

The impact of construal level on green consumption decision-making

Wang Jingjing^{1,2}, Jiang Tao³, Hu Fengpei³, Tao Xiangnan⁴

¹Ningbo Entry-exit Inspection and Quarantine Bureau Technical Center, Ningbo, Zhejiang, China

²Asia Metropolitan University, Kuala Lumpur Malaysia)

³Zhejiang University of Technology, Hangzhou, Zhejiang, China

⁴Nanjing University, Nanjing, Jiangsu, China

⁵Universiti Putra Malaysia, Selangor Darul Ehsan Malaysia

Keywords: construal level, green consumption, decision-making time, orientation moral perception

Abstract: With the rapid development of science and technology, the acceleration of industrialization, environmental pollution has become an issue that cannot be ignored by human beings. Excessive pursuit of economic interests, at the expense of the environment pollution, leads to the destruction of the atmosphere, carbon dioxide concentration rising, global warming, water shortages and other environmental problems. These problems have become increasingly prominent and seriously affected human production and life. This paper throw highlight on how the construal levels related to psychological distance influence green consumption, and uses the method of questionnaire and experiment to explore the influence of construal levels on consumers' green consumption decision-making, and further explores the influence mechanism of time orientation and moral perception green consumption decision-making.

1. Introduction

With the rapid development of science and technology, the acceleration of industrialization, environmental pollution has become an issue that cannot be ignored by human beings. Excessive pursuit of economic interests, at the expense of the environment pollution, leads to the destruction of the atmosphere, carbon dioxide concentration rising, global warming, water shortages and other environmental problems. These problems have become increasingly prominent and seriously affected human production and life. The previous study found that most of these problems originated from human unreasonable behaviors, including inappropriate production and consumption behaviors, and suggested that the full use of resources and sustainable consumption are the fundamental ways for economic society to reach reasonable standards (Hanss & Böhm, 2012). The unreasonable consumption behavior of human beings has caused numerous damages to the environment. For example, the use of disposable plastic bags has caused “white pollution”; the heavy use of private cars has increased the emission of pollutant gases such as carbon dioxide, resulting in a “greenhouse effect”, which causes bad effects to physical and mental health of human; the use of non-energy-saving household appliances has caused much waste of natural resources and energy. It can be seen that changing the consumption pattern of only pursuing personal interests and improve reasonable consumption behaviors are important ways for individuals to protect the environment.

2. Statement of problems

The study of green consumption behavior dates back to the 1960s and 1970s, and the impact of consumption and production patterns on the environment has received increasing attention, and mostly focus on the effects of industrial pollution, economic and population growth (Cohen, 2001). Forty years later, in many Western countries, green consumption is considered as part of social environmental reform. Elkington and Burke (1987) define green consumption in the Green Consumer Guide, which states that green consumption refers to avoiding the purchase of the

following goods: (1) goods that are harmful to the health of others; (2) goods that cause waste of resources during production, use, and disposal; (3) goods that cause damage to the environment during production, use, and disposal; (4) over-packaging or goods that have a short life cycle and cause unnecessary waste; (5) goods whose raw materials are rare natural resources or animals and plants; (6) goods that are cruelly harming animals due to quality tests or other purposes; (7) goods that do harm to other countries, especially developing countries (Xu Jinjie, 2007). In general, green consumption refers to the purchase of products that are harmless to society, others and the environment, and do not contain hazardous ingredients, that is, green products. To determine whether a product is a green product, the product should be evaluated throughout the life cycle of product procurement, product manufacturing, product transportation, product consumption, and product disposal. To some extent, there is ble, non-polluting production materials, and their prices are 20% to 25% higher than ordinary products (Lin & Chang, 2012). When consumers buy green products, they will weigh the various benefits offered by the products, such as price, function, soc no absolute green product. Products that consumers buy, use, and dispose of in their daily lives have a certain impact on the environment at some stage of their life cycle, but the degree of impact is different. A less influential one can be considered a green product. Compared with ordinary products, green products tend to use degradation status, mood and quality, which will all affect consumers' consumption decisions. Choosing one of the benefits often requires sacrificing the other benefits that the product brings to you. For example, many people understand that green products are good for the environment; but some people are more frugal, they will need to balance between expensive green products and ordinary products with normal prices. If you choose green products that are good for the environment, you need to pay more money, choosing cheap ordinary products needs to be at the expense of the harming environment.

