standard deviations of all the constructs were presented in Table n. 4. The survey instruments related to each construct were provided in the Appendices section.

Descriptive statistics of the constructs under study (N = 86)*				
	Mean score	Standard deviation		
Knowledge of green consumption	0,80	0,37		
Attitudes toward green consumption	3,64	1,43		
Internal Moderators	4,14	1,15		
- Environmental concer	4,47	0,96		
- Perceived consumer effectiveness	3,82	1,29		
External Moderators	3,57	1,12		
Green consumer behavior	4,19	1,02		
- Purchasing behavior	4,41	0,79		
- Using behavior	3,81	0,83		
- Recycling behavior	4,34	0,73		
* N represents sample size. Except knowledge of green consumption (KGC), the possible range for the average summated mean score of the other constructs was between 1 and 5, and the range of KGC was between 0 and 1.				

Table n. 4

The reported mean score of the options related to knowledge is 0,80. Such a high result shows that people understand environmental issues.

8.1.2.2 Knowledge of green consumption

In the first question of knowledge, 88,4% of the respondents answered correctly in what green consumption means with answer purchasing low pollution, low resource cost, recyclable products.

1. Green consumption means: (Zelená spotreba znamená):

86 responses



Figure n. 6

In the second question of recognizing sign of environment-friendly product 80,2% of the respondents answered correctly with answer of option 4 Eco label.

2. Recognize the sign of environment-friendly products: (Rozoznajte znak produktu ktorý je šetrný k životnému prostrediu:)

86 responses





In the third question of what problems CO2 will cause, 70,9% of the respondents answered correctly with answer global warming.

3. What problems will CO2 cause? (Aký problem spôsobí CO2?)

86 responses



Figure n. 8
In the fourth question of what prohibition of freon detergents prevented, 70,9% of the respondents answered correctly with answer ozone layer depletion.



4. Prohibition of freon detergents is to prevent: (Zákaz freónov zabraňuje:) ^{86 responses}



In the fifth question of what the main objective of banning sales of old ordinary lamps was, 84,9% of the respondents answered correctly with answer to save energy consumption.

5. The main objective of banning sales of old ordinary lamps was? (Hlavný zámer zákazu predaja starých žiaroviek bol?)

86 responses



Figure n. 10

In the sixth question of what the main objective of garbage classification is, 89,5% of the respondents answered correctly with answer recycle and reuse.

6. The main object of garbage classification is: (Hlavný zámer klasifikćie odpadov je:)

86 responses





In the seventh question of what the EU energy label on white goods shows, 90,7% of the respondents answered correctly with an answer energy effectiveness of the product.

7. The EU Energy Label on white goods shows: (EU energetická nálepka na bielych spotrebičoch ukazuje:)

86 responses



Figure n. 12

In the eight-last question of knowledge part about what the EU target for an improvement in energy efficiency by 2030 compared to today's level is, only 61,6% of the respondents answered correctly with answer 30%.

8. What is the EU target for an improvement in energy efficiency by 2030 compared to today's level? (Aky je cieľ...rgie v porovnaní s dnešou spotrebou?) ⁸⁶ responses





In order to sum up the score of the respondents regarding knowledge, there was prepared a graph showing number of respondents compared with their averaged score fitting 4 categories of their scored mean 0-0,25; 0,26-0,50; 0,51-0,75; 0,76-1. The score is based on eight knowledge questions just described. Majority of the respondents received a score above 0,76, followed by group scoring between 0,51-0,75, implying the respondents' knowledge is very strong.



Figure n. 14

8.1.2.3 Attitudes toward green consumption

The mean score of attitudes toward green consumption is 3,64 which shows that there is not very strong position of respondent towards green consumption. The attitude construct consists of 6 questions.

In the first statement of attitude construct, the respondents were asked to provide score to whether "it is more convenient to buy new household electrical appliances than to repair them". This statement was reverse scored. The results showed very mixed distribution of answers with 34,9 % respondents strongly agreeing with the statement followed by neutral position of undecided with 22,1%. Such results indicate that the respondents prefer buying new electrical

appliance than repairing them.

1. It is more convenient to buy new household electrical appliances than to repair them. (Je výhodnejšie si kúpiť no... elektrické spotrebiče ako ich opraviť) ⁸⁶ responses



Figure n. 15

In the second statement of attitude construct, the respondents were asked to provide score to whether "the resources consumed by myself won't cause any pollution to the environment". This statement was reverse scored. The most of the respondents scored with neutral undecided position of 38,4% and followed by agree position with 20,9%. Therefore, respondents are mostly

neutral towards their pollution of the environment.

2. The resources consumed by myself won't cause any pollution to the environment. (Zdroje, ktoré spotrebuje...ivotne prostredie preto neznečistujem) ⁸⁶ responses



Figure n. 16

In the third statement of attitude construct, the respondents were asked to provide score to whether "there is no need to persuade others to get involved in green behavior". This statement was reverse scored as well. The most of the respondents scored with strongly disagree position of 59,3% and followed by neutral undecided position with 15,1%. Such outcome strongly indicates

that the respondents agree to convincing other people in involvement in green consumption.

3. There is no need to persuade others to get involved in green behavior. (Nieje potreba presviedčať iných aby sa správali ekologickejšie)





Figure n. 17

In the fourth statement of attitude construct, the respondents were asked to provide score to whether "it seems very attractive to focus on water and electricity conversation for household products". The most of the respondents scored with strongly agree position of 51,2% and followed by neutral undecided position with 23,3%. Such results indicate that people find attractive when

household products save water and electricity.

4. It seems very attractive to focus on water and electricity conservation for household products. (Je veľmi atraktív... elektriny pre produkty do domácnosti) ⁸⁶ responses



Figure n. 18

In the fifth statement of attitude construct, the respondents were asked to provide score to whether "it is very important to promote active actions for the green behavior". The most of the respondents scored with strongly agree position of 64% and followed by agree position with

15,1%. Therefore, people find very important to advertise activities towards green consumption.

5. It is very important to promote active actions for the green behavior. (Je veľmi dôležité propagovať aktívne kroky voči ekologickému spravaniu) 86 responses



Figure n. 19

In the last sixth statement of attitude construct, the respondents were asked to provide score to whether "I was supportive for the EU law which bans one-time-use plastic products". The most of the respondents scored with strongly agree position of 52,3% and followed by neutral undecided position with 17,4%. The results are showing that most of the respondents are supportive in

banning one time use plastics.



6. I was supportive for the EU law which bans one-time-use plastic products. (Som sa za zákon, ktorý nari...lastových výrobkov na jedno použitie)
^{86 responses}

Figure n. 20

8.1.2.4 Internal moderators

The mean score of internal moderators is 4,14. The internal moderators construct consists of two subconstructs of environmental concern scoring with mean of 4,47 and perceived consumer effectiveness scoring with mean of 3,82. The mean score of environmental concern indicates that people in Slovakia are dissatisfied with quality of the environment. The result of perceived consumer effectiveness shows that people have positive confidence that their actions can bring about change. The environmental concern subconstruct consists of 3 statement and the perceived consumer effectiveness subconstruct consists of 2 statements.

In the first statement of environmental concern construct, the respondents were asked to provide score to whether "the balance of nature is very fragile and easily can get hurt". The results showed that 68,6% of the respondents strongly agree with the statement followed by agreeing group of 18,6% of respondents. These results show that great majority of the respondents thinks that

nature is very fragile.



