



UNIVERSITÀ  
DI TRENTO

Thesis Exposé

CONSUMERS' ATTITUDE TOWARDS SUSTAINABILITY IN  
URBAN AND RURAL AREAS: DIFFERENCES AND  
CONSEQUENCES FOR MARKETING MANAGEMENT

MSc in Management

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## **Abstract**

**Background:** The debate regarding negative human impact on the environment became central in the last few years. Now we reached a point where everyone should act and shift its unsustainable consumption (SC) habits. Sustainability and being sustainable is becoming more and more central in current debates in many fields, and the business field is not an exception to this trend. The effects of human activity on the environment are under everyone's eyes. Political actions and public opinion move towards reaching a higher degree of sustainability. In all this the role of business is central and companies must adapt to this change to guarantee its existence and foster a shift in consumer behavior. Reaching a higher degree of sustainability for a company it means increasing sales, improving the reputation, reaching a higher degree of efficiency, and at the same time having a positive impact on consumers' sensibility about the environment. Through the implementation of sustainable marketing (SM), marketing managers and entrepreneurs can contribute to the diffusion of sustainable practices, the survival of humankind and of their business. Being sustainable can also lead to competitive advantages; two companies equal in every aspect, but one is sustainable, most consumers will prefer the sustainable one.

**Aim:** This study aims to investigate the differences in consumers' perception towards sustainability in urban and rural areas, and its implications for SM management and innovation adoption. The research is based on the application of the Value-Belief-Norm (VBN) theory. Moreover, the socio-demographic variable of urban and rural will be used as a mediator.

**Methodology:** This thesis is based on a quantitative study: data are gathered through an online questionnaire addressed to consumers that live both in urban and rural areas. Data will then be analyzed by means of the SEM, using SmartPLS.

**Contributions:** The study will contribute at a theoretical level to pro-environmental and sustainable marketing literature. Critical practical implications for marketing managers and entrepreneurs will be outlined. Furthermore, there will be benefits at a societal level thanks to the ease of pressure on the environment deriving from the positive influence of green marketing on consumers' behavior.

**Keywords:** sustainability, sustainable marketing, consumer behaviour, innovation adoption, urban, rural, sustainable consumption

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## **List of Abbreviations**

SM: Sustainable Marketing

SC: Sustainable Consumption

VCN: Value-Belief-Norm theory

NEP: New Environmental Paradigm

SEM: Structural Equation Modelling

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## 1. Introduction

The concept of sustainability and environmental sustainability is growing in importance and centrality. This trend has led to growing pressure for firms, consumers, and governments. (Kiatkawsin & Han, 2017). Studies regarding the environment focus themselves on studying the factors behind green behavior. As marketing leverages more and more environmental messages, it is becoming important to understand consumers' green behaviors. It is central, due to the growing pressure that characterizes businesses, individual consumers, and governments. A theory used in many studies on the topic is the VBN theory, as it is very reliable to explain the effects of values, beliefs, and personal norms on someone's intention to behave pro environmentally (Stern, 2000). Studies adopting the VBN theory widely explained how marketers can comprehend consumers' pro-environmental behavior (Peattie & Peattie, 2009). Obstacles to the diffusion of eco-innovation, such as car sharing, in rural areas, exist. The most important is the different population densities between the groups (Zulauf & Wagner, 2021). Moreover, a strong relationship exists between marketing and sustainability; in fact, marketing represents a powerful tool to make consumers behave sustainably (White et al., 2019). Furthermore, pro environmental behavior (PEB) has been widely studied, but only a few studies focused on the impact of sociodemographic factors. Many studies focused on the determinants of green behavior (Stern et al., 1999). Ghazali et al. (2019) adopted a similar approach to the present research; they investigated the potential differences in PEB between two ethnic groups. Instead, Lind et al. (2015) focused only on urban consumers. No study investigated urban and rural people's differences. In Jansson et al. (2011), the aim of the study is very similar, but it is mainly focused on electric vehicles adoption.

The studies mentioned above aimed to explain PEB, but they did not go as in-depth as we want to do with this study. Not much has been done to investigate differences between different groups of consumers. Only few studies adopted this approach; for example, Ghazali et al. (2019) studied the differences between two ethnic groups. Furthermore, other studies studied PEB without distinguishing between urban and rural (Choi et al., 2015), while others focused only on urban consumers' attitudes towards green consumption (Lind et al., 2015). A limited portion of studies on the field adopted sociodemographic variables to profile green behavior. There is the need to go beyond the individual level and investigate more in-depth, as pointed out in Medina et al. (2019). In the current research exists a gap as no study was able to identify environmentally sustainable strategies. As pointed out in Gleim et al. (2013), exist a considerable gap in explaining why pro-environmental consumers do not engage in PEB (Quoquab and Mohammad, 2020). Given this gap,

the current research aims at filling this need, studying the differences in attitude towards SC between urban and rural areas.

The contribution of this study will be to an academic, practical, and societal level.

The study will contribute, from an academic perspective to the PEB literature. Thanks to integrating sociodemographic variables into the model and studying the differences between two social groups, the gap in the literature of green behavior will be partially closed. Moreover, it will provide a good starting point for researchers interested in identifying differences between urban and rural consumers. Thanks to this research, the understanding of which factors impact PEB will increase.

