

# *Different Color Preference of Digital Camera between Japanese and Chinese*

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**Abstract:** This study asked 79 subjects (Japanese 39, Chinese 40) to investigate the most popular color blue and color pink for digital cameras. Let subjects choose three from 15 blue digital cameras which were processed depending on best-selling ranking of digital cameras by Adobe Photoshop, and arrange these three cameras according to their preference. The procedure of pink digital cameras was the same with blue digital cameras. For This study, the metallic pink for digital camera was commonly preferred in Japan and China. The refreshing blue for digital camera was considered the most popular color in Japan and China. The purpose of this study will be to identify the preferences of young people in China and Japan for digital cameras and develop electronic products that young people enjoy. Are there any differences in the preference for blue and pink digital cameras between young people in China and Japan was also will be find in this study.

## 1. Introduction

In these years, digital electric machines have been developing very fast. The new technology of digital electric machines has been producing every day, and also function has been evolving quickly. Further, selection range of digital electric machines for consumers is much wider than before, for instance improved function, much variety of color and variety of design are provided today. Among many kinds of digital electric machines, digital camera is one of the most popular digital electric machines in Japan and China. Recently, the number of people who like to use camera functions of mobile or digital camera to remember some important moments have increased. Therefore, digital camera was the stimuli of this study.

The color of camera was black or silver, not many kinds of color for camera could be selected before. Along with kinds of color of digital electric machines have increased today, consumers choose the color which they like. The phenomenon also happened in case of digital camera, consumers choose the color of digital camera which they like.

Saito (1994) did a comparison study between Tokyo, Taipei and Tianjin revealed that white as well as vivid blue, vivid green, light violet, light blue, was commonly preferred in all three areas. And olive, dark gray, gold and dark yellowish were commonly disliked in all three areas. From the result above, although in different areas, the similarities of color preference can be seen clearly.

Black was commonly preferred in Taipei and Tianjin, but in Tokyo the preference of color black was not seen. On the other hand, black was disliked in Tianjin area. And Silver was disliked in

Taipei area. The preference tendency of color silver was seen in Tokyo area. Therefore, the differences of color preference can be seen also in this study [1].

Cho and Saito (2005) showed that in Japan and China the red color was used for happy event commonly, but in these two areas the color red also has its own meaning and cognition of beauty. In China the traditional meaning “gratifying” had a great influence, and the political significance was being lost that was caught. With the times changing, the impression of the red color was also changed. Generally from the color emotion such as preference of color, the use of color, the connect of mind from color etc., can reflect that the national character and the appreciation of the beauty in one country. From the result above, we can know that different color in different countries have different meaning. And the impression of the color will be different [2].

Tianren, L and Renhao, L (2011) found that white is the most popular color for most daily necessities and color tickets, followed by light blue and light red. Generally, daily necessities in light colors are more popular than those in dark colors. Most people dislike dark yellow products the most, followed by deep purple and deep yellow green [3].

Xia and Saito (2012) did a comparison investigation of the attitudes of black as fashion color in Japan, China and U.S. The reason for Japanese and Chinese people wearing black clothes was revealed. For Japanese people, the reason for wearing black clothes was psychological, such as a sense of security. For Chinese people, most of them just wanted to express their good image to others. And “face society” can be reflected on fashion in China. In Japan and China, the tendency of “ease suit and difficulty dirt” as the reason for wearing black can be seen [4, 5].

Therefore, the purpose of this study will be to identify young people's preferences for digital cameras and develop electronic products that young people enjoy. Are there any differences in the preference for blue and pink digital cameras between young people in China and Japan was also will be found in this study. This article is a preliminary research achievement.

## 2. Purpose

This study was to find out the most popular blue digital camera and the most popular pink digital camera in Japan and China. Because there are so many kinds of color blue and pink. What kind of color blue and pink are preferred for digital camera in Japan and China? This will be examined in this study.

## 3. Method

### 3.1. Subjects

40 Japanese (19 males/21 females, Mage=20.5) came from graduate schools and under graduate schools in Tokyo area in Japan.

52 Chinese (22 males/30 females, Mage=19.2) came from graduate schools and under graduate schools in Shenyang in China.

### 3.2. Stimulus

Design B was used in this study. This design was printed in blue and pink. There are many kinds of blue digital cameras and pink digital cameras. And some digital cameras were been reference which were selling well. And print out in size A4. In this study, there are 24 stimulus (Blue=15, Pink=9). These 24 stimuli are shown as Figure 1 and Figure 2 [6].

### 3.3. Procedure

First, 15 blue digital cameras were placed as Figure 1, the experiment participants were asked to select 3 blue digital cameras from these 15 blue digital cameras according to their preference and to arrange these 3 cameras according to their preference also. And then the same procedure would be done one more time with 9 pink digital cameras. 9 pink digital cameras were placed as Figure 2, the experiment participants were asked to select 3 pink digital cameras from these 9 pink digital cameras according to their preference and to arrange these three cameras according to their preference also. At last, the experiment participants were asked to write out the reason of their selection. This study was carried out in Japan and China.

