



Color Stimulation for Impulse Spending——The Effect of Background Color on Consumer Purchase Intention in Goodie Sharing Videos

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Abstract.Currently, the state has issued a series of policies and regulations to support the development of e-commerce platforms, and under this social environment, more and more online consumers are purchasing online, and visual marketing plays an important role in the online purchasing environment. This paper studies the most popular good-sharing marketing model, and explores the influence of background color in video on consumers' purchase intention.

Keywords: Background color; Visual marketing; Consumer decision-making

1 Introduction

In recent years, new consumption modes such as online cloud shopping, online shopping and offline experience have been developed rapidly, the proportion of online shopping has increased significantly, and the shopping path of global consumers has shifted to digital channels. The development trend of China's short video industry is booming, and the degree of professional segmentation of short videos is gradually increasing, with a clear trend of specialization and boutique, and increasing influence. Advertising short videos are in various forms, covering all major platforms. In recent years, goodies sharing video has become an emerging advertising

and marketing mode, bloggers recommend and introduce products to users through goodies-sharing video, which is a new exploration and attempt to promote the mode, with remarkable results.

The purpose of this project is to study the effects of background color, product attributes, and the interaction between background color and product attributes on consumers' purchase intention in the goodies sharing video, Based on the previous studies on the influence of color brightness on consumer behavior [1], combined with the theory of perceived importance [2], the influence of background color and product attributes on consumers ' purchase intention in the sharing video of good things is compared, and the influence of the interaction between background color and product weight attributes is also studied. To explore whether the background color, product attributes and their interaction in the sharing video of good things will promote or inhibit consumers ' purchase intention, and to innovate research directions and research results.

2 Literature Review

Vision is the most important means for human beings to acquire external information and is dominant among the five senses, and more than 80% of the information acquired by human beings is obtained through vision (Calvert et al., 2004). Visual elements and information elements can positively influence viewers' purchase intention by enhancing their sense of control, concentration, curiosity and pleasure [3].

Color psychology is a complex research field, color perception is closely related to the parameters of luminance, chroma and hue [2], different background colors have different color recognition efficiencies for colors, white backgrounds have higher rate of correct recognition than colored backgrounds, and colored backgrounds motivate people to actively approach novelty [4]. The wavelength and saturation of the color will bring different feelings and influence people's choices, so the two different background colors of white and blue in the goodies-sharing video may have a certain degree of influence on consumers' purchase intention.

As far as product attributes are concerned, product weight may have an important impact on consumer experience and purchase intention, but the specific relationship between the two is still unclear, and can only be inferred from the fact that there is a significant correlation between product weight and consumers' product evaluations:

weight-positive attribute products are defined as the heavier the product is, the higher the consumer's evaluation of the product; and weight-negative attribute products are defined as the lighter the product is, the higher the consumer's evaluation of the product is.

Visual marketing plays an important role in today's short video marketing, this paper combines the background color, the impact of visual marketing on consumers' purchase intention, and the relationship between product attributes and purchase intention with the relevant literature, to explore whether the various elements of video display will have an impact on consumers' purchase intention in the emerging marketing mode of goodies sharing, mainly focusing on the background color and product attributes as two kinds of visual elements, and study the direct, indirect and interactive impacts of both on consumers' purchase intention, so as to have a deeper understanding of this advertising marketing mode and provide material and theoretical reference for related research.

3 Research Difficulties and Innovations

Based on the above theories, background color and product weight attributes will have a certain degree of influence on purchase intention, however, this paper explores whether the interaction of the two will have an effect on purchase intention, which is less relevant research in this field, so this paper will focus on the interaction of background color and product weight attributes on purchase intention, and summarize the feedback mechanism of the two interactions on purchase intention.

Secondly, this paper compares the influence of background color and product weight attribute directly and interactively on consumers' purchase intention, summarizes the most suitable background color for displaying products and the best combination of background color and product weight attribute interaction in the video of sharing goodies, explores the optimal visual marketing mode, grasps more accurately the important factors affecting consumers' purchase intention, and enriches the ecology of the Internet platform and the advertisement marketing mode. It will also enrich the ecology of Internet platforms and advertising and marketing models, and promote the high-quality development of the Internet economy.

In addition, the “immersive experience” in the video of sharing goodies is also the hotspot of short video live broadcasting and marketing nowadays, and the role of the background color in the video studied in this paper is closely related to the video

scenario to create and display, which can be more targeted for the future of different products with the help of different scenarios created by the video marketing to provide reference.

4 Research methodology and Data

Based on the above theories, this paper makes the following three original hypotheses: original hypothesis 1: background color has no effect on purchase intention; original hypothesis 2: product attributes have no effect on purchase intention; original hypothesis 3: the interaction between background color and product attributes has no effect on purchase intention.