1. The balance of nature is very fragile and easily can get hurt. (Rovnovaha prŕody je veľmi krehká a ľahko je zničená) 86 responses

Figure n. 21

In the second statement of environmental concern construct, the respondents were asked to provide score to whether "mankind seriously harms the environment". The results showed that 77,9 % of the respondents strongly agree with the statement followed by agreeing group of 12,8% of respondents. Therefore, vast majority of the respondents believe that humanity dangerously

damage the environment.

1



3

4

5

2. Mankind seriously harms the environment. (Ľudstvo veľmi ničí životné prostredie)

Figure n. 22

2

In the third statement of environmental concern construct, the respondents were asked to provide score to whether "the whole pollution issue has upset me". The results showed that 59,3% of the respondents strongly agree with the statement followed by agreeing group of 23,3% of

respondents. The result shows that most of the respondents feel upset about pollution.



3. The whole pollution issue has upset me. (Všetko znečistenie ma robí smutným)

Figure n. 23

In the first statement of perceived consumer effectiveness construct, the respondents were asked to provide score to whether "I can do nothing to help control pollution of the environment". This statement was reverse scored. The results showed that 33,7 % of the respondents strongly disagree with the statement followed by disagreeing group of 26,7% of respondents and 20% of the respondents showed neutral undecided position. Such results indicate that majority of the

respondents, individually, can do something about controlling the pollution of the environment.

1. I can do nothing to help control pollution of the environment. (Nemôžem urobiť nič pre kontrolu znečistenia prostredia)



86 responses

Figure n. 24

In the second statement of perceived consumer effectiveness construct, the respondents were asked to provide score to whether "my behavior can have a positive effect on the environment by purchasing green products". The results showed that 46,5 % of the respondents strongly agree with the statement followed by agreeing group of 27,9% of respondents. Therefore, majority of the respondents believe that purchasing green products can have positive effect on the

environment.

2. My behavior can have a positive effect on the environment by purchasing green products (Moje správanie môže ...i nakupovaní ekologických produktov) ⁸⁶ responses



Figure n. 25

8.1.2.5 External moderators

The mean score of external moderators is 3,57, the lowest of recorded means. This means that people are not strongly affected by government or businesses when it comes to green consumption including implying moderate businesses/government promotion and supply of green products. The external moderators construct consists of 3 statements.

In the first statement of external moderators' construct, the respondents were asked to provide score to whether "marketing campaigns for green products have effect on my purchasing". The results showed that 36% of the respondents were neutral or undecided with the statement followed by agreeing group of 26,7% of respondents and 23,3% of the respondents showed disagreeing position. Such results indicate marketing campaigns for green product has neutral to positive effect on purchasing.

1. Marketing campaigns for green products have effect on my purchasing. (Marketingová kampaň na ekologické produkty maju efekt na môj nákup) ^{86 responses}



Figure n. 26

In the second statement of external moderators' construct, the respondents were asked to provide score to whether "government campaigns will encourage me to care about environment". The results showed that 30.2% of the respondents were neutral or undecided with the statement followed by strongly agreeing group of 24.4% of respondents and agreeing respondents with 23.3%. Results show that government campaigns do encourage neutrally to positively encourage

the respondents to care about environment.

2. Government campaigns will encourage me to care about environment protection. (Kampane štátu ma motivujú...y som sa staral o životné prostredie) ⁸⁶ responses



Figure n. 27

In the third statement of external moderators' construct, the respondents were asked to provide score to whether "I can buy green products with great convenience". The results showed that 34.9% of the respondents were neutral or undecided with the statement followed by strongly agreeing group of 32.6% of respondents and agreeing respondents with 20.9%. Results show that

majority of the respondents can buy green products with convenience.

3. I can buy green products with great convenience. (Viem kúpiť ekologické produkty bez problémov)

86 responses



8.1.2.6 Green consumer behavior

The mean score of green consumer behavior is 4,19. The green consumer behavior construct consists of three subconstructs of purchasing, using and recycling behaviors. There is considerable variation that exists among the three behaviors, with purchasing behavior being the most popular with mean of 4,41, followed by recycling behavior with mean of 4.34 and using behavior being the least popular with mean 3,81. Such positioning within behaviors shows that the respondents think about their purchasing decisions when looking into green consumption first. Then following they think about recycling and economic benefit out of it and lastly findings concerning using behavior are less encouraging. The respondents are still in favor of products to their convenience as for example using plastic bags. Each of the subconstructs consists of 2 statements.

In the first statement of using behavior construct, the respondents were asked to provide score to whether "I use the plastic bags in retail stores". This statement was reverse scored. The results showed that 32,6% of the respondents strongly disagree with the statement followed by neutral

undecided group of 26,7% of respondents and 20,9% of the respondents showed disagreeing position. Such results indicate that majority of the respondents, individually, don't use plastic bags or they have neutral position to it.



1. I use the plastic bags in stores. (Používam nové plastove tašky v obchodoch)

Figure n. 29

In the first statement of purchasing behavior construct, the respondents were asked to provide score to whether "I buy high efficiency light bulbs to save energy". The results showed that majority 65,5% of the respondents strongly agree with the statement followed by agreeing group of 16,3% of respondents. These results indicate that vast majority of the respondents prefer

buying high efficiency light bulbs.



I buy high efficiency light bulbs to save energy. (Kupujem usporné lampy aby som ušetril energiu) ^{86 responses}

Figure n. 30

In the second statement of purchasing behavior construct, the respondents were asked to provide score to whether "I buy energy efficient household appliances". The results showed that 59,3% of the respondents strongly agree with the statement followed by agreeing group of 24,4% of the respondents. These results indicate that majority of the respondents prefer buying energy

efficient household appliances.



3. I buy energy efficient household appliances. (Kupujem úsporné spotrebiče do domácnosti)

Figure n. 31

In the first statement of recycling behavior construct, the respondents were asked to provide score to whether "I reuse bag or plastic bags". The results showed that more than half 54,7% of the respondents strongly agree with the statement followed by agreeing group of 32,6% of

respondents. Such results indicate that majority of the respondents reuse paper or plastic bags.



4. I reuse paper bag or plastic bags. (Znova používam papierové alebo plastové tašky)

Figure n. 32

In the second statement of using behavior construct, the respondents were asked to provide score to whether "I use less water". The results showed that majority 39.5% of the respondents strongly agree with the statement followed by agreeing group of 31.4% of respondents. These results

indicate that most of the respondents use less water whenever they can.



5. I use less the water whenever I can. (Snažím sa používať menej vody) ^{86 responses}

Figure n. 33

In the second statement of recycling behavior construct, the respondents were asked to provide score to whether "I bring back plastic/glass bottles to pant machines". The results showed that majority 62,8% of the respondents strongly agree with the statement followed equally by agreeing group of 15,1% of the respondents and neutral undecided group of 15,1% of the respondents. Such results indicate that majority of the respondents bring back plastic/glass bottles to pant

machines.



6. I bring back plastic/glass bottles to pant machines. (Vždy prinesiem sklenené fľaše späť do obchodu)

86 responses

Figure n. 34

The descriptive statistics showed the results of each construct and questions. The next part will look into finding relationships among constructs and demographics.

