

Investigating the Wrong Decision of Fashion Designers on the Creativity of Color Combination for Apparel

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ABSTRACT

Designers usually choose a lot of color combinations to match their originality of fashion apparels in conformity with their own subjective sensations. But, it may frequently result in against what they expected. Therefore, an experiment including a semantic differential method and the color psychophysical method Magnitude Estimation Method³ was conducted in this study to explore how a designer's error is in the selection of color to give a specific creation color-meaning to her/his new apparel works compared with what people actually respond to those works. The result shows that fashion designers would have about 20% error in the selection of colors to match their originality of fashion apparels being away from those color imageries of the observers examined. It also indicates that an effective color imagery model is needed to be a good tool for designers in creating new color fashion.

INTRODUCTION

In general, from the beginning of human in prehistoric times, there exist four major original function purposes of clothing, the modesty, immodesty, protection and adornment. But, nowadays, art-work has already gravitated from the individual "Originality" of highly expressive artists to Mass-produced vision-perceptual semiotic games that facilitate audience participation and consumption.¹ Meanwhile, the role of the ultimate consumer in the fashion business is an important one and, in the final analysis, controlling. The controlling role of the consumer is not unique to the fashion industry. Every business that serves the public has to guide its operations in the light of consumer demand. Consumer demand becomes the guide to intelligent production and merchandising. A knowledge of the fundamental facts of what consumers want and why is clearly of the first importance to those who design the product, prepare the advertising and sales promotion, sell the goods and make the collections, etc.²

The originality on the works created by artists, in fact, frequently cannot match with the perception and demand of consumers completely. It is a great problem for fashion industry at present to have to be solved due to the importance of the role of

consumer as depicted above. And, especially, the color imagery of consumers on fashion apparel with color combination is the first important factor among all those perception and demand ones. Therefore, the authors conducted an experiment by means of a semantic differential method and a psychophysical experimental method Magnitude Estimation Method³ to examine the wrong decision of designers on the creativity of color combination for apparel.

EXPERIMENTAL

Two types of apparel and five fashion colors were created and employed by two designers participating in this study as shown on Figure 1. The originalities of these fashion colors for those apparels were also provided and indicated in the Table 1 before they all were arranged in the psychophysical experiment of color-imagery assessment conducted in this study.³ And, in the visual assessment of scaling color imagery, 10 color-image specimens of apparels with fashion colors respectively described above having a large size of 3×3 square inch subtending 10⁰ visual angle, shown on a flat display in a dark room. Each sample was assessed twice by a panel of ten observers including five female and five male ones, within the ages of 20 and 35. And, fifty-two pairs of semantic differential words were also used. Totally, 10400 assessments were obtained.



Figure 1 Two examples for two types of fashion apparels respectively were created by the designers in this study, (a) the first type and (b) the second type ones.

Table 1 The CIEL*a*b* coordinates of color samples tested and the related originalities given by the designer in this study.

Color Sample No.	CIE L*,a*,b* Coordinates	Originality of Designers
1	42, 2, 6	Elegant and Mature
2	43, 5, 2	Sweet and Lovely
3	44, 8, 5	Soft-beauty and Harmonious
4	62, 4, 1	Pure and Fresh
5	56, 2, 2	Graceful and Beautiful

Table 2 The mean results of visual color imageries are listed for five fashion colors tested respectively. The abbreviated CSN indicates Color Sample No., MV Mean Value and SDPW Semantic Differential Pair of Words. The symbol “+” indicates that the word with “+” has the positive meaning of color imagery, on the other hand, the other one the negative.

SDPW MV CSN	1	2	3	4	5
	(+) Beautiful-Ugly	-15	26	21	21
(+) Complicated-Simple	-35	-20	-30	-31	-27
Relaxed-Tense (+)	-7	-34	-24	-29	-11
Mature-Young (+)	-33	21	35	19	-13
(+) Fashionable-Unfashionable	-16	32	27	7	11
(+) Respectable-Contemptible	-7	26	34	28	28
(+) Natural-Affected	-11	-11	-10	30	-4
(+) Perceptual-Reasonable	6	20	25	-3	-12

RESULTS and DISCUSSIONS

There were fifty-two pairs of semantic differential words being used in the psychophysical assessment experiment of color imagery as described previously. And, a normal repeatability of observers with the mean value of 79 in the unit of coefficient of variation (CV %) was obtained. According to the selected ratio value for every pair of semantic differential words obtained from visual results,³ eight ones having the selected ratio value larger than 99% are chosen, and their mean results of visual color imageries are listed in Table 2 for five fashion colors tested respectively. The results indicate that the observers feel Relaxed, Simpler and Mature, but Ugly, Unfashionable, Contemptible, Affected and little Perceptual to the No. 1 fashion color tested as shown in Table 1, but this result is almost against the originality for the No. 1 given by the designers in this study.

For the rest four fashion colors No. 2 to No.5 examined, the visual results of color imageries may nearly completely match with those originalities by designers respectively, with the exception of the imagery sensation Affected. Finally, on the whole, it is obvious that a fashion designer would generally have about 20% wrong decision on the selection of color combination for his/her own creativity of fashion apparel. Further and more field trials may be needed to verify this finding.

CONCLUSIONS

Designers determine to choose a color combination to match their originality of fashion apparel usually in conformity with their own subjective sensations. But, it may frequently result in against what they expected. The wrong decision of fashion designers was examined using an experiment with the semantic differential and the psychophysical methods conducted and carried out in this study. And, two types of apparel and five fashion colors proposed by two designers and fifty-two pairs of semantic differential words were also employed. Each sample was assessed twice by a panel of ten observers. The conclusions can be obtained as follows: a normal repeatability of observers with the mean value of 79 in the unit of coefficient of variation (CV %) was obtained. Most fashion colors tested can match with those originalities by designers. But, there still exists about 20% wrong decision on their selection of color combinations for their creativity of fashion apparels. It also indicates that an effective color imagery model is needed to be a good tool for designers in creating new color fashion.

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