The experimental study in this paper is divided into three parts, namely: the effect of background color on purchase intention (Study 1), the effect of product attributes on purchase intention (Study 2), and the effect of the interaction between background color and product attributes on consumers' purchase intention (Study 3).The following will describe the three experimental studies in detail, and use independent sample t-tests and one-way analysis of variance to analyze and compare the relevant data obtained from the experiment, and summarize the final conclusions. The experimental model is as follows: (refer to Figure 1)

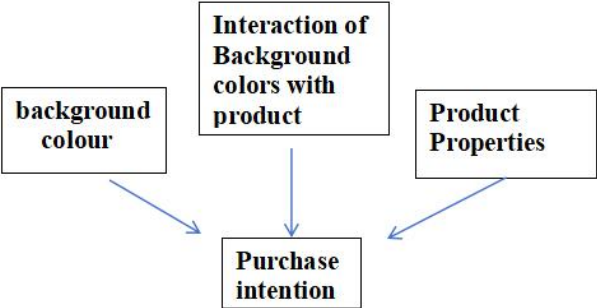


Fig. 1. Experimental model

The questionnaire of this experiment mainly adopts the form of Likert5 scale, and the questionnaire is designed for the five aspects of video background color, product attributes, video display effect, consumer perception, and purchase willingness, and collects the basic personal information of the respondents. The questionnaires were distributed through Questionnaire Star, and a total of 94 questionnaires were distributed. After excluding invalid questionnaires, a total of 81 valid questionnaires were collected, with an effective rate of 86.2%.

The data collected from the valid questionnaires were analyzed by descriptive statistics, in which 40.7% of the subjects were male. Females accounted for 59.3%; 8.6%, 42%, 28.4%, 16%, and 5% were under 18, 18-30, 31-45, 46-60, and over 60 years old, respectively; 58% of the people whose monthly income situation was in the range of 6001-10000 yuan accounted for the largest share of the people; the educational level of high school and below, junior college and undergraduate, master's degree and above accounted for 13.6 %, 81.4 % and 5 % respectively, as shown in Table 1.

Table 1. Sociodemographic analysis

Category	Feature	Number of samples	Proportion
Sexuality	Males	33	40.7%
	Female	48	59.3%
Age	Under 18 years old	7	8.6%
	18-30 years old	34	42%
	31-45 years old	23	28.4%
	46-60years old	13	16%
	60 years and over	4	5%
Educational background	High school and below	11	13.6%
	College, undergraduate	66	81.4%
	Master degree and above	4	5%
	Less than 3000 yuan	9	11.1%

monthly salary	3001-6000 yuan	16	19.8%
	6001-10000 yuan	47	58%
	More than 10,000 yuan	9	11.1%

4.1 Study 1: The Effect of Background Color on Purchase Intention.

The purpose of Study 1 was to explore the different effects of background color (white vs. blue) on consumers' purchase intention in goodie-sharing videos and to test the original hypothesis 1. This experiment used a situational experiment in which respondents made choices related to their purchase intention regarding an item by watching a video of two items displayed in front of different colored backgrounds.

Experimental design: Using pure white and blue background board as the bottom, displaying a pair of glasses and an apple, and making a video of goodies sharing, the subjects watch the video of different items displayed in front of the pure white and blue background board, investigate whether the subjects' willingness to buy the goods will be affected by the different background colors, and verify whether the background color (white VS. blue) in the video of goodies sharing has a to verify whether the background color (white vs. blue) has a significant effect on consumers' willingness to buy in the good sharing video.

Experimental process: In front of the pure white and blue background board, the glasses and apples are displayed in an all-round way respectively, and the sharing video of the good things is shown to the subjects. The questionnaire is made and distributed to the subjects, so that they can compare the videos they see, evaluate their actual purchase intention, and finally analyze and compare the experimental results.

Experimental results: Table 2 shows the experimental data of displaying glasses in front of white and blue background, Table 3 shows the experimental data of displaying apples in front of white and blue background.

Table 2. Data on glasses displayed in front of white&blue background

Background color	White			Blue		
Category	Feature	Number of samples	Proportion	Feature	Number of samples	Proportion

Likeability	Like very much	9	45%	Like very much	4	20%
	Like	5	25%	Like	7	35%
	general	4	20%	general	6	30%
	dislike	2	10%	dislike	2	10%
	Dislike very much	0	0%	Dislike very much	1	5%
Purchase intention	Very willing to buy	11	55%	Very willing to buy	5	25%
	willingness to purchase	5	25%	willingness to purchase	5	25%
	General willingness to buy	3	15%	General willingness to buy	7	35%
	Unwilling to buy	1	5%	Unwilling to buy	2	10%
	Very reluctant to buy	0	0%	Very reluctant to buy	1	5%
Whether the background can highlight the product features	The effect is very obvious.	10	50%	The effect is very obvious.	6	30%
	The effect is obvious	6	30%	The effect is obvious	4	20%
	Generally effective	2	10%	Generally effective	7	35%
	The effect is not obvious	2	10%	The effect is not obvious	2	10%
	It's very ineffective.	0	0%	It's very ineffective.	1	5%