From a practical viewpoint, this study will provide valuable tips for marketing managers. Thanks to a better understanding of what contributes to green consumption for urban and rural consumers, their marketing strategies will become more effective. Moreover, this study will ease the development of innovative services and products tailored to the needs of urban and rural consumers.

Finally, a better understanding of the two groups will benefit the environment and society from a societal perspective. Marketing managers will be more able to influence both urban and rural consumers to behave sustainably. Thanks to this research, rural consumers will gain importance in future marketing strategies, as more services and products will be developed, thanks to a higher understanding of their preferences.

Through the application of VBN theory (Stern et al., 1999; Ghazali et al., 2019), this research aims at answering the following research questions addressed in Zulauf & Wagner (2021):

(i) Which sustainable motives and values do urban and rural consumers have in common? Which makes a difference?

(ii) To which extent enablers of SC in urban and rural areas identical are? How do they differ? Are there any enablers that work in urban areas but not in rural areas and vice versa?

(iii) What are shared characteristics of the dynamics arising from consumers' motives to behave sustainable according to their values and marketers' innovative sustainable offers? What are the differences? Furthermore, do the dynamics lead to convergence or divergence of the conception of SC, the adaption of sustainable innovations, and marketing?



This study is structured as follows. First, the context and the aim of the research is presented. Chapter 2 presents the theoretical framework, the state of the art of the literature about the topic, and the theory on which the research is based. In Chapter 3, the hypotheses and the research model are presented. In Chapter 4, the methodology, the sample description, and how the data will be collected and analyzed are explained. Chapter 5 presents the expected contributions of the study. Chapter 6 provides an overview of the thesis chapters. Chapter 7 outlines the work plan to finish the project. In the last chapter, all the references on which the study is based are presented.

## **2. Theoretical Framing**

This chapter presents the relevant theoretical background on the topic and the theory to develop testable hypotheses. First, the concepts of sustainability, SC, and sustainable marketing are discussed. The focus is on the implications of sustainability for marketing management. A definition of sustainability and sustainable development is provided, and the relationship between these two concepts and the marketing field is outlined. Second, the theory on which the study is based is presented. In particular, the perception of sustainability and SC in urban and rural areas is studied through the VBN theory, which represents the most suitable theory for studying in this field.

### **2.1 Sustainability**

The concept of sustainability is growing in importance nowadays, and it became in recent years a fashionable term with an elusive meaning. Despite its actual popularity, it is not a concept that has been developed in the last few years. In fact, one of the first conceptualization of sustainability was presented in 1987 in a report from the United Nations, the Brundtland Report of the World Commission on Environment and Development. Here an important definition of sustainable development states that sustainability consists in the "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (Brundtland, 1987). The concept, probably not articulated as it is today, has existed for a long time, with many researchers thinking it existed since ancient times. However, the WCED contributed to render the notion broadly known.

In the last century, the world population and living standards rose rapidly, as never experienced in the history of humankind (Maddison, 2010). This growth is harmful to future generations as it fails to be sustainable.

The WCED report states that sustainability is based on three interlinked aspects: economic prosperity, environmental protection, and social well-being. The dictionary definition is a good starting point, and it defines that an activity or action is sustainable when it can continue indefinitely and thus is capable of being sustained (Santillo, 2007).

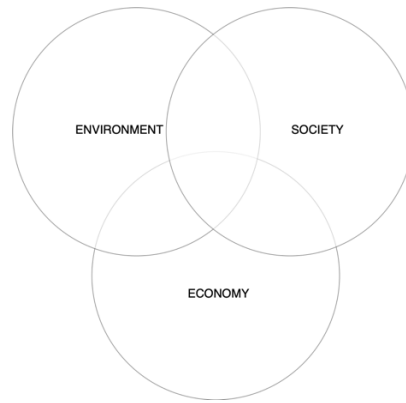
The Swedish scientist Karl-Henrik Robèrt developed four System Conditions (sustainability principles) (Santillo, 2007). The following are the four System Conditions: "In the sustainable society, nature is not subject to systematically increasing...

1. ... concentrations of substances extracted from the Earth's crust
2. ... concentrations of substances produced by society
3. ... degradation by physical means and
4. People are not subject to conditions that systematically undermine their capacity to meet their needs."

These definitions together give an idea of what sustainability is.

Mebratu's (1998) definition presents a strong relationship between the following aspects: economic growth, poverty alleviation, environmental improvement, and social equitability. Moreover, the concept of sustainability is particularly important when it refers to restoring, maintaining, renewing something specific and comprehends the balance between economic pressure and preservation of the environment (Sutton, 1999). In another study is pointed out that "sustainability is becoming a key business imperative, as the eternal search for domination over nature is replaced by the challenge of achieving environmental balance" (Clarke and Clegg, 2000).