8.1.3. Correlations

In statistics, correlations are often used in order to indicate predictive relationships between variables. The relationship might help the researchers to observe or predict possible movements of the variables. The variables can move both with accordance (positive correlation) or counter to each other (negative correlation) (Cohen, 1983).

When it comes to level of significance, Bryman (2012) explains that the level of statistical significance is the level of risk that researcher is prepared to take that the researcher is inferring that there is a relationship between two variables in the population from which the sample was taken when in fact no such relationship exists. The maximum level of risk that is conventionally

taken in social research according to Bryman (2012) is to say that there are up to 5 chances in 100 that we might be falsely concluding that there is a relationship when there is not one in the population from which the sample was taken. This means that, if researcher drew 100 samples, him or her are recognizing that as many as 5 of them might exhibit a relationship when there is not one in the population. The sample might be one of those 5, but the risk is fairly small. This significance level is denoted by p < 0.05 (p means probability). If there is accepted a significance level of p < 0.1, it would be accepting the possibility that as many as 10 in 100 samples might show a relationship where none exists in the population. In this case, there is a greater risk than with p < p0.05 that the researcher might have a sample that implies a relationship when there is not one in the population, since the probability of having such a sample is greater when the risk is 1 in 10 (10 out of 100 when p < 0.1) than when the risk is 1 in 20 (5 out of 100 when p < 0.05). Therefore, the researcher would have greater confidence when the risk of falsely inferring that there is a relationship between 2 variables is 1 in 20, as against 1 in 10. But, if there is a need to have a more stringent test, perhaps because there is a worry about the use that might be made of your results, there might be chosen the p < 0.01 level. This means that the researcher is prepared to accept as level of risk a probability of only 1 in 100 that the results could have arisen by chance (that is, due to sampling error). Therefore, if the results, following administration of a test, show that a relationship is statistically significant at the p < 0.05 level, but not the p < 0.01 level, the researcher would have to confirm the null hypothesis (Bryman, 2012). To sum up, a test of statistical significance allows the analyst to estimate how confident researcher can be that the results deriving from a study based on a randomly selected sample are generalizable to the population from which the sample was drawn. When examining statistical significance in relation to the relationship between two variables, it also tells us about the risk of concluding that there is in fact a relationship in the population when there is no such relationship in the population. If an analysis reveals a statistically significant finding, this does not mean that the finding is intrinsically significant or important. The word 'significant' seems to imply importance. However, statistical significance is solely concerned with the confidence researchers can have in their findings. It does not mean that a statistically significant finding is substantively significant (Bryman, 2012).

In this research when doing correlations, the researcher is using SPSS program with statistical significance at the 1% (p < 0.01 level) and 5% level (p < 0.05).

Correlations between demographics and constructs (knowledge, attitude, internal and external moderators and behaviors) are listed in Tables n. 5, 6 and 7. In Table n. 5 of correlations between demographics, an income is significantly correlated with education level and employment status; and occupation category is significantly correlated with education level. The observed highest coefficient is 0,485 and occurs between education level and occupation category.

Correlations between demographics						
Variables	Gender	Education level	Occupation category	Income		
Age	0,141	-0,138	-0,176	-0,082		
Gender		-0,039	-0,061	0,142		
Education level			-0,485**	0,471**		
Occupation category				-0,465**		
Note: "**" and "*" denote statistical significance at the 1% and 5% level, respectively.						

Table n. 5

When it comes Table n. 6 of correlations between knowledge, attitudes and behavior, the observed highest coefficient is 0,594 and exists between attitudes toward green consumption and perceived consumer effectiveness, meaning that attitudes determine perceived consumer effectiveness of an individual. There is almost half of the scales (12 out of 28) that are significantly correlated (p < 0,01) and 2 that are significant at p < 0,05. There is only one negative correlation and it occurs between knowledge and perceived consumer effectiveness. The most significant and positive coefficients (p < 0,01) occur among behaviors themselves; environmental concern and perceived consumer effectiveness, external moderators and behaviors; external moderators and behaviors; and knowledge and purchasing behavior.

Correlations between knowledge, attitudes and behavior							
	Attitudes toward	Environmental	Perceived consumer	External	Purchasing	Using	Recycling
Variables	green consumption	concern	effectiveness	Moderators	behavior	behavior	behavior
Knowledge of green consumption	0,155	0,159	-0,068	0,070	0,356**	0,127	0,239*
Attitudes toward green consumption		0,199	0,594**	-0,153	0,010	0,131	0,120
Environmental concern			0,333**	0,426**	0,399**	0,310**	0,338**
Perceived consumer effectiveness				0,179	0,116	0,167	0,203
External Moderators					0,457**	0,379**	0,270*
Purchasing behavior						0,334**	0,486**
Using behavior							0,414**
Note: "**" and "*" denote statistical significance at the 1% and 5% level, respectively.							

Table n. 6

Three behaviors show different correlations with constructs and demographics. External moderators with age are the most important factor in predicting purchasing behavior. Using behavior is underlain by external moderatos. Finally, recycling behavior is governed mostly by purchasing and using behavior, which supports the research of Thøgersen and Ölander (2006) but as well by environmental concern in this case.

Occupation category and income appear to have the weakest influence among the demographic variables. In contrast, education level has the strongest influence on attitudes and age has influence on purchasing behavior. Previous studies of Diamantopoulos et al. (2003), Samdahl and Robertson (1989), and Zimmer et al. (1994) showed that people with higher education level are more likely to exhibit high levels of knowledge, develop positive attitudes, report higher environmental concern and perceived consumer effectiveness, and purchase environment-friendly products, which is consistent with the results.

The correlation analyses performed show that psychographic variables (knowledge, attitude, internal and external moderators) are more significant predictors of green consumer behavior than demographic variables (age, gender, education level, occupation category, income). Such results are comparable to previous research of Zhao et al. (2014).

Correlations between demographics and constructs							
Variables	Age	Gender	Education level	Occupation category	Income		
Knowledge of green consumption	272*	249*	0,207	-0,151	0,187		
Attitudes toward green consumption	-0,144	-0,049	.368**	-0,120	0,149		
Environmental concern	0,126	218*	0,163	-0,134	0,183		
Perceived consumer effectiveness	-0,107	-0,061	.255*	0,053	0,166		
External Moderators	.265*	-0,125	269*	0,174	-0,039		
Purchasing behavior	.326**	-0,157	-0,131	0,026	0,006		
Using behavior	-0,008	-0,019	0,048	0,128	0,097		
Recycling behaviour	0,095	-0,101	0,040	-0,041	0,158		
Note: "**" and "*" denote statistical significance at the 1% and 5% level, respectively.							

Table n. 7

8.1.4. Regressions

In statistics and more precisely statistical modeling a regression is a method that allows to describe co-variableness of variable or multiple variables by fitting them to a right function. Regressions consists of various techniques of modeling and analyzing variables with the main focus on trying to explain the relationship between a dependent variable (the variable one is trying to explain) and independent variables (set of variables that are trying to explain the dependent) (Doyle, 2011).

It this case, stepwise multiple regression analysis was performed in order to avoid not significant independent variables. The reason is to choose the closest model possible for the theoretical simplicity. In practice, it allows to have only relevant predictors and finally it allows to maximize predictability of the criterion in subsequent samples. In statistics the stepwise regression is a method of fitting regression models in which the choice of predictive variables is carried out by an automatic procedure (Efroymson, 1960).

