



Temperature Word: Green Consumption Booster

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Abstract. With the intensification of the contradiction between environmental protection and economic development in China, people pay more and more attention to green economy. Among them, green consumption, as a key force to promote the development of green economy, has aroused extensive discussion in academic circles. However, previous studies mainly focused on the impact of interpersonal factors on consumers' green consumption behavior, and the research on non-interpersonal field is still insufficient. In view of this, the purpose of this study is to analyze the influence of temperature word on consumers' green consumption behavior by conceptual priming method. Through a survey of 130 consumers in more than 10 provinces in China, it is found that temperature word has a positive impact on consumers' green consumption behavior. This shows that the rational use of temperature word in publicity and marketing scenes is expected to stimulate consumers' green consumption behavior. This study not only provides innovative marketing ideas for marketing organizations, but also provides strong support for the government to formulate environmental protection policies.

Keywords: Green consumption behavior, Temperature words, Sustainability

1 Introduction

The consumption patterns of industrial civilization have generated unparalleled material wealth for humanity. However, the escalating depletion of resources, widespread pollution, and frequent natural disasters now present a substantial threat to the quality of human life and the sustainable development of our economy and society. People are increasingly recognizing the drawbacks of this consumption model. Furthermore, environmental issues have triggered numerous social problems, profoundly impacting societal and national stability¹. In this context, countries have to explore a new path of sustainable development, green consumption has become the focus of policy makers and marketing strategy makers². However, although the concept of green consumption is becoming more and more popular, the public's understanding of green consumption mostly stays at the theoretical level and has not been widely translated into practical action³. Therefore, actively promoting consumers' green consumption behavior has become the key to solve environmental problems⁴. Green consumption behavior is a behavior that consumers actively practice the concept of eco-environmental protection in

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the whole process of purchasing, using and disposing of goods while meeting their personal needs while giving consideration to social well-being⁵. Previous studies have found that there is a high correlation between green consumption intention and green consumption behavior⁶, and green consumption intention is often affected by situational factors⁷. Therefore, it is very important to explore a situational factor which is deeply rooted in people's daily life, can effectively stimulate green consumption intention, and then promote green consumption behavior. Previous research shows that temperature word can effectively guide people to think deeply about global warming^{8,9}, this kind of thinking helps to strengthen people's willingness to consume green production, thus promoting them to adopt green consumption behavior actively. Based on this, the purpose of this study is to explore the correlation between temperature word and green consumption behavior, and to verify the impact of temperature word on green consumption behavior.

2 Literature Review

2.1 Temperature Word

The use of familiar words to express abstract ideas is a universal linguistic tool. This phenomenon is grounded in the cognitive process of metaphorical mapping, where individuals are able to convey and grasp intangible and intricate notions by leveraging the familiarity and tangibility of concrete concepts, such as warmth¹⁰. This linguistic construct is known as a conceptual metaphor, which is a fundamental mechanism through which our cognitive faculties bridge the gap between the known and the unknown. A conceptual metaphor is characterized by the interaction of two distinct yet interconnected conceptual domains. The first is the specific, or primitive domain, which consists of concrete experiences and perceptions that are universally recognized and easily relatable. The second is the complex, or target domain, which encompasses abstract ideas that are less tangible and more challenging to comprehend¹¹. Through this metaphorical process, the concrete elements from the primitive domain are used as a lens through which the target domain is viewed and understood. The influence of conceptual metaphor extends beyond language and permeates our cognitive and perceptual faculties, shaping the very way we think and structure our conceptual frameworks. By linking abstract concepts with more familiar ideas, conceptual metaphors ignite a cascade of thoughts and associations that reach beyond the immediate context, encouraging a deeper and more expansive consideration of broader or more complex ideas. Conceptual metaphor affects people's way of thinking and conceptual framework, triggering thinking about broader or more complex concepts through common words¹².

We feel the temperature intuitively in our daily life, and the information we feel about the temperature is specific. When we use temperature words to describe global warming, our brains naturally map the direct perception of temperature to our understanding of global warming. Then, the temperature word, as a message, may cause people to think about global warming, thus prompting people to adopt green consumption behavior.

2.2 Green Consumption Behavior

The concept of green consumption has been continuously expanded since it was put forward, and its characteristics should be clearly defined in the study of green consumption. In previous studies, people paid more attention to recycling behavior¹³, but we know that recycling is only an ex post facto measure, which is accompanied by the production of pollutants. Therefore, we pay more attention to the study of purchasing behavior, and we can explore that consumers' attitudes can be transformed into sustainable forms by understanding the causes of such behaviors, thus triggering the change of their behavior. in order to achieve a sustainable way of life. In this paper, we define green consumption as individual purchase and consumption behavior related to environment and resources, which is different from traditional consumption. Its motivation is not only to meet individual needs, but also to pay attention to the well-being of society as a whole¹⁴. In the past research, scholars mainly focused on the influence of interpersonal field on green consumption, including exploring from the perspective of social population (such as age, gender, occupation, income, etc.) and individual psychological motivation (such as attitude, values, cognition, sense of responsibility, etc.)¹⁵⁻¹⁹. However, the impact of non-interpersonal field on green consumption is less, which leads to the incomplete understanding of the antecedents of green consumption behavior.