The three pillars of sustainability (profitability, respect for the environment, and social responsibility) linked together form the triple bottom line (Boyd 2001; Johnson 2009). It can be represented as follows:



**Figure 1.** *The three pillars of Sustainability. Adapted from: Purvis et al., 2019.*

Moreover, consumption patterns have a substantial impact on the environment; this stream of research is defined as SC (Leigh, Murphy, & Enis 1988; Droge et al. 1993; van Dam & Apeldoorn 1996). Marketing has a vital role in the development of SC, as stated in Van Dam & Apeldoorn (1996). SC has also been defined as “sustainable production and consumption is the use of goods and services that respond to basic needs and bring a better quality of life, while minimizing the use of natural resources, toxic materials, and emissions of waste and pollutants over the life cycle, so as not to jeopardize the needs of future generations.” (Oslo Symposium on Sustainable Consumption, cited in Dolan, 2002). Sustainable development can be fostered mainly by SC (Abdulrazak & Quoquab, 2018; Barth et al., 2014; Bulut et al., 2017; Quoquab et al., 2019). There is not a unique definition of SC, as it has been defined differently by many authors. However, all these definitions have in common the attention towards basic human needs and to prevent uncontrolled consumption. An important focus is also on the needs of future generations and preservation of the environment (Quoquab & Mohammad, 2020). SC behavior is considered one of the key drivers to reach an appreciable level of sustainability in our society that can lead to the preservation of our ecosystem (Quoquab & Mohammad, 2020).

## **2.2 Sustainable marketing**

The public concern for the deterioration of the environment that grew in recent years also impacted the discipline of marketing (Chamorro et al., 2009). This sensibility led to the emergence of a new stream of research in the marketing field. Many researchers refer to it with different terms, such as ecological marketing (Fisk, 1974; Henion and Kinnear, 1976), green marketing (Ottman, 1993; Smith, 1998), greener marketing (Charter, 1992), environmental marketing (Coddington, 1992;

Peattie, 1995), enviropreneurial marketing (Menon and Menon, 1997) or SM (van Dam and Apeldoorn, 1996; Fuller, 1999). These terms are often considered synonyms. They all refer to the study of how marketing impacts the environment and how sustainability concepts can be included in marketing management. In the current research, to reach a higher degree of simplicity, only the term SM is used to refer to this field of research (Chamorro et al., 2009).

The first definition available of SM is the one by Hennion and Kinnear (1976) and states that it is “concerned with all marketing activities that have served to help cause environmental problems, and that may serve to provide a remedy for environmental problems” (Peattie, 2001). The focus on certain specific environmental and industries problems and the fact that only a limited number of enterprises and consumers saw a change in their behavior characterized the first decades (Peattie, 2001). Since the end of the 1980s, marketing has broadened its focus and aims at achieving sustainability in a broader sense (Peattie, 2001). A fundamental definition is the one of Peattie (1995), and it defines Green Marketing as “the holistic management process responsible for identifying, anticipating and satisfying the needs of customers and society, profitably and sustainably” (Peattie, 2001). A central finding in Peattie (2001) is that a company characterized by a high degree of socio and environmental performance can reach a sustained competitive advantage and make society more sensible about problems such as biodiversity, climate change, and poverty. Another key definition is the one of Fuller (1999). Here Green Marketing is defined as “the process of planning, implementing, and controlling the development, pricing, promotion, and distribution of products in a manner that satisfies the following three criteria: (1) customer needs are met, (2) organizational goals are attained, and (3) the process is compatible with eco-systems”.

Another definition includes the 4Ps of marketing and defines SM as a way of designing, pricing, promoting, distributing a product following the principles of sustainability while at the same time promoting green consumption and being environmentally friendly (Polonsky, 2001). The same author defined green marketing as a spectrum of activities that focuses on satisfying human needs while not being harmful to the environment (Polonsky, 2001). At first SM was only a response to external legislative and public opinion pressure, but what can be seen today is an authentic effort to act in an eco-friendly way (Polonsky and Rosenberger, 2001).

A critical definition is provided by Philip Kotler, one of the most trusted experts in the marketing field. He states, “the concept of SM holds that an organization should meet the needs of its present consumers without compromising the ability of future generations to fulfill their own needs” (Kotler & Armstrong, 2010). SM substantially is when a company focuses on social and

environmental aspects in its marketing strategy. Some companies focus on the triple bottom line outlined in the previous paragraph (social, economy, environment). Considering these concepts, a company can sustainably make a profit. A famous example is the clothing company Patagonia. They highlight how sustainable their supply chain is and how important it is to buy good quality products that last to lower impact on the environment. A set of definitions of SM is provided in the following table.

**Table 1.** *Main definitions for Green Marketing. (Dangelico & Vocalelli, 2017).*

SOURCE	DEFINITION
Henion, K.E. and Kinnear, T.C. (1976).	Ecological Marketing is “concerned with all marketing activities that have served to help cause environmental problems and that may serve to provide a remedy for environmental problems [...] The study of the positive and negative aspects of marketing activities on pollution, energy depletion and non-energy resource depletion”
Peattie, K., & Charter, M. (2003).	Green Marketing is “the holistic management process responsible for identifying, anticipating and satisfying the needs of customers and society, in a profitable and sustainable way”
Peattie, K. (2001).	Sustainable Marketing is “the process of planning, implementing, and controlling the development, pricing, promotion, and distribution of products in a manner that satisfies the following three criteria: (1) customer needs are met, (2) organizational goals are attained, and (3) the process is compatible with eco-systems”
Peattie, K. (2001).	“Green Marketing has been used to describe marketing activities which attempt to reduce the negative social and environmental impacts of existing products and production systems, and which promote less damaging products and services.”
Prakash, A. (2002).	Green Marketing refers to “strategies to promote products by employing environmental claims either about their