For the multiple regression analysis in this paper, purchasing, using and recycling behaviors were modeled as the dependent variables respectively, with knowledge, attitudes, internal and external moderators, and behavior serving as predictor variables, see Tables n. 8, 9 and 10. As indicated by the regression of purchasing, the first predictor to enter the model (Table n. 8) is recycling behavior, explaining 22,7% of the variance. Further the model entry for other variables has the following order (incremental gain in R2 in parentheses): external moderators (0,108), knowledge of green consumption (0,054), and age (0,084). This analysis in purchasing behavior also indicates that recycling behavior, external moderators, knowledge of green consumption, and age are significant (p < 0.05). The ordering of model entry suggests that psychographics and demographics are independent predictors of purchasing behavior, but psychographic segmentation is more effective. This finding agrees with the previous literature (Straughan and Roberts, 1999; Zhao et al., 2014). As for using behavior there are two variables that enter the model. The model in Table n. 9 is explained by recycling behavior with 16,2% of the variance, followed by external moderators (6,8%). For recycling behavior, likewise two variables enter the model in Table n. 10. Purchasing behavior explains 22,7% of the variance the same as in Table n. 8, followed by using behavior (0,64%). Multiple regression and correlation analysis yield consistent results.

Regression of purchasing behavior						
Variables	Regression coefficients	Variable significance	Cumulative adjusted R2	Model significance		
Recycling behavior	0,327	0,001	0,227	0,000		
External moderators	0,222	0,002	0,335			
Knowledge of green consumption	1,164	0,000	0,389			
Age	0,178	0,000	0,473			

Table n. 8

Regression of using behavior						
Variables	Regression coefficients	Variable significance	Cumulative adjusted R2	Model significance		
Recycling behavior	0,384	0,001	0,162	0,000		
External moderators	0,251	0,005	0,230			

Table	n.	9
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Regression of recycling behavior							
Variables	Regression coefficients	Variable significance	Cumulative adjusted R2	Model significance			
Purchasing behaviour	0,358	0,000	0,227	0,000			
Using behaviour	0,248	0,004	0,291				

Table n. 10

To sum up analysis of surveys, there was found that certain variables and construct differently affect each other. In order to find out why, selected connections will be chosen to be explored by interviews. The detailed findings of both survey and interview analysis will be discussed in Discussion section of this research.

8.2 Interview analysis

Interview analysis is based on interviews that were positioned on data analysis from survey. The survey analysis showed connections among demographic and psychographic variables and constructs, and 3 strongest connections were selected for interviews in order to supplement this research by more detailed data. These connections are attitude towards green consumption and education level, again attitude toward green consumption and perceived consumer effectiveness, and connections among 3 behaviors of recycling, using and purchasing. Each of the connection

consisted of a few questions and answers of these questions from interviewees will be analyzed. The interview transcripts which are analyzed, are located in Appendices section.

8.2.1 Education level and attitude towards green consumption

In regards to education level and attitude towards green consumption, the researcher found out that more educated interviewees with higher education of bachelor degree or master degree do have more positive attitude towards green consumption like in Marek case (interviewee 5) with master degree education and age of 66: his attitude is "positive" as he states further adding "I love my country and it tears my hearth when I see it polluted or destroyed by catastrophic events like storms. That's why I support and I have positive attitude towards green consumption." or like in Michal case (interviewee 3) with also master degree education and age of 34: his attitude towards green consumption is "definitely positive"; and supported by Maria with bachelor degree and age of 25: her attitude towards green consumption as "very positive"; than interviewees with only middle education of high school like in case of Pavol (interviewee 3) with high school education and age of 43, has "neutral" position towards greed consumption; and Anna with also high school education and age of 57, has according to her "not the best one" attitude towards green consumption as she thinks "it is all fake with intention to get from people more money on taxes and bigger margins on products". Such findings correspond to research of Diamantopoulos et al. (2003), who stated that the better educated tend to score high on all components of the green consumption domain of knowledge, attitudes, and moderators.

Further when asking whether they think that education affected their attitude towards green consumption only younger generation Maria (25) and Michal (34) admitted that education had some influence on their attitude towards green consumption whereas Maria is stating: "I *learned to some point about green consumption in elementary and then in high school and this topic was interesting to me" adding "therefore, I got hooked"*; whereas Michal is described it in this way: "*education simply showed me that there is something like green consumption"*. On the other hand, older interviewees all agreed that they did not learn about green consumption or environmental problems when they were going through education. Marek (66), the oldest, said: "*During my times when I was studying it was during the deepest communism and green consumption or*

environmental concern really didn't exist." Pavol (43) adding that: "my last studies were 25 years ago and that time we had no idea about eco products, green consumption or global warming." And Anna confirming the same story: "I used to attend cooking high school so anything about ecology was far far away from my study purpose." These findings correspond to historical events of environmental movement that only occurred in late 1980s which then led to Velvet Revolution and collapse of communism in Czechoslovakia (Podoba, 1998). As interviewees and Podoba (1998) state that extensive heavy industrialization was priority for communist regime and ecological aspect was never taken into consideration.

8.2.2 Attitudes towards green consumption and perceived consumer effectiveness

In regards to attitudes towards green consumption and perceived consumer effectiveness, the researcher found out that interviewees with positive attitude towards green consumption had higher perceived consumer effectiveness in position of individual responsibility effect on environment like in case of Maria (25) who states that her attitude "affects it a lot as I first needed to develop positive attitude to green consumption and then I implemented it to my every day choices." Or Pavol (66) adding similar statement that "it is my attitude in the first place towards environment that predict my individual behavior towards changing something about environment. I think it is very connected." On the other hand, interviewees who did not have positive attitude they had little knowledge and little interest how to protect environment like Anna (57) who connected this to scarcity of financial resources to even think green: "Look I don't have positive attitude towards green consumption as partly my family cannot afford it so I cannot choose what product we can buy whether it is green or not. So, in the end I cannot change anything." Such position is connected to price sensitivity of consumers in Slovakia which also previous researches confirmed this in works of Benda-Prokeinova (2015), Kubelaková & Košičiarová (2016), Krizova & Buday (2015). Furthermore, Pavol (43) is skeptical about his contribution to environment stating: "We are told to recycle but even we recycle, we hear that it all ends up in one junkyard together. The whole system is wrong and it needs to start from above. One man cannot change anything.

Such findings correspond to survey analysis findings." He is referring to a fact that 50% of collected plastic waste for recycling cannot be recycled and it ends up in junkyard (Startitip.sk,

2019). Such problem indicates to linear economy in Slovakia where 70% of all waste ends up in junkyards. On the other hand, countries of western Europe have circular economy which takes unrecyclable waste to incinerator where waste transforms to electricity and heat (Startitip.sk, 2019). Several independent studies identified perceived consumer effectiveness as the most predictive factor of green consumer behavior (Berger and Corbin, 1992; Kim and Choi, 2005; Roberts, 1996; Straughan and Roberts, 1999; Wiener and Doescher, 1991). Individuals with a strong belief that their green consumer behavior will result in positive outcomes are more likely to engage in such behavior (Zhao at al. 2004).