Table 3. Data on apples displayed in front of white&blue background

Background color	White			Blue		
Category	feature	number of samples	proportion	feature	number of samples	proportion
Likeability	Like very much	10	50%	Like very much	3	15%
	Like	5	25%	Like	5	25%
	General	3	15%	General	7	35%
	Dislike	1	5%	Dislike	4	20%
	Dislike very much	1	5%	Dislike very much	1	5%
Purchase intention	Very willing to buy	12	60%	Very willing to buy	2	10%
	Willingness to purchase	4	20%	Willingness to purchase	4	20%
	General willingness to buy	3	15%	General willingness to buy	9	45%
	Unwilling to buy	0	0%	Unwilling to buy	3	15%
	Very reluctant to buy	1	5%	Very reluctant to buy	2	10%
Whether the background can highlight	The effect is very obvious.	9	45%	The effect is very obvious.	2	10%
	The effect is obvious	7	35%	The effect is obvious	3	15%
	Generally	2	10%	Generally	8	40%

the product features	effective			effective		
	The effect is not obvious	1	5%	The effect is not obvious	6	30%
	It's very ineffective.	1	5%	It's very ineffective.	1	5%

From the above results, it can be seen that the glasses and apples displayed in the white background are favored by more subjects and can stimulate their purchase desire, and the display of the same product in front of two different color backgrounds has a significant difference in stimulating and influencing consumers' purchase intention, so it can be assumed that the background color will have a certain impact on consumers' purchase intention.

The following figure is an analysis of consumers ' preference for glasses and apples displayed on a white background and their purchase intention. According to the single factor ANOVA test, the significance is less than 0.05, rejecting the original hypothesis, indicating that there is a correlation between preference and purchase intention. Therefore, it can be considered that background color has an impact on consumers ' purchase intention.

Table 4. ANOVA This pair of glasses can meet my needs

	Sum of squares	Degree of freedom	mean square	F	significance
Intergroup	6.076	2	3.038	4.799	.014
Within a group	23.424	37	.633		
Total	29.500	39			

Table 5. ANOVA I like this apple.

	Sum of squares	Degree of freedom	mean square	F	significance
Intergroup	3.370	2	1.685	3.365	.045
Within a group	18.530	37	.501		

Total	21.900	39			
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Discussion: Based on the above experimental results, it can be concluded that the background color has an impact on consumers' purchase intention to a certain extent. The white background is more able to set off various colors and highlight the color or other characteristics of the product itself, which is more conducive to the authentic display of the item, and it is more authentic to use white as the background base color of the goodies sharing video for product publicity and promotion.

4.2 Study 2: The Influence of Product Attributes on Purchase Intention

Experimental Design: Apples are generally regarded as weight positive attribute products, while eyeglasses are generally regarded as weight-negative attribute products, both of which can be used as representative items of different product attributes for experiments. In this experiment, two groups of different types of goods with different weight perceptions (apples with large and small volume & glasses with and without frames) are displayed with a white background board as the bottom, and a good sharing video is produced, and the subjects investigate whether product attributes affect their willingness to purchase the goods by watching the video of the two kinds of goods displayed in front of a plain white background board, and verify whether product attributes in the good sharing video (weight-positive attribute & Weight-Negative Attribute) whether they have a significant effect on consumers' purchase intention.

Experimental results: The experimental subjects think that in front of the background plate of the same color, the weight perception difference between apples with large volume and apples with small volume is obvious, and if they want to buy apples, more than 90% of the experimental subjects will choose to buy apples with large volume. On the other hand, in front of the background plate of the same color, the difference in weight perception between framed glasses and frameless glasses is smaller, and therefore has less influence on consumers' purchase intention, 70% of the subjects will choose to buy framed glasses, while 30% of the subjects will choose to buy frameless glasses.

Discussion: According to the experimental results of this group, it can be seen that in front of a colorless background such as white, products with positive weight attributes will have a greater impact on consumers ' purchase intention. People will choose products that look more important according to factors such as visual volume

gap ; for products with negative weight attributes, the factors that affect the purchase intention are not only the weight size, but also the style, shape and other factors.

4.3 Study 3 The interaction between background color (white VS.blue) and product attributes (weight positive product VS.weight negative product) has a significant impact on consumers ' purchase intention

Experimental design: Two types of commodities with different weight perceptions (glasses and apples) are displayed on a plain white and blue background board, and a goodie-sharing video is created. The subjects investigated their willingness to purchase the products by watching the good sharing video of the same type of products with different weight perceptions in front of different background colors. To verify whether there is an interaction between background color (white vs. blue) and product attributes (weight-positive products vs. weight-negative products) that significantly affect consumers' purchase intention.