	attributes or about the systems, policies and processes of the firms that manufacture or sell them”
Mishra, P., & Sharma, P. (2010).	“Green Marketing” refers to holistic marketing concept wherein the production, marketing consumption and disposal of products and services happen in a manner that is less detrimental to the environment with growing awareness about the implications of global warming, nonbiodegradable solid waste, harmful impact of pollutants etc.”
Mishra, P., & Sharma, P. (2010). (American Marketing Association)	Green Marketing is the “marketing of products that are presumed to be environmentally safe”
Van Dam, Y. K., & Apeldoorn, P. A. (1996).	Sustainable marketing is marketing within, and supportive of, sustainable economic development. Combines different concepts linking marketing to the environment (ecological, green, and sustainable) and labels as environmental marketing.
Polonsky, M. J. (1994).	Green or environmental marketing consists of all activities designed to generate and facilitate any exchanges intended to satisfy human needs or wants, such that the satisfaction of these needs and wants occurs, with minimal detrimental impact on the natural environment
Crane, A. (2000).	Green marketing is the incorporation of environmental dimensions into marketing activities

The latter used term to identify this field of research, which combines the concepts of market and sustainability, is SM (Van Dam & Apeldoorn, 1996). It incorporates all aspects of sustainability that are concerning marketing. As a synonym, the term sustainability marketing is also used.

### **2.3 Socio-Demographic Variable: Urban vs rural consumers**

The concept of national culture was introduced by Hofstede (Hofstede, 1991; Hofstede, 2011), where he studied cultural differences between nations using some specific variables.

Few studies on research on PEB based their analysis on sociodemographic (Diamantopoulos et al., 2003; Chekima et al., 2016) or cultural factors (Strizhakova & Coulter, 2013; Minton et al., 2015).

Studies on green consumption and PEB rarely adopted sociodemographic variables (Zulauf & Wagner, 2021). The study of the differences between urban and rural areas is particularly worth it. As stated in Zulauf & Wagner (2021), these groups of consumers differ in sustainable practices and their perception of threats to the environment. Moreover, urban consumers do not have access to green services and products like their urban counterparts. Also, attitude towards air pollution is different, with urban areas less sensitive to it given the better air quality (Zulauf & Wagner, 2021). With this study, the dissimilarities between the two groups (urban and rural consumers) will be explored in relation to PEB.

## **2.4 Value-Belief-Norm Theory**

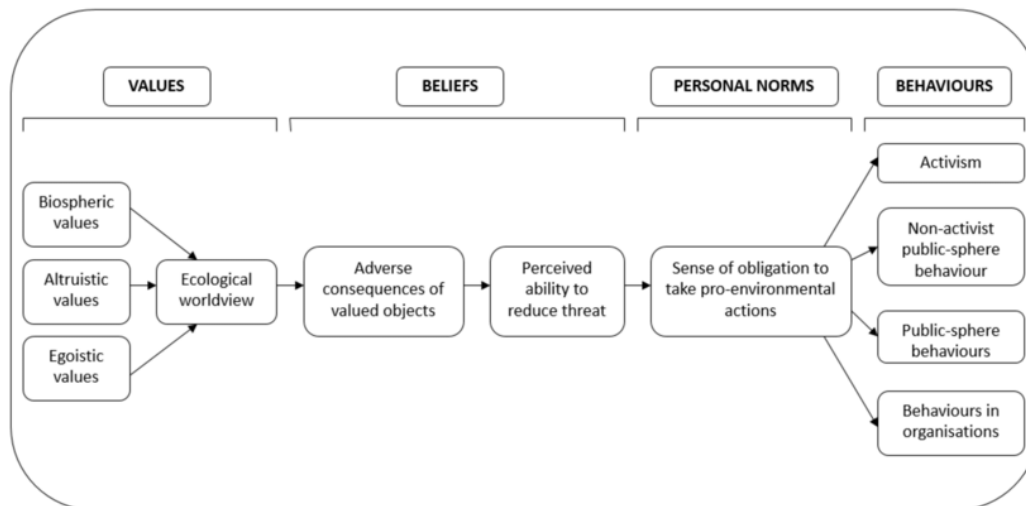
The most appropriate theory for this study is Stern's VBN theory (Stern et al., 1999), as it provides a framework that can explain which factors promote sustainable behavior and attitude. Stern et al. (1995, 1999, 2000) built the VBN theory linking together value theory (Schwartz, 1992), norm-activation theory (Schwartz, 1977), and the new environmental paradigm (NEP; Dunlap, Van Liere, Mertig, & Jones, 2000). This model has been used in numerous studies aimed at investigating perception towards sustainability and SC. Among all the models that can be adopted for our study, this one is undoubtedly the one who has demonstrated to be the most solid, as the several papers available demonstrates.

Personal values are essential and have a crucial influence on the cost-benefit analysis (Payne et al., 1992) and, consequently, on positive environmental actions.

Linking norm activation model to value theory and the NEP, Stern et al. (1999) developed a more valid theory for examining PEB and intention to act with respect and care for the environment (Oreg & Katz-gerro, 2006; Stern, 2000). The VBN theory is very reliable in investigating PEBs as it is vital in predicting intention to pay more to protect the environment (Stern et al., 1999), use of greener non-conventional vehicles (Jansson et al., 2011), adoption of sustainable modes of transport (Jakovcevic & Steg, 2013) and more in general environmental-friendly conducts (Nordlund & Garvill, 2002).

In many studies, VBN theory was used in combination with other theories such as Expectancy Theory and Theory of Planned Behavior. This demonstrates how VBN is seen as one of the most reliable theories to conduct studies in the field of SC.