8.2.3 Recycling, using and purchasing behaviors

When asking interviewees whether they think green when purchasing any products or services, interviewees with higher perceived consumer effectiveness, higher knowledge about green consumption, and positive attitude were thinking green when purchasing. Such as Maria (25) states: "If my budget allows me, I buy eco products. I do not use any plastic bags in stores, I bring my own. I also visit store called Odvazene in Presov that doesn't sell packaged food." On the other hand, Michal (34) think green when purchasing but from different perspective: "I do" think green (comment of interviewer)" mainly because I believe it can be a small from my side and at the same time big contribution to our planet". Marek (66) looks into his green thinking when purchasing from different additional perspective when purchasing new car: "when looking into car models, we wanted small car and ecological so we bought hybrid car" and when purchasing fridge: "we looked for low electricity consumption fridge within our price range of course". When looking into answers of interviews who don't think green the answers were more connected to pricing issues. Anna (57) states the she doesn't think green as she buys "the cheapest options and I do not care whether it is ok or not ok to environment." Additionally, Pavol (43) adds whether he thinks green when purchasing: "No, I don't. If I would, I would be bankrupt. It is expensive to think green. Just look at eco products they are 50% or more expensive. I cannot afford them. For me the price issue is the main problem." Again, such findings indicate price sensitivity issue towards green behavior.

Further when asking interviewees whether they think that recycling affects their purchasing and using behaviors, the similar proportion of answers were received with Maria (25), Michal (34) and

Marek (66) answered in similar way with Maria answering that "recycling significantly affects my purchasing and using product and service as I think a lot about products and service what I will do with them after I use it." Michal mentioned that recycling affected him "to not purchase anymore because e.g. the packaging" or further adding: "I look a lot on the product expiry dates to make sure that the food I buy will not go to waste either." Marek mentions that he prefers "not packaged food or if packed then I prefer paper instead of plastic." Marek further adds: "I do not buy small packaging of ham but I better go to butcher with my Tupperware." On the other hand, Pavol (43) and Anna (57) do not think the recycling affects their purchasing and using behaviors. However, Pavol thinks this way only on purchasing every day products: "When it comes to food, we are not affected at all as we look on price of the products not whether they are environment friendly or not." But when it comes to long term products he states: "I try to repair all the things that get broken than buying new ones. For example, lately our 10 years old washing machine broke and I repaired it instead of buying new one." However, such behavior can be motivated by financial aspect.

To sum up interview analysis, there are several aspects that needs to be taken into consideration when looking into the findings. There was found that economic aspect is strong when facing green consumption in all constructs. Likewise, it seems that education level seems as important factor when looking towards perception and attitude towards green consumption. The findings of interview analysis will be discussed in detail in Discussion section.

9 Discussion

Discussion of findings on green consumption between survey and interviews compared with theories and past research. Firstly, when looking on scores of behaviors, purchasing behavior scores highest and using behavior scores lowest. When looking at these findings, it is quite surprising that Slovak respondents of the survey scored the highest with purchasing behavior as Slovak are very price sensitive (Benda-Prokeinova, 2015; Kubelaková and Košičiarová, 2016; Krizova and Buday, 2015). However, the research showed that majority, almost 80%, of the respondents are willing to pay more for green products, which generally are priced higher (Mahenc, 2017). On the other hand, this research purchasing behavior focus on products saving

electricity as household appliance and electricity light bulbs whereas research of Musova et al. 2018 shows that Slovak consumers care about electricity saving when buying mid and long-term consumption products. Recycling behavior scores slightly behind purchasing with high score corresponding to fact that 90% of Slovak thinks that recycling is very important (Startitup.sk, 2019). Using behavior scored the lowest. According to Zhao et al. (2014) using behavior means *"changing life habits to protect the environment, e.g. fostering good habits of using"*. Such explanation can be applied also in this research as using one-time plastic and saving water fits this explanation. Since this behavior scored the lowest, agreeing with Zhao et al. (2014) *"changing life habits should be also advocated by government and green groups."*

Secondly, when looking into demographic variables and their effect on other constructs, education level is the most important. This finding is also supported by previous researches of Diamantopoulos et al. (2003), Musova et al. 2018 and Zhao et al. (2014) that stated that *"the better educated tend to score high on all components"*. Zhao et al. (2014) further added: *"plausible explanation for this phenomenon is that the more educated can better understand complex environmental issues, and hence are more concerned with environmental quality and more willing to participate in green consumer behavior." Such statement is supported by interview analysis whereas interviewees with higher education had much more positive attitude towards green consumption than people with high school only.*

Further when looking into age and its effect on behavior in this research there was observed that older the respondents where they were more likely to engage in purchasing behavior. Such findings also correspond to previous research of Diamantopoulos et al. (2003), Roberts (1996), Samdahl and Robertson (1989) and Zhao et al (2014) where positive relationship between age and behavior was described.

Despite income being described by previous studies as positive (Kinnear et al., 1974; Musova et al., 2018) or even significant variable towards green consumption (Gilg et al., 2005), this reaserch did not confirm such findings. Despite such results, as Zhao et al. (2014) summarizes in his research that there is tendency among higher-income group in general to perform sustainable consumer behavior which as well is confirmed on Slovak consumers by Musova et al. 2018.

Lastly when looking into predictors for behaviors for this research, there is strong connection among all behaviors, especially recycling behavior and another two behaviors of purchasing and using (Biswas et al., 2000; Thøgersen and Ölander, 2006, Zhao et al. (2014). Biswas et al. (2000) found a potential effect of recycling behavior on other related behaviors. Further Biswas et al. (2000) add: *"as Berger (1997) suggests, recycling may be the first step in adopting other related behaviors."* Such indications support this research findings. Furthermore, findings from interview analysis indicate that people who had positive attitude towards green consumption thought more that their recycling behavior were affecting their purchasing and using behaviors.

Besides recycling behavior as strong predictor there are also others. In regards to purchasing behavior, external moderators and knowledge of green consumption enter the model. When it comes to external moderators of government environmental campaigns, marketing for green products and accessibility to green products, they enter the model as the second predictor. Such results are supported by research Kollmuss and Agyeman (2002) and Thøgersen (2010) research where these campaigns do have positive or pro-environment behavior and affect behavior of people towards purchasing and using green products. Knowledge of green consumption follows. Such result is also confirmed by interview analysis whereas interviewees knowing a lot about green consumption were exhibiting green behavior in general but strongly in purchasing. These findings are confirmed by several researches of Bartkus et al. (1999); Chan and Yam (1995); Haron et al. (2005); Hoch and Deighton (1989); Park et al. (1994); and Peattie (2010).

10 Conclusion

This section presents summary of findings for this research. The used theoretical model analyzed relationships among demographics, knowledge of green consumption, attitude towards green consumption, internal and external moderators, and behavior.

Correlation analyses and multiple linear stepwise regression analyses were applied to data from collected surveys and determined the influence factors on green consumer behavior regarding purchasing, using and recycling. Furthermore, five semi structured interviews were made in order to supplement the findings of survey analysis. The results showed differences between three behaviors with regard to demographic and psychological variables and constructs. When looking into purchasing behavior, the researched showed that it is affected by recycling behavior, external moderators, knowledge of green consumption and age. Predictors for using behavior are recycling behavior and external moderators. In regards to recycling behavior, it is affected by purchasing behavior.