Therefore, this paper puts forward the hypothesis that temperature word will positively affect green consumption behavior.

3 Methods

In this study, data were collected through a questionnaire survey distributed across multiple provinces in China and analyzed through 130 questionnaires collected. Spss analysis tool is used to process the questionnaire data and evaluate the relationship between variables. Among them, temperature word is studied quantitatively through the results of text analysis, and green consumption behavior is studied through 13 items. The correlation of variables is shown in Table 1, which shows that there is a significant correlation between temperature word and green consumption behavior($\beta=0.345, p<0.001$).

Table 1. Correlation coefficient

Variable	M	SD	1	2	3
1 age	2.62	0.99			
2 gender	1.69	0.49	-0.016		
3 temperture	2.03	1.32	0.147	-0.168	
4 consume	4.19	0.49	0.147	-0.168	0.345**

4 Results and Discussion

4.1 The Characteristic of Respondents and Research Results

According to statistics, in terms of gender, men account for 40%, women account for 60%; in terms of age, 21-30-year-old accounts for 46.2%-31-year-old 40-year-old accounts for 33.8%, and there are more young and middle-aged people. The next stage is to state the research results, first to test the reliability and validity, and then to test the hypothesis by regression analysis. The Cronbach's Alpha is 0.861 and the KMO coefficient is 0.869, and the factor loadings are all greater than 0.4.

The regression results were shown by Table 2 and Table 3. According to Table 3, temperature word has a positive effect on green consumption behavior($\beta=0.341$, $p<0.01$).

Table 2. Determination Test (R2)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	F
1	0.386	0.149	0.129	0.453	7.364**

Table 3. Hypothesis Test

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
1(Constant)	3.589	0.186		19.279	<0.001
Age	0.070	0.040	0.143	21.724	0.087
Gender	0.100	0.082	0.101	1.217	0.226
temperature	0.126	0.031	0.341	4.043	<0.001

4.2 The Influence of Temperature Word on Green Consumption Behavior

The results of this study show that temperature word has an impact on consumers' green behavior, and it can be concluded that temperature word promotes consumers to carry out green consumption behavior. Previous studies have shown that green consumption behavior generally starts with intention¹⁴, But now it can be emphasized that this process can be improved by temperature word. This can provide innovative marketing strategies for marketing organizations. Marketing organizations can skillfully make use of this psychological effect to promote consumers' environmental protection behavior in a low-cost way. For example, use temperature-related words in advertisements, promotional materials or product packaging to create a warm and positive environmental atmosphere for consumers, so as to stimulate their willingness to start green consumption. This can not only significantly enhance the brand image of enterprises, but also effectively promote the sales of green products and achieve a harmonious symbiosis of economic and environmental benefits. At the same time, the judicious utilization of

temperature word will also help to create a positive and responsible image of environmental protection, so as to attract more consumers who pay attention to environmental protection, establish a stable and long-term cooperative relationship with them, and jointly promote sustainable development.

5 Conclusion

The findings of the study reveal a significant and robust relationship between the concept of temperature word and the green consumption tendencies exhibited by consumers. Temperature word captures the emotional nuances and environmental connotations associated with products and services. We can inspire consumers to have a deep understanding of environmental responsibility and moral consumption through this language technique. The regression analysis conducted as part of the study demonstrates that temperature word has a clear and positive impact on shaping and influencing consumers' green consumption behavior. This suggests that the way products and services are described and marketed can significantly affect consumer choices and encourage more sustainable consumption patterns.

Building on these insights, the researchers have proposed a straightforward model that encapsulates the relationship between the temperature word and green consumer behavior. This model serves as a foundational framework to understand how the emotional and ethical dimensions of marketing can drive environmentally friendly consumption. Nevertheless, the study acknowledges certain limitations that require further attention. The exact mechanisms through which the temperature word exerts its influence on consumer behavior remain to be fully understood. Additionally, the study does not address the specific contexts or conditions under which this influence is most pronounced or the reasons behind these effects.

In light of these limitations, future research endeavors should aim to refine and enhance the existing research framework. This could entail delving deeper into the causal mechanisms linking temperature-related terminology and environmentally conscious consumer behavior. Additionally, identifying background factors and delineating boundary conditions that govern this correlation would be beneficial.

Moreover, the employment of more rigorous and scientifically validated experimental methods would strengthen the credibility and generalization of the findings. This could include the use of controlled experiments, longitudinal studies, and advanced statistical techniques to provide a more nuanced and comprehensive understanding of the influence of temperature word on green consumer behavior.

By addressing these areas for improvement, follow-up research can provide valuable insights into the areas of sustainable marketing and consumer behavior. This, in turn, could guide the development of more effective strategies and interventions to promote green consumption and a more environmentally conscious society.

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