In the previous researches, the literature mostly study on the effect of psychological variables such as values and environmental awareness, as well as demographic variables on green consumption decision-making behaviors. Few studies explored the impact of construal levels on consumers' green consumption decision-making behavior. Different construal levels have different ways of interpreting goals. Therefore, the way consumers interpret the benefits of products will make a difference in their consumption decisions. Based on this, this paper explores the impact of construal levels on consumers' green consumption decision-making from different levels, and further explores the influence mechanism of time orientation and morel perception green consumption decision-making.

3. Research Purpose

First, we collect data through questionnaires and experimental manipulation methods, explore the impact of trait construal levels and manipulation construal levels on consumers' green consumption decision-making, investigate whether there are differences in green consumption decision-making between consumers' different construal levels. Secondly, based on the process perspective, explore the impact of time orientation on green consumption decision-making. Then, based on the perspective of the ethical decision-making model and moral perception, the questionnaire method is used to verify the influence of construal levels on green consumption decision-making.

4. Significance of research

4.1 Theoretical significance

In the current research on green consumption decision-making, most researchers focus on the impact of consumer internal factors and external factors on green consumption decisions. Consumer internal factors include their own objective factors (such as demographic variables such as age, gender, income, and marital status), behavioral psychological factors (eg, green consumption attitudes, personal norms, perceived behavioral controls, green consumption intentions, and values,

etc.) and lifestyle (eg, impulse purchases, price sensitivity, media preferences, and new product attempts). External factors that influence consumers' green consumption decisions include the government, business organizations, and the third sector. The social environment created by the government and the green consumption policy formulated by the government are important factors influencing the decision-making behavior of green consumption; the green level of the production mode, product, cost and quality of the enterprise organization will also influence the green consumption decision of consumers; The third sector mainly includes environmental organizations and mass Internet media. They use the Internet or other means to carry out publicity and education to achieve the goal of influencing green consumption. Although relevant research on green consumption has been going on for many years, the impact of the above factors on green consumption decisions still cannot explain people's consumption behavior in depth. Based on this, we believe that in addition to the influence of consumers' own factors and external factors on green consumption decision-making in previous literature research, greenconsumption decision-making is also affected by other factors. This paper throw highlight on the construal levels related to psychological distance, and uses the method of questionnaire and experiment to explore the influence of construal levels on consumers' green consumption decision-making from different angles. At the same time, consumer value theory points out that consumers will make consumption decisions based on the different values that products bring. As we all know, green products are made by non-polluting production materials and production processes, so the purchase of green products is conducive to environmental protection, but its price is higher than ordinary products. While ordinary products use ordinary production processes, and its price is lower, such products' production and consumption can have an adverse impact on the environment. The trade-off between future environmental protection and immediate payment of lower prices may vary depending on the individual's orientation on time, which in turn affects green consumption decisions. Therefore, this paper once again explores the role mechanism of time orientation in the relationship between construal levels and green consumption decision-making. At the same, this paper also interprets the relationship between construal levels and green consumption decision-making from the perspective of moral decision-making model. These not only can deepen the understanding of green consumption decision-making, but also provides a theoretical basis for market product pricing.

4.2 Practical significance

This paper focuses on the impact of construal levels and time orientation on green consumption decision-making, and helps the government to adopt corresponding policies to guide and encourage consumers to actively purchase green products; it is conducive to the positioning and promotion of green products by enterprises, at the same time, improve product promotion and promote green consumption. In addition, advertisers can adopt different forms of advertising for different consumer groups, improve the effectiveness of media advertising and increase the level of green consumption; in addition, sales personnel can also use different sales models to increase the sales rate of green products aimed at different consumers.

5. Literature review –Main variable

Research on green consumption originated in the early 1970s, and researchers focused on the characteristics of consumers with an ecological orientation. At the same time, the concept of green consumption was first explicitly stated in the 1970s (Peattie, 2010), and future research on green consumption was expanded on this basis. Mainieri et al. (1997) suggest that green consumption refers to the purchase of products that are beneficial to the environment. More specifically, Stern (2000) breaks down green consumption behavior into two categories based on the environmental impact of the product in both production and consumption. For example, the purchase of organic food and recycled products is a green consumption behavior at the production stage, while purchasing household goods and services (such as cars and household appliances) often has a greater impact on the environment during consumption stage, and the behavior during the consumption phase has a greater direct impact on the environment, including carbon dioxide

emissions and climate change (Olander & Thøgersen, 1995; Stern, 2000). At present, the concept of green consumption generally recognized by the academic community is: “5R” principle, which is to save resources and reduce pollution; green living, environmental protection consumption; reuse and multiple use; classified recycling and recycling; protection of nature, coexistence of all things (Wang Mingfang, 2006). The understanding of the concept of green consumption helps us to clarify the characteristics of green consumption and further explore the influencing factors of green consumption decisions.