Further, in data from surveys and interviews, we found that attitudes toward green consumption are tied to education level whereas more educated interviewees showed more positive attitude. They were also more aware of green consumption and environment overall. Additionally, they felt more responsible that their behavior can have effect on their environment. These interviewees were also showing stronger green consumption behavior in all aspects of purchasing, using and recycling. On the other hand, interviewees who did not have positive attitude towards green consumption showed neutral or negative positions towards green behavior or environment. Their biggest struggle of not being interested were financial and economic factors. Adding, these interviewees were older and reached high school education.

To sum up, psychographic variables are more significant predictors of green consumer behavior than demographic variables. Despite they affect green consumer behavior stronger, demographics, especially educational level, seem important as well.
11 Managerial implications and further research

After concluding this research, the researcher would like present possible managerial implications and possible further research of this study. Since this research was made with convenience sample for survey, it cannot be generalized to Slovak population. Despite this fact, there might be certain implications for business strategy and public policy can be drawn from these findings.

For business marketers, the regression of purchasing behavior showed the importance of external moderators for the consumers. This proves that green marketing campaigns do have strong impact on end consumers and engage them in purchasing behavior. Further knowledge is as well strong predictor of purchasing behavior therefore these campaigns should also play educational role towards green products and their advantages. Although price acts as the barrier to buying green products due to price sensitivity of Slovak consumer, there could be an opportunity for marketing managers to successfully implement differentiated marketing in such case. Another different concept could be used for consumers who exhibit little or no concern about green consumption, this concept should be aiming to win-win concept based on finding out the price the consumers are willing to pay.

For public policy makers, this research shows that education is key demographic variable towards green consumption. Additional educational programs will need to be necessary in order to increase knowledge levels among population and reshape consumer preferences towards sustainable future. Furthermore, policy makers shall look into forms of presenting their supporting or restrictive actions to population. The massive spread of Internet made consumers getting more and more information from Internet and social media therefore policy makers should find creative ways of promoting their steps in legislation changes like implementation of carbon tax.

In regards to further research, this research should be replicated on much larger random sample of people in Slovakia. This would allow to get precise data that can be generalized to population and such findings could be used in effective targeting of green consumption in Slovakia. The researcher feels confident that this research can be replicated to any country, city or group of people. Furthermore, additional factors or more detailed factors could be added into constructs.

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13 Appendices

Data from questionnaire, interviews transcripts and excel sheet with data.

13.1 Survey questionnaire

The main research tool was a questionnaire consisting of questions with pre-selected answers. The questionnaire will have three main sections.

The first section collects basic information on green consumption:

- 1. Have you ever heard about terms called green consumption? Už ste niekedy počuli o termíne zelena spotreba?
- A. Yes (Áno)

B. No (Nie)

- 2. From what sources do you obtain information about green consumption? Z akých zdrojov získavate informácie o zelenej spotrebe?
- A. TV (TV)
- B. Advertisement (Reklama)
- C. Newspaper (Noviny)
- D. Internet (Internet)
- E. Family or friends (Rodina a priatelia)
- F. Others (Iné)
 - 3. What is the maximum price increase that is acceptable when you would purchase green products? Aký maximálny príplatok ste ochotný zaplatiť za nákup zelených produktov?
- A. 0%
- B. 1-10%
- C. 11-20%
- D. 21-50%
- E. 50% or more (alebo viac)

The second part supposed to get respondents' knowledge about green consumption, attitudes toward green consumption, internal and external moderators and green consumer behavior.

Knowledge about green consumption

Vedomosti o zelenej spotrebe:

- 1. Green consumption means: Zelená spotreba znamená:
- A. Purchasing products from abroad to promote resource circulation

(Nakupovanie produktov zo zahraničia na základe propagácie cirkulácie zdrojov)

B. Purchasing products made from plants only

(Nakupovanie produktov výlučne vyrpbených z rastlín)

C. Purchasing products from not developed countries

(Nakupovanie produktov z tretćh krajín)

D. Purchasing recyclable products, low resource cost, low pollution

(Nakupovanie produktov ktoré sa dajú recyklovať, majú nízke nároky na zdroje, neznečistujú tak veľa)

2. Recognize the sign of environment-friendly products: Rozoznajte znak produktu ktorý je šetrný k životnému prostrediu:





3. What problems will CO2 cause? Aký problem spôsobí CO2?

A. Global warming

(Globálne otepľovanie)

B. Rapid growth of crops

(Zvýšenie rastu plodín)

C. Acid rain

(Kyslé dažde)

D. Ozone layer depletion

(Dieru v ozónovej vrstve)

- 4. Prohibition of freon detergents is to prevent: Zákaz freónov zabraňuje:
- A. Global warming

(Globalnemu otepľovaniu)

B. Rapid growth of crops

(Zvýšeniu rastu plodín)

C. Acid rain

(Kyslému daždu)

D. Ozone layer depletion

(Zväčšovaniu ozónovej diery)

- 5. The main objective of banning sales of old ordinary lamps was? Hlavný zámer zákazu predaja starých žiaroviek bol?
- A. To reduce rapid growth of crops
- (Zredukovať rapídny rast plodín)
- B. To prevent ozone layer depletion
- (Zabrániť zväčšovaniu ozónovej diery)
- C. To stop acid raids
- (Zabrániť kyslím dažďom)

D. To save energy consumption

(Znížiť spotrebu energie)

- 6. The main object of garbage classification: Hlavný zámer klasifikćie odpadov je:
- A. Prevent breeding of mosquitoes
- (Predchádzať rozmnožovaniu komárov)
- B. Reduce the workload of cleaning of streets

(Znižovať náklady na čistenie ulíc)

C. Recycle and reuse

(Recyklovať a znovu použiť)

D. Increase income by selling recyclable products

(Zvýšiť píjem predávaním recyklovaných produktov)

- EU Energy Label on white goods shows:
 EU energetická nálepka na bielych spotrebičoch ukazuje:
- A. Attractiveness of the goods
 - (Atraktivitu produktov)
- B. Price of the goods

(Cenu pruduktov)

C. Energy effectiveness of the product

(Energeticku efektívnosť produktov)

D. Marketing of the goods

(Propagáciu produktov)

- 8. What is the EU energy saving target on electricity by 2030 compared to today's level? Aky je cieľ EU v roku 2030 pri znižovaní spotreby elektrickej energie v porovnaní s dnešou spotrebou?
- A. 5%
- B. 10%
- C. 30%
- D. 60%

Note: Bold letters indicate the right answer for the knowledge questions. Answerable on a twocategory 'true/false' format with 1 point for a true answer and 0 for a false answer.

