Color preference of hospital information book designed in process color and monotone

Ekachai Tholuang
Deputy of Printing and Mass Communication Tech., Rajamangala Univ. of Tech., Thanyaburi, Thailand

Phattharaporn Keotsakul
Major of Printing Tech., Deputy of Printing and Mass Communication Tech., Rajamangala Univ. of Tech., Thanyaburi, Thailand

Keywords: Color preference, Book design, Process color, Monotone, Digital printing.

1. Introduction

To design a book the color is one important factor to attract the customer. In this paper we emphasized at the book that give the information of the hospital to people. What is color will proper to use in the information book? How is color preference on the book? The printing process we normally print in four color and called “process color” that gives variety color for the book sometime we saw a book that print only one color and called “monotone color”. And we like to know how color preference its work.

2. Experiment

The information book of Tambon Health Promoting Hospital Banbangpung was made in size 21 x 29.7 cm. The process of this study we divided into two parts that were book design and surveying the preference for the customer who comes to the hospital.

2.1 Book design

The dummy of the book was made by hand sketching that was including pictures and contents. The design was combined the real pictures and cartoon for graphic. Then we used the software namely Adobe InDesign to make a layout. Finally the book had 40 pages including the cover. We used two kinds of font (TH SarabunPSK and TP Tankhun) and three size of the letter height as 16, 18 and 20 pt. Two kinds of paper were printed, coated paper 115 g/m2 and uncoated paper 80 g/m2. The books were printed by digital printing Fuji Xerox version 700 Digital Color Press in process color and monotone color. The meaning of process color is any color will be produced by using 4 colors such as cyan, yellow, magenta and black. Monotone color here we mean the book print in black color only even the picture. The saddle binding was used for the book binding. Figure 1 showed the book for using to survey the preference of customer in part 2.

Fig. 1 The hospital information books. Left column is coated paper and right column is uncoated paper.

2.2 Preference surveying

Twelve books in process and monotone color were put on the table at the hospital. Fifty subjects were the customer to come to the hospital. They observed the book under the diffuse sunlight that gave illuminance about 4500 lx. The surveying by five rating scale of preference in the questionnaire was carried out.
1 = Very low preference  
2 = Low preference  
3 = Middle preference  
4 = High preference  
5 = Very high preference  

We analyzed the data by showing the mean of the rating scale of the preference as following: 

4.51-5.00 = very high preference  
3.51-4.50 = High preference  
2.51-3.50 = Middle preference  
1.51-2.50 = low preference  
1.00-1.50 = Very low preference  

Fig. 2 Subjects were carried out the experiment at the hospital.  

3. Result and Discussion  
The total of subject was 50 people. The highest education among the subject was bachelor’s degree at 12 people and lowest at grade 1-6 for 13 people as seen in Fig. 3. The preference result showed the highest preference for front was TH SarabunPSK at 18 point. The very high score of rating preference on the book was showed at the process color compare to the monotone color as shown in Fig. 4.

![Pie chart](image)

Fig. 3 The education of fifty subjects at Tambon Banbangpung, Ratchaburi, Thailand.

![Bar chart](image)

Fig. 4. The score of preference rating scale for process and monotone color for information book design.

The finding of this experiment we could conclude that two factors was affected to the preference of subject to the information book. One was the kind of paper, the high preference score showed at the coated paper both of process and monotone color compare to the uncoated paper. The reason is understandable that coated paper has the shiny surface in spite of uncoated paper has the matte surface. In psychology the shiny surface is the most attractive to us at the first impression this might be logic to the preference of subject. Second is the point of process color and monotone color, it was seemed not so big effect to attract interesting of the subject. Of course the process color showed always high score compare to monotone but the difference was not so high enough to say that was big factor to attract the preference of the customer.

References  
2) P. Pachonkraw: Color and printing design, Printing design study, (1996).  