In the following figure, a representation of the theory with its constructs is provided.



**Figure 2.** Schematic framework of Value-Belief-Norm theory. (Morrissey et al., 2016).

The VBN theory is a model where individual value influence beliefs, attitudes, and behavior by filtering the information to be evaluated.

As shown in Figure 2, environmental values influence beliefs, influencing personal norms and behaviors (López-Mosquera & Sánchez, 2012). The theory is based on the process values -> NEP -> awareness of consequences -> ascription of responsibility (Stern et al., 1999; Stern, 2000).

Value orientations can be divided into biospheric, altruistic, and egoistic values. These influence the general beliefs that people have about the environment and their relationship with it. Therefore, they led to specific, more responsible behaviors (Stern et al., 1999).

The distinction between biospheric, altruistic, and egoistic values is critical, and it has been demonstrated in many studies (Karp, 1996; Stern, Dietz, and Kalof, 1993). Together with biospheric, altruistic, and egoistic values, two variables not represented in the figure will be analyzed as Stern et al. (1999) suggested. These are Conservation (traditional values) and Openness to Change and seems



to be particularly interesting for our case where the differences between the two groups (rural and urban) are studied, as several papers stated the effect of these two constructs on environmentalism (Stern et al., 1995).

## **2.5 Extended Value-Belief-Norm Theory**

VBN theory has been widely adopted to predict PEB; in few studies, social norms can also predict this behavior (Choi et al., 2015). Social norms are all kinds of pressure deriving from the specific individuals or society someone gets in contact with (Yadav, 2016). Moreover, some studies state that PEB can be influenced by personal norms and social norms (Kumar et a., 2017). Social norms influence positively PEB (Lind et al., 2015). Furthermore, social norms are positively affected by personal norms in case of coincidence between social and personal benefits.

## **2.6 Alternative theories**

To the present, different theories could have been applied. The Theory of Planned Behavior, for example, is very similar to the VBN theory, and they have been used together in few studies. Ajzen's (1991) Theory of Planned Behavior has been successfully used in environmental studies to analyze PEB.

### 3. Research Proposal

After having outlined the theoretical framework, this section presents the hypotheses and the model adopted for the study. These hypotheses are based on previous studies in the field.

#### 3.1 Hypotheses

In previous studies, it has been shown that exist significant differences between urban and rural consumers. These differences have been presented in Zulauf & Wagner (2021). The hypotheses are presented using the socio-demographic construct of urban/rural and following Ghazali's (2019) approach. In Schwartz (1992), value is defined as "a desirable trans-situational goal varying in importance, which serves as a guiding principle in the life of a person or other social entity." There are three different value orientations, and they influence PEB. These are: biospheric, altruistic, and egoistic (de Groot and Steg, 2008; Hansla et al., 2008). Biospheric value refers to the biosphere or non-living things (Stern et al. 1999). "Altruists are who care about other people and species" (Stern, 2000). Egoistic values include self-interest, such as influence, dominance, and wealth (Stern et al., 1999). Whether or not to act green for individuals with a biospheric value orientation is based on an analysis about cost and benefit for the biosphere (de Groot and Steg, 2008). PEBs are positively influenced by altruistic and biospheric values, while egoistic values negatively impact (de Groot and Steg, 2008). Following what has been hypothesized in Ghazali (2019), the following hypotheses are proposed:

**H1:** The strength of the relations between biospheric value and awareness of consequences is different between urban and rural consumers.

**H2:** The strength of the relations between altruistic value and awareness of consequences is different between urban and rural consumers.

**H3:** The strength of the relations between egoistic value and awareness of consequences is different between urban and rural consumers.

Openness to change means someone's propensity to decide and act independently, even without caring about others' expectations (Stern et al. 1999). Following Ghazali et al. (2019), the following hypothesis has been proposed:

**H4:** The strength of the relations between openness to change and awareness of consequences is different between urban and rural consumers.

Beliefs, in this case, are mediating variables that strengthen the relationship between values and behaviors (Stern, 2000). Belief means what someone thinks about human behavior and the environment. Two different types of belief can be found: awareness of consequences and ascription of responsibility. The first refers to how humanity, animal species, and the environment can be impacted by environmental circumstances (Stern et al., 2000; Kiatkawsin, K., & Han, H., 2017). In Kiatkawsin & Han (2017), it has been shown that values awareness of consequences. Therefore, the following hypotheses have been proposed:

**H5:** The strength of the relations between awareness of consequences and ascription of responsibility is different between urban and rural consumers.

Awareness of consequences, in VBN theory, is followed by the second belief, ascription of responsibility. Ascription of responsibility refers to the fact that someone, with his actions, can contribute to the prevention of negative consequences. (Stern et al., 2000). Therefore, the following hypothesis has been proposed:

**H6:** The strength of the relations between ascription of responsibility and personal norms is different between urban and rural consumers.

It has been found that personal norms strongly influence PEB (Jansson et al., 2011). Therefore, the following hypotheses have been proposed:

**H7 to H12:** The strength of the relations between personal norms and PEBs is different between urban and rural consumers.