Attitudes toward green consumption

<u>Postoj k zelenej spotrebe</u>

 It is more convenient to buy new household electrical appliances than to repair them. (R) (Je výhodnejšie si kúpiť nové elektrické spotrebiče ako ich opraviť)

- The resources consumed by myself won't cause any pollution to the environment. (R) (Zdroje, ktoré spotrebujem ja sám majú veľmi malý dopad na životne prostredie preto neznečistujem)
- 3. There is need to persuade others to get involved in green behavior. (R) (Nieje potreba presviedčať iných aby sa správali ekologickejšie)
- It seems very attractive to focus on water and electricity control for household products. (Je veľmi atraktívne sa zamerať na kontrolu vody and elektriny pre produkty do domácnosti)
- It is very important to promote active actions for the green behavior. (Je veľmi dôležité propagovať aktívne kroky voči ekologickému spravaniu)
- 6. I was supportive for the EU law which bans one-time-use plastic products.(Som sa za zákon, ktorý nariadzuje zákaz plastových výrobkov na jedno použitie)

Environmental concern

<u>Postoj k ekológii</u>

- The balance of nature is very fragile and easily can get hurt. (Rovnovaha prŕody je veľmi krehká a ľahko je zničená)
- Mankind seriously harms the environment. (Ľudstvo veľmi ničí životné prostredie)
- The whole pollution issue has upset me. (Všetko znečistenie ma robí smutným)

Perceived consumer effectiveness

Vnímaná efektívnosť spotrebiteľov

- I can do nothing to help control pollution of the environment. (R) (Nemôžem urobiť nič pre kontrolu znečistenia prostredia)
- My behavior can have a positive effect on the environment by purchasing green products. (Moje správanie môže mať pozitívny efekt na životné prostredie pri nakupovaní ekologických produktov)

External moderators'

Externý moderatori

- The marketing campaign of green products has effect on my purchasing. (Marketingová kampaň na ekologické produkty maju efekt na môj nákup)
- The government campaigns will encourage me to care about environment protection. (Kampane štátu ma motivujú aby som sa staral o životné prostredie)

 I can buy green products with great convenience. (Viem kúpiť ekologické produkty bez problémov)

Green consumer behavior

Správanie ekologického spotrebiteľa

- I use new plastic bags in the stores. (R) (Používam nové plastove tašky v obchodoch)
- I buy high efficiency light bulbs to save energy. (Kupujem usporné lampy aby som ušetril energiu)
- I buy energy efficient household appliances. (Kupujem úsporné spotrebiče do domácnosti)
- 4. I reuse the paper bag or plastic bags. (Znova používam papierové alebo plastové tašky)
- I use less the water.
 (Snažím sa používať menej vody)
- I bring back plastic/glass bottles to pant machines.
 (Vždy prinesiem sklenené fľaše späť do obchodu)

All the statements are set on a 5-point scale with "1 = not agree at all" and "5= strongly agree". R= reverse scored

The final part of the questionnaire gathered demographic information, including age, gender, employment, education level and income.

Demographic measures

<u>Demografia</u>

1. What is your age?

Aký je tvoj vek?

_____Years (rokov)

2. What is your gender?

Ake je tvoje pohlavie?

- A. Male (Muž)
- B. Female (Žena)
- 3. What is your education level? (Aké je tvoje vzdelanie?)
- A. Primary school (základná škola)
- B. High school (stredná škola)
- E. Bachelor degree (bakalár)
- F. Master/Engineer degree or above (magister/inžinier alebo vyšší)
- 4. What is your occupation? Aká je tvoja profesia? (Profesia)
- A. Higher managerial, administrative, or professional
 - (Vyššia manažérska, administratívna alebo profesionálna)
- B. Scientific researcher and, educational, medical worker
 - (Vedec, učiteľ, medicínsky pracovník)
- C. Machinery operator and driver
- (Operátor strojov alebo vodič)
- D. Trade and service worker
- (Obchodník alebo pozícia v službách)
- E. Self-employed
 - (Podnikateľ/živnostník)
- F. Farming, forestry, animal husbandry and fishery worker
- (Poľnohospodár, lesník, rybár)
- G. Pensioner
- (Penzista)
- H. Unemployed/student
- (Nezamestnaný/student)
- I. Other

(Iné)

- 5. Check the category which best fits your total net income per month:
- Vyber kategóriu ktorá najviac vystihuje váš čistý mesačný príjem:
- A. Less than 550 EUR (Menej ako)
- B. 551 EUR 1100 EUR
- C. 1101 EUR 2200 EUR
- D. 2201 EUR or more (Alebo viac)

DATA collected by Google Forms

13.2 Excel sheet data

Attached to this research paper during hand in.

13.3 Interviews

Interview 1. Maria (25, bachelor degree)

Education level and attitudes towards green consumption

3. What is your attitude towards green consumption?

My attitude is very positive. I like all green products and I also try to recycle a lot. I visit new store in our city that doesn't pack food in plastic. I also support all initiative like My sme les for saving forests in Slovakia and I also support school strike for climate movement by Swedish girl Greta Thunberg.

4. In what way do you think education affected your attitude towards the green consumption?

I think that we learned to some point about green consumption in elementary and then in high school and this topic was interesting to me. Therefore, I got hooked and it was natural path for me to live in green or responsible way towards environment.

Attitudes towards green consumption and perceived consumer effectiveness

3. How do you think you personally can change environment?

I think that it can be through my every day actions like saving electricity, recycling, using less water, and purchasing sustainable products. I try to do it every time I can and my budget allows me to.

4. How does your attitude towards green consumption affect your personal position of whether you personally can change anything about environment you live in?

I think it affects it a lot as I first needed to develop positive attitude to green consumption and then I implemented it to my every day choices. I also tried to implement a few "green" things to my parents but they weren't that happy about it. (laughing) They haven't got that same enthusiasm as I have had until now.

Recycling behavior, purchasing behavior and using behavior

4. Do you think green when purchasing products or services? Why, yes? Why, not?

Yes definitely. If my budget allows me, I buy eco products. I do not use any plastic bags in stores, I bring my own. I also visit store called Odvazene in Presov that doesn't sell packaged food. You can buy normal food just you need to bring your own packaging.

5. Do you recycle? Why yes? Why not?

Yes, I do. I have different bins at home for composting, plastic, paper, glass and metals. Even though I need to look around for the bins, they are quite far away from my place where I live, but I do it. I just feel responsible for my actions and towards future generations to not pollute.

6. How do you think recycling affects your purchasing and using products and service?

I think that recycling significantly affects my purchasing and using product and service as I think a lot about products and service what I will do with them after I use it. Therefore, I go

shopping to Odvazene shop instead of normal shop where I would buy also packaging. It is quite funny as sometimes I buy cheaper in Odvazene than in normal store.

Interview 2. Michal (34, master degree)

Education level and attitudes towards green consumption

1. What is your attitude towards green consumption?

I would say that my attitude it's definitely positive, I think we're all responsible for our planet and finally we're able to realize that and work together towards better tomorrow.

2. In what way do you think education affected your attitude towards the green consumption?

Well I think my education had some contribution to my knowledge about the green consumption but the choices I made and I am making each day are based very much on my values and beliefs. Therefore, if I would need to give a simple answer, I think the education simply showed me that there is something like green consumption but the final decision was totally up to me and was never pushed by schools or universities I was attending.

Attitudes towards green consumption and perceived consumer effectiveness

1. How do you think you personally can change environment?

I think I can do that through making sure that at the very least I do my very best and not look what other people do. Thus, I am trying to recycle as much as possible, I have reduced the meat products and try to purchase more eco-friendly products. Additionally, I have decided to use bike to commute to my workplace despite the fact that it is very uncommon practice in Slovakia.

2. How does your attitude towards green consumption affect your personal position of whether you personally can change anything about environment you live in?

Well my positive attitude definitely increases the believe that my personal choices can influence the planet. As I said in one of the previous questions, I try to make sure that at the very least it's me who is doing something without judging others.