Experimental Procedure: The weight-positive attribute product selected for this group of experiments is apple, and the variables are different color background boards. The apples are placed in front of the white background board and the blue background board respectively, displaying the products in all directions, filming and producing the goodies sharing video, playing it to all the experimental subjects and investigating their purchase intention. Meanwhile, the weight-negative attribute product selected for the experiment was eyeglasses, and the variables were different colored background boards. The glasses were placed in front of the white and blue background boards respectively, the product was displayed in all directions, the video of sharing the goodies was filmed and produced, and the video was played to all the experimental subjects to investigate their purchase intention.

Experimental results: In the valid questionnaires collected, more than 70% of the respondents believe that products with positive weight attributes are more likely to motivate consumers to buy on a white background, while 22% believe that products with negative weight attributes are more likely to motivate consumers to buy on a white background, and the rest of the respondents believe that the difference is not significant. The results for the blue background are quite different, with only 18% of the respondents believing that products with positive weight attributes are more likely to motivate consumers to buy on the blue background, while more than 80% of the

respondents believe that products with negative weight attributes are more likely to motivate consumers to buy on the blue background.

Discussion: According to the experimental results, the interaction between background color and product attributes will have a certain effect on consumers' purchase intention: white background has a significant additive effect on weight-positive attribute products, and blue background has a significant additive effect on weight-negative attribute products. The weight perception of positive attribute products in the white background is higher than the blue background, and the colorless background is more able to highlight the characteristics of positive attribute products, stimulate consumers' desire to buy through the visual senses, and promote the emergence of the willingness to buy; on the contrary, the blue background is a more distinctive color of the background color is more capable of highlighting the characteristics of negative attribute products, and the negative attribute products displayed in the blue background are more capable of stimulating the consumers' willingness to buy. In short, it can be considered that there is a certain interaction between background color and product attributes, which can affect consumers' purchase intention.

5 Measurement Results

According to the above experimental results, it can be seen that the background color has a certain degree of influence on consumers' purchase intention, and in front of a pure white background, consumers can form a clearer and more accurate impression of the product, with less interference from other elements. For similar products, the background color has a direct impact on consumers' purchase intention. Due to the complexity of product attributes, the direct effect of product attributes on consumers' willingness to buy is smaller than that of background color, and is related to many factors other than weight. The interaction between background color and product attributes will play a role in influencing consumers' purchase intention.

However, there are some loopholes in the above experiment. As far as product attributes are concerned, the previous generalization that weight attribute is the key factor in evaluating product attributes ignores the fact that there are other attributes of some commodities that can directly affect the purchase intention, such as the portability of eyeglasses and the pulp content of apples, etc. The experimental results

have certain limitations and cannot completely prove the three studies and hypotheses proposed in this paper.

6 Conclusions

In recent years, as an emerging mode of communication, goodies sharing video has emerged in major mainstream new media platforms, becoming a new form of advertising implantation and attraction by virtue of its advantages of fast dissemination speed and wide range. Based on the reference of related literature, this study verifies whether the background color and product attributes in the goodies sharing video have an impact on the purchase intention of the viewing users through three groups of experiments, the experimental data are collected and processed, and the results of the study are compared and summarized. After data analysis and testing, it can be concluded that the background color in the goodies sharing video has an impact on consumers' purchase intention, and it is also found that the factors affecting consumers' purchase intention are comprehensive and diverse, and it is worthwhile to carry out more in-depth and comprehensive research.

The emerging advertising form of goodies sharing video has not yet been paid attention to and researched by a large number of authoritative experts, and there are fewer research results from previous researchers. The two variables (background color and product attributes) selected for this project are relatively limited and cannot scientifically, systematically and completely summarize all the factors affecting consumers' purchase intention in goodies sharing videos. As far as background color is concerned, there are several contrasting color combinations, and this study only chooses white and blue as the background color, which has some limitations; and as for weight attributes, they are greatly influenced by subjective perception, and there are some differences in the weight perceptions of different individuals for different products.

Meanwhile, during the research, it is also found that the sound in the goodies sharing video is also an important factor influencing consumers' purchase intention, and the video plot presented by the blogger or the interaction with the audience or even the fans can, to a certain extent, increase consumers' purchase intention. This study can also be used as a reference for the data application of the emerging business model of goodies sharing video, which can create situational marketing by capturing

current hotspots through big data, and innovate the ways and means of implantation of soft advertisements to create more revenue.

In future research, multiple variables can be considered, and more comprehensive analysis and experiments can be carried out to fully verify the degree and relevance of each factor affecting consumers' purchase intention in new media marketing scenarios.

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