Following the approach of Ghazali et al. (2019), social norms have been included in the framework, as they influence PEB (Choi et al., 2015). With the term social norms, we refer to all kind

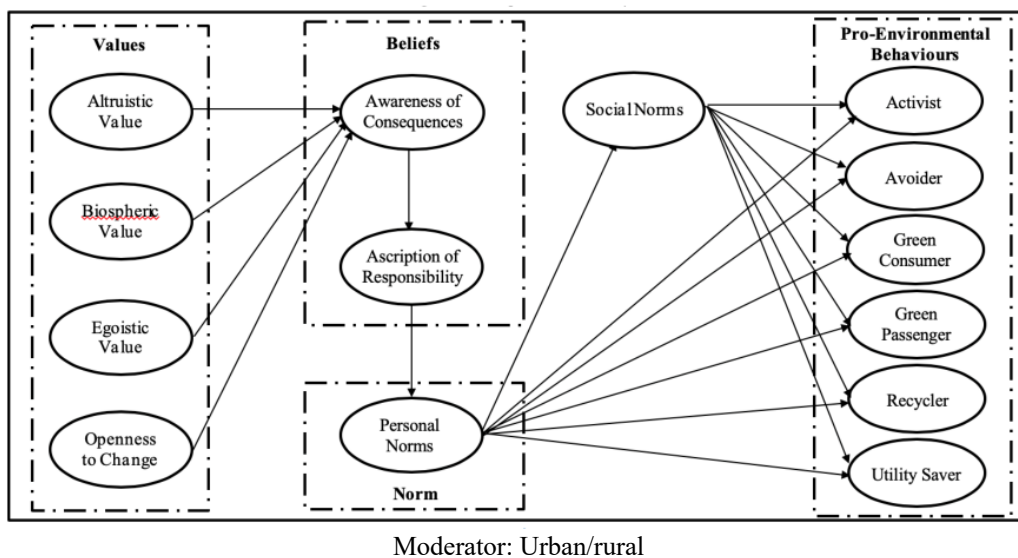
of pressures an individual experiment from others to behave in a certain way (Yadav, 2016). Social norms positively influence PEB. Personal norms have a positive impact on PEB. Moreover, social norms are positively influenced by personal norms, when there is accordance between personal and societal benefits (Gabler et al., 2013). Therefore, the following hypotheses have been proposed:

**H13:** The strength of the relations between personal norms and social norms is different between urban and rural consumers.

**H14 to H19:** The strength of the relations between social norms and PEBs is different between urban and rural consumers.

### 3.2 Research Model

After having analyzed all the academic literature related to the topic and different papers, including the VBN theory, the model for the study is presented. It mainly relies on the extended VBN model developed by Stern et al. (1999). The social norms from Ghazali et al. (2019) have been integrated into the conceptual framework. Moreover, the socio-demographic variable of urban/rural is used as a moderator similar to the moderator ethnicity used in Ghazali et al. (2019).



**Figure 3.** Conceptual framework for the study. Adapted from: Ghazali et al., 2019.

### 3.3 Literature Review Table

This section summarizes the most relevant academic papers and studies on which the current study is based. The sources are organized in two different tables; the first presents sources related to sustainability, SM, and socio-demographic variables. In the second table take place the sources related to the theory on which the research is based.

**Table 2.** Literature review of Sustainability/SM/Socio demographic variable.

TITLE	SOURCE	CONTRIBUTION
“Sustainability and beyond.”	Jamieson, D. (1998).	Discussion on the sustainability concept.
“Sustainability and sustainable development: Historical and conceptual review.”	Mebratu, D. (1998).	Systematic analysis of definitions of sustainability.
“Reclaiming the Definition of Sustainability.”	Santillo, D. (2007).	Discussion of sustainability in the current world.
“Three pillars of sustainability: In search of conceptual origins.”	Purvis, B., Mao, Y., & Robinson, D. (2019).	Different characteristics and types of sustainability.
“Green marketing and its impact on consumer buying behavior.”	Boztepe, A. (2012).	Study of the effect of green marketing on customers purchasing behaviors.
“Characteristics of research on green marketing.”	Chamorro, A., Rubio, S., & Miranda, F. J. (2009).	Analysis of green marketing journals.
“Green marketing: A study of consumers’ attitude towards environment friendly products.”	Cherian, J., & Jacob, J. (2012).	Review of studies about green marketing.
“An analysis of definitions, strategy steps, and tools through a systematic review of the literature.”	Dangelico, R. M., & Vocalelli, D. (2017).	Systematic review of the literature about green marketing.

“Urban and Rural Sustainability: Divergent Concepts and Their Consequences for Marketing.”	Zulauf, K., & Wagner, R. (2021).	Provide a useful guide to researchers towards revealing divergences in values, motives and enablers for sustainability among people in urban and rural areas.
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**Table 3.** Literature review of PEB.

TITLE	SOURCE	CONTRIBUTION
“Future Teachers’ Sustainable Water Consumption Behavior: A Test of the Value-Belief-Norm Theory.”	Çakır Yıldırım, B., & Karaarslan Semiz, G. (2019).	VBN
“Travelers’ pro-environmental behavior in a green lodging context: Converging value-belief-norm theory and the theory of planned behavior.”	Han, H. (2015).	VBN + TPB
“Exploring consumer adoption of a high involvement eco-innovation using value-belief-norm theory.”	Jansson, J., Marell, A., & Nordlund, A. (2011).	VBN
“Young travelers’ intention to behave pro-environmentally: Merging the value-belief-norm theory and the expectancy theory.”	Kiatkawsin, K., & Han, H. (2017).	VBN
“The value-belief-norm theory, personal norms and sustainable travel mode choice in urban areas.”	Lind, H. B., Nordfjærn, T., Jørgensen, S. H., & Rundmo, T. (2015).	VBN