Recycling behavior, purchasing behavior and using behavior

1. Do you think green when purchasing products or services? Why, yes? Why, not?

Yes, I do, mainly because I believe it can be a small from my side and at the same time big contribution to our planet.

2. Do you recycle? Why yes? Why not?

As mentioned before yes, I do, why yes? I think because it is a simple daily task that can benefit us all. I think it should be taught since the early age to each individual in order to make it a habit. From a more practical answer I am recycling because I can only imagine how terrible the places full of waste can look like. I have never seen it by myself but through recycling I am decreasing the chance of that ever happening and I am satisfied about it.

3. How do you think recycling affects your purchasing and using products and service?

I personally think it does a lot. This is mainly about some products that I decided to not purchase anymore because e.g. the packaging of it. I try to make sure that I am aware customer that purchases goods that can be easily recycled. Additionally, I look a lot on the product expiry dates to make sure that the food I buy will not go to waste either.

Interview 3. Pavol (43, high school)

Education level and attitudes towards green consumption

1. What is your attitude towards green consumption?

Me personally I am neutral towards green consumption, I think it is good idea overall. However, I think it is quite expensive and I am little bit skeptical about it. 2. In what way do you think education affected your attitude towards the green consumption?

I don't think that my education affected in any way my attitude towards green consumption. You know, my last studies were 25 years ago and that time we had no idea about eco products, green consumption or global warming. On top I am having engineering high school and there was not even one word about things we are talking about right now.

Attitudes towards green consumption and perceived consumer effectiveness

1. How do you think you personally can change environment?

I don't think I can change anything. What can one man like me change? I think the change needs to start with politicians, government and all these large corporations that pollute with all the plastic. For example, why shop didn't ban the plastic bags earlier? Because, they do not care about environment, they only care about profits.

2. How does your attitude towards green consumption affect your personal position of whether you personally can change anything about environment you live in?

I do not know. We are told to recycle but even we recycle, we hear that it all ends up in one junkyard together. The whole system is wrong and it needs to start from above. One man cannot change anything.

Recycling behavior, purchasing behavior and using behavior

1. Do you think green when purchasing products or services? Why, yes? Why, not?

No, I don't. If I would, I would be bankrupt. It is expensive to think green. Just look at eco products they are 50% or more expensive. I cannot afford them. For me the price issue is the main problem.

2. Do you recycle? Why yes? Why not?

Yes, we do recycle at home as we are forced to do it. If we don't recycle then municipality can send us a fine.

3. How do you think recycling affects your purchasing and using products and service?

When it comes to food, we are not affected at all as we look on price of the products not whether they are environment friendly or not. But I try to repair all the things that get broken than buying new ones. For example, lately our 10 years old washing machine broke and I repaired it instead of buying new one.

Interview 4. Anna (57, high school)

Education level and attitudes towards green consumption

1. What is your attitude towards green consumption?

Not the best one. I think it is all fake with intention to get from people more money on taxes and bigger margins on products.

2. In what way do you think education affected your attitude towards the green consumption?

In none. Back in days when I was going to school no one ever heard of green consumption. I used to attend cooking high school so anything about ecology was far far away from my study purpose. Despite sometimes I hear in news about environmental problems but doesn't count like selfeducation.

Attitudes towards green consumption and perceived consumer effectiveness

1. How do you think you personally can change environment?

I think that I cannot change it that much. My actions have so little impact on environment. When you take all the people on Earth, I am one of billions. Maybe I can recycle more and tell my husband the same but what will it change? There is so much waste that it will be here for thousands of years. 2. How does your attitude towards green consumption affect your personal position of whether you personally can change anything about environment you live in?

I really don't know. I really don't have opinion on that. Look I don't have positive attitude towards green consumption as partly my family cannot afford it so I cannot choose what product we can buy whether it is green or not. So, in the end I cannot change anything. Maybe it is connected but who knows.

Recycling behavior, purchasing behavior and using behavior

1. Do you think green when purchasing products or services? Why, yes? Why, not?

No, I don't. I buy the cheapest options and I do not care whether it is ok or not ok to environment. The government should regulate that; however, prices cannot go up.

2. Do you recycle? Why yes? Why not?

Yes, because we have to. But we could do it more, I think. Why we don't recycle more? I think it is because we are too lazy.

3. How do you think recycling affects your purchasing and using products and service?

No, I really do not think that recycling affects us in any way. Yes, it does, we have more bins taking space in our kitchen.

Interview 5. Marek (66, master degree)

Education level and attitudes towards green consumption

1. What is your attitude towards green consumption?

Positive. I love my country and it tears my hearth when I see it polluted or destroyed by catastrophic events like storms. That's why I support and I have positive attitude towards green consumption.

2. In what way do you think education affected your attitude towards the green consumption?

During my times when I was studying it was during the deepest communism and green consumption or environmental concern really didn't exist. It was time of heavy industrialization of our country and following manufacturing plans of communist party, reaching 5 years plans as so on. Also, there wasn't at all that much plastic and waste in overall. We were also lacking many things from toilet paper to furniture. So, really there wasn't something like green consumption. It is only now when we live this consume type of life. Everything is packaged in plastic horrible! So, my education back in times really didn't affect my attitudes towards green consumption. But currently it is a problem since we live in different times and kids should be educated about environment and pollution. I hope that current young generation can find solution on this huge problem.

Attitudes towards green consumption and perceived consumer effectiveness

1. How do you think you personally can change environment?

I think I can change it through my actions. It means on what I buy, how often I buy it, whether I recycle, whether I turn off the light whenever I can to save electricity and money, whether I repair things instead of buying new ones. In the past everything was scarcity so we valued things, now this generation has everything and they don't value anything. If something breaks, they throw it away and buy new one.

2. How does your attitude towards green consumption affect your personal position of whether you personally can change anything about environment you live in?

I think that it is my attitude in the first place towards environment that predict my individual behavior towards changing something about environment. I think it is very connected. I know many people, also my age, that don't believe that there is an issue with environment and they just don't care and they behave like that including their everyday lifestyle.

Recycling behavior, purchasing behavior and using behavior

1. Do you think green when purchasing products or services? Why, yes? Why, not?

Yes, we do. We try to buy not packaged food so for example instead going to retail store we go to local market place where we buy not packaged fruits and vegetables. Also, we buy milk from automat in our village and we bring our own glass bottle. Likewise, lately we needed to buy new car as our old car got broken and we could not repair it. So, when looking into car models, we wanted small car and ecological so we bought hybrid car. It was little more expensive but we will save on fuel. The same happened with our fridge, we looked for low electricity consumption fridge within our price range of course.

2. Do you recycle? Why yes? Why not?

Yes, we do because we have to. But even before times of recycling, we have had our compost in the garden which we have used since the beginning we built our house 35 years ago. I think that recycling came too late. We could recycle much earlier but we didn't have correct bins and government didn't have infrastructure built. Back in times we could only sell old newspapers for some funny money that was all. Also, we could sell old iron but that has been here all the time due to huge iron manufacturing plant in Kosice.

3. How do you think recycling affects your purchasing and using products and service?

I think it affects them a lot as I buy products which can be safely disposed. When looking into products I prefer not packaged food or if packed then I prefer paper instead of plastic. I do not buy small packaging of ham but I better go to butcher with my Tupperware. I also never use plastic bags when go shopping and one-time plastic bags. Further I try to reuse as many products as possible

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