It mainly includes, perceived consequences, consumer perceived effectiveness, green consumption attitudes, health awareness, values (interested values, altruistic values, and biosphere values), price, trust, and accessibility. Among these factors, the most researched factor is “environmental attitude (concern)”. Environmental attitudes (concerns) are based on how respondents assess environmental components, environmental issues, and environmental protection. Most researchers believe that environmental attitudes play an important role in the green consumption process (Liobikienė G. & Bernatoniene J., 2017). In addition, environmental knowledge is one of the variables that researchers often study in green consumption research. Environmental knowledge refers to the amount of information stored in the consumer's brain about environmental protection and has an impact on consumer preferences (Tan, 2011). In green consumption research, environmental knowledge is often studied as a regulatory variable of environmental attitudes and green consumption (Kumar, 2012; Liobikienė et al., 2016; Kumar et al., 2017). Therefore, environmental knowledge is related to environmental attitudes or green consumption attitudes, which in turn affects green consumption decision-making behavior. Social norms, which refer to social pressures to adopt or not to behave as behaviors, are the third major factor affecting green consumption. This factor is related to the social context and includes other intimate social relationships such as friends, relatives and colleagues. Consumers with positive social norms are more inclined to make green consumption decisions and buy green consumer products. Accessibility or perceived behavioral control reflects the degree of feasibility of a consumer's consumption of a product. Usually this indicator reflects the ability to buy green products (time, money, adequate supply), and whether green products are readily available in stores or whether the green products are worth the money. Therefore, product accessibility or perceived behavioral control may be one of the factors that promote or hinder green consumption in the green procurement process. Green consumption attitude is an indicator that reflects the degree of individual's approval of a certain behavior. A positive attitude is easier to purchase green products. Research on the impact of price and eco-label on green consumption decision-making shows that the high price of green products is the main factor to inhibit the decision-making behavior of green consumption, and the eco-label of green products can promote green consumption decision-making behavior. Trust and environmental awareness, as the other two factors affecting green consumption decisions, high levels of trust and environmental awareness promote the implementation of green consumption decisions. The theory of value belief norms, including values and consequences perception, is often used to study environmentally friendly behavior. However, the theory of value belief norms does not explain green consumption behavior very well. As a positive belief in health issues, health awareness has been extensively studied in the food and cosmetics fields, but this factor does not explain green consumer decision-making behavior well.

Based on the above literature review, the factors influencing green consumption behavior can be divided into different categories, namely: (1) internal factors, including attitudes, values and awareness; (2) social factors; and (3) external factors. Most researchers focus on internal factors of green consumption, such as environmental attitudes and environmentally friendly behavioral awareness (Liobikienė et al., 2016). However, simply studying internal factors does not help us to understand the impact of external factors such as social situation. For example, respondents are highly environmentally conscious, but because of their limited ability to pay, they do not have green consumption (Liobikienė et al., 2017). Therefore, in order to comprehensively explore the impact mechanism of green consumption, an overall model covering internal factors, external factors and social factors should be constructed to increase the frequency of green consumption.

References

- [1] Liobikienė G, Bernatoniene J. Why determinants of green purchase cannot be treated equally? The case of green cosmetics: Literature review[J]. *Journal of Cleaner Production*, 2017, 162: 109-120
- [2] van Beek, J., Handgraaf, M.J.J. & Antonides, G. (in press) Time orientation effects on health behavior. In *Handbook of Behavioral Economics and Smart Decision-Making: Rational Decision-Making Within the Bounds of Reason* (ed. by M. Altman), Edward Elgar Publishing, Cheltenham, UK.
- [3] Zimbardo, P. G., & Boyd, J. N. (1999). Putting time into perspective: A valid, reliable individual differences metric. *Journal of Personality and Social Psychology*, 77(6), 1271–1288.
- [4] Reyt J N, Wiesenfeld B M, Trope Y. Big picture is better: The social implications of construal level for advice taking[J]. *Organizational Behavior & Human Decision Processes*, 2016, 135:22-31.
- [5] Chang H, Zhang L, Xie G X. Message framing in green advertising: the effect of construal level and consumer environmental concern[J]. *International Journal of Advertising*, 2015, 34(1):158-176.
- [6] Irmak, C., Wakslak, C. and Trope, Y. (2013), “Selling the forest, buying the trees: the effect of construal level on seller-buyer price discrepancy”, *Journal of Consumer Research*, Vol. 40 No. 2, pp. 284-297.