<p>“Theory of Planned Behavior and the Value-Belief-Norm Theory explaining willingness to pay for a suburban park.”</p>	<p>López-Mosquera, N., &amp; Sánchez, M. (2012).</p>	<p>VBN + TPB</p>
<p>“Predicting Proenvironmental Behavior Cross-Nationally: Values, the Theory of Planned Behavior, and Value-Belief-Norm Theory.”</p>	<p>Oreg, S., &amp; Katz-Gerro, T. (2006).</p>	<p>VBN + TPB</p>
<p>“A Value-Belief-Norm Theory of Support for Social Movements: The Case of Environmentalism.”</p>	<p>Stern, P. C., Dietz, T., Abel, T., Guagnano, G. A., &amp; Kalof, L. (1999).</p>	<p>VBN</p>
<p>“Pro-environmental behaviours and Value-Belief-Norm theory: Assessing unobserved heterogeneity of two ethnic groups.”</p>	<p>Ghazali, E. M., Nguyen, B., Mutum, D. S., &amp; Yap, S.-F. (2019).</p>	<p>VBN</p>

## **4. Methodology**

In this section, the research methodology used to conduct the study is presented. The methodological approach, context of the empirical research, and sample group will be outlined. Moreover, an explanation of which procedures and how they are implemented for data collection and analysis will be provided.

### **4.1 Methodological approach, research context and sample description**

For the research, an adaptation of the model developed by Ghazali et al. (2019) will be used, and the study will rely on a quantitative study. Moreover, all previous studies on PEB adopting the VBN theory were conducted following a quantitative approach.

The survey will be addressed to potential respondents who have a minimum knowledge of what sustainability and SC are. This will be tested at the beginning of the questionnaire with some simple questions. Potential respondent of the research is everyone above the minimum legal age of 18 years old. Other filters to understand more in-depth will be applied: age, education, household income, marital status.

### **4.2 Data collection procedures**

The questionnaire will be distributed both online and offline. The first method will be mainly through social media platforms (Instagram, Facebook, LinkedIn) and sport and university groups. The data will also be collected in person in different shops.

Like in all the studies presented in the literature reviews' table, the survey will be based on a 7-point Likert scale. A video explaining the concept of sustainability may be helpful, but it may also influence respondents' opinions, raising the respondents' sensibility about the topic. Instead, a definition of SC will be provided to assure a minimum degree of understanding about the topic. For the current research, the interest is in people's PEB. An initial screening question will be presented at the beginning of the survey to ensure that the respondents have sufficient knowledge of SC.

The following table (Table 4) presents the constructs on which the study is based and outlines the questions.



**Table 4.** Items included in the model. Based on VBN theory.

SOURCE	CONSTRUCT	ITEMS
Kiatkawsin & Han (2017).	Biospheric values	<ol style="list-style-type: none"> <li>1. Preventing pollution</li> <li>2. Unity with nature</li> <li>3. Protecting the environment</li> <li>4. Respecting the earth</li> </ol>
Stern et al. (1999).	Altruistic values	<ol style="list-style-type: none"> <li>1. Social justice, correcting injustice, care for the weak</li> <li>2. Preventing pollution, conserving natural resources</li> <li>3. A world of peace, free of war and conflict</li> <li>4. Respecting the earth, harmony with other species</li> <li>5. Protecting the environment, preserving nature</li> <li>6. Equality, equal opportunity for all</li> <li>7. Unity with nature, fitting into nature</li> </ol>
Kiatkawsin & Han (2017).	Egoistic values	<ol style="list-style-type: none"> <li>1. Social power, control over others, and dominance</li> <li>2. Wealth, material possessions, money</li> <li>3. Authority, the right to lead or command</li> <li>4. Influential, having an impact on people and events</li> </ol>
Stern et al. (1999).	Openness to Change	<ol style="list-style-type: none"> <li>1. An exciting life, stimulating experiences</li> <li>2. A varied life, filled with challenge, novelty, and change</li> <li>3. Curious, interested in everything, exploring</li> </ol>
López-Mosquera & Sánchez (2012).	Awareness of Consequences	<ol style="list-style-type: none"> <li>1. Protection of the environment benefits us all</li> </ol>

		<p>2. The next decade thousands of species will become extinct</p> <p>3. What they say about climate change is an exaggeration</p> <p>4. Environmental threats to public health are exaggerated</p> <p>5. Environmental protection is beneficial for my health</p> <p>6. Environmental protection means a better world</p> <p>7. Environmental protection improves my quality of life</p> <p>8. The environmental damage we cause here affects people</p>
Ghazali et al. (2019).	Openness to Change	<p>1. Curious, interested in everything, exploring</p> <p>2. A varied life, filled with challenge, novelty and change</p> <p>3. An exciting life, stimulating experiences</p> <p>4. Freedom of action and thought</p> <p>5. Creativity, Uniqueness, Imagination</p> <p>6. Independent, Self-reliant, Self-sufficient</p> <p>7. Choosing Own Goals, selecting one's own purposes</p> <p>8. Self-Respect, belief in one's own worth</p> <p>9. Daring, Seeking adventure, Risk</p>

Choi et al. (2015).	Awareness of Consequences	<ol style="list-style-type: none"> <li>1. Global warming is a problem for society.</li> <li>2. Energy savings help reduce global warming.</li> <li>3. The exhaustion of fossil fuels is a problem.</li> <li>4. The exhaustion of energy sources is a problem.</li> <li>5. Environmental quality will improve if we use less energy.</li> <li>6. It is not certain whether global warming is a real problem.</li> </ol>
Choi et al. (2015).	Ascription of Responsibility	<ol style="list-style-type: none"> <li>1. I feel jointly responsible for the energy problems.</li> <li>2. I feel jointly responsible for the exhaustion of energy sources.</li> <li>3. I feel jointly responsible for global warming.</li> <li>4. My contribution to the energy problem is negligible.</li> </ol>
Choi et al. (2015).	Personal Norms	<ol style="list-style-type: none"> <li>1. I would be a better person if I use environmentally friendly products and services.</li> <li>2. I feel morally obliged to use green product or services instead of regular ones.</li> <li>3. People like me should do everything they can to save the environment.</li> <li>4. I feel obliged to bear the environment and nature in mind in my consumption behaviors.</li> <li>5. I feel morally obliged to use green products or services, regardless of what others do.</li> <li>6. I feel personally obliged to save as much energy as possible.</li> </ol>
Choi et al. (2015).	Social Norms	<ol style="list-style-type: none"> <li>1. People I know buy green products</li> <li>2. People I know are concerned about issues related to the environment.</li> </ol>

		<p>3. People I know think it is important to buy green products.</p> <p>4. People I know recycle those items that can be recycled.</p> <p>5. Most people who are important to me think I should purchase green products in place of conventional, non-green products.</p> <p>6. Most people who are important to me would want me to purchase green products in place of conventional non-green products.</p> <p>7. People whose opinions I value would prefer that I purchase green products in place of conventional non-green products.</p>
Stern et al. (2019).	Consumer Behavior	<p>1. I make a special effort to buy fruits and vegetables grown without pesticides or chemicals</p> <p>2. I make a special effort to buy paper and plastic products that are made from recycled materials</p> <p>3. I avoid buying products from a company that I know may be harming the environment</p> <p>4. I make a special effort to buy household chemicals are environmentally friendly?</p> <p>5. I prefer to go by bicycle instead by car</p> <p>6. If it's possible, I prefer to share the travel with someone else</p>

### **4.3 Data analysis**

The collected data will be processed and analyzed using Structural Equation Modelling (SEM) via SmartPLS. Other studies in the field demonstrated that this method is suitable for testing the hypotheses and investigates if the correlation between the different variables exists.

## **5. Expected Contributions**

This study will contribute at an academic, practical, and societal level.

### **5.1 Theoretical contribution**

Through a reliable theory such as the VBN, how the attitude towards SC differs between urban and rural consumers will be studied. In general, this study goes beyond existing models and existing studies, incorporating a socio-demographic component that tries to shed light on differences between two different groups of consumers. The study will contribute, from an academic perspective to the PEB literature. Thanks to integrating socio-demographic variables into the model and studying the differences between two social groups, the gap in the literature of green behavior will be partially closed. Moreover, it will provide a good starting point for researchers interested in identifying differences between urban and rural consumers. Thanks to this research, the understanding of which factors impact PEB will increase.

### **5.2 Implications for business**

The business field will also benefit from a practical viewpoint, as this study will provide valuable tips for marketing managers. Marketing managers and entrepreneurs may benefit thanks to a higher understanding of their consumers, and their strategies will become more effective. Moreover, this study will ease the development of innovations tailored to the needs of urban and rural consumers. They will know better the differences between urban and rural consumers' perceptions of SC. With this new knowledge, they will develop marketing strategies tailored to the two different groups, leading to higher efficacy and better results within the marketing practice.

### **5.3 Implications for society**

Finally, society at all will benefit from this study. Many problems, as previously outlined, like pollution, environmental degradation, and severe issues for the future of humankind and other species, characterize our current world. Through their more profound understanding of customers' perceptions, marketers will become more effective in influencing people's consumption patterns. They will promote SC more effectively, leading to a higher degree of sustainability within society.

## **6. Thesis chapters' overview**

The final thesis will be presented as follows:

- 1. Introduction**
- 2. Theoretical Framing**
  - 2.1. Sustainability
  - 2.2. Sustainable marketing
  - 2.3. Socio-Demographic Variable: Urban vs rural consumers
  - 2.4. Value-Belief-Norm Theory
  - 2.5. Extended Value-Belief-Norm Theory
  - 2.6. Alternative theories
- 3. Research proposal**
  - 3.1. Hypotheses
  - 3.2. Research model
  - 3.3. Literature review table
- 4. Methodology**
  - 4.1. Methodological approach, research context and sample description
  - 4.2. Data collection procedures
  - 4.3. Data analysis
- 5. Results**
- 6. Discussion and implications**
- 7. Conclusions**
- 8. References**
- 9. Appendices**

## 7. Workplan

In the following table, the detailed workplan of this thesis is presented:

<b>DATE</b>	<b>ACTIVITY</b>
10/05 – 02/06	Literature search
03/06 – 02/07	Writing theoretical frame and methodology
14/09 – 10/10	Questionnaire design
11/10 – 11/11	Questionnaire test and improvements
12/11 – 12/12	Data collection
13/12 – 20/01	Data analysis and thesis writing
22/03	Thesis defense



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