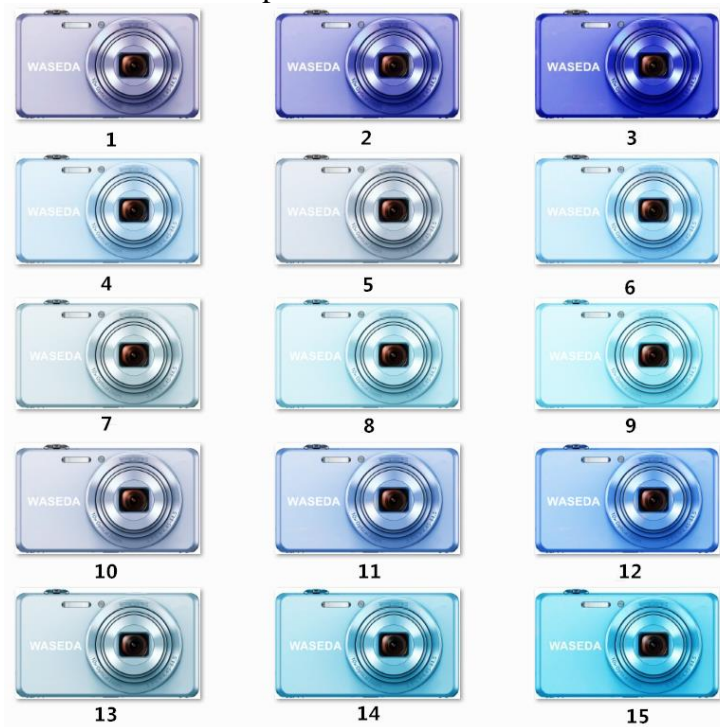


Figure 1: Stimuli of blue digital camera



Figure 2: Stimuli of pink digital camera

## 4. Result

### 4.1. The Result of Pink Digital Camera

Table 1: Frequency of selection for placing on first of pink digital camera

Country/ Ranking	China	(%)	Japan	(%)
1st	No.2/No.9	19.2%	No.9	17.5%
2nd	No.1	15.4%	No.7	15.0%
3rd	No.8	13.5%	No.1/No.8	12.5%
4th	No.3/No.5/No.7	7.7%	No.2/No.6	10.0%
5th	No.6	5.8%	No.3/No.4/NO.5	7.5%
6th	No.4	3.8%		

Table 1 showed the frequency of selection for placing on first of pink digital camera. In Japan, No.9 (17.5%) of pink camera got the highest frequency of selection, and in China No.2 and No.9 (19.2%) got the highest frequency of selection. No.1 and No.8 (12.5%) got the third highest frequency of selection in Japan, No.1 (15.4%) was the second highest one, and No.8 (13.5%) was the third highest one in China. No.1 and No.8 got high frequency of selection for placing on first in these two countries. No.4 (3.8%) got lowest frequency of selection for placing on first of pink digital camera, and No.6 (5.8%) got the second lowest frequency of selection in China. In Japan it was the same with China. So No.4 and No.6 got low frequency of selection for placing on first in Japan and China. From the frequency of selection for placing on first of pink digital camera, there is almost no difference in Japan and China.

Table 2: Frequency of selection for placing on second of pink digital camera

Country/ Ranking	China	(%)	Japan	(%)
1st	No.6/No.7	15.7%	No.3/No.6/No.8	15.0%
2nd	No.1/No.5	13.7%	No.2	12.5%
3rd	No.4	11.8%	No.1/NO.5/No.7	10.0%
4th	No.2/No.9	9.8%	No.9	7.5%
5th	No.3	5.9%	No.4	5.0%
6th	No.8	3.9%		

The frequency of selection for placing on second of pink digital camera was shown in Table 2. In Japan, No.3, No.6, and No.8 (15.0%) of pink digital camera got the highest frequency of selection, and in China No.6 and No.7 (15.7%) got the highest frequency of selection. No.6 got the highest frequency of selection in both two countries. In the other hand, there is a big difference between these two countries. In Japan No.3 and No.8 got the highest frequency of selection, but in China No.3 got the second lowest frequency of selection, and No.8 got the lowest frequency of selection.

Table 3: Frequency of selection for placing on third of pink digital camera

Country/ Ranking	China	(%)	Japan	(%)
1st	No.5	21.6%	No.1	20.0%
2nd	No.4	15.7%	No.5/No.9	15.0%
3rd	No.6/No.7/No.9	11.8%	No.3/No.6/No.7	12.5%
4th	No.1	9.8%	No.2	10.0%
5th	No.8	7.8%	No.4	2.5%
6th	No.3	5.9%	No.8	0.0%
7th	No.2	3.9%		

Table 3 showed the frequency of selection for placing on third of pink digital camera. As shown in Table 3, No.1 (20.0%) of pink digital camera got the highest frequency of selection in Japan. In China, No.5 (21.6%) got the highest frequency of selection. No.4 (15.7%) was the second highest one on China, No.5 and No.9 (15.0%) were the second highest one in Japan. There is a big difference in these two countries. The frequency of placing No. 4 on third of pink digital camera in China was the second highest one, but in Japan NO.4 (2.5%) was the second lowest one. There is also some similar part of placing on third of pink digital camera in Japan and China. No.5 got high frequency of selection, but the frequency of selection on No.2 and No.8 were low in both two countries.

Table 4: Frequency of selection of pink digital camera

Country/ Ranking	China	(%)	Japan	(%)
1st	No.5	14.3%	No.1	14.2%
2nd	No.9	13.6%	No.9	13.3%
3rd	No.1	13.0%	No.6/No.7	12.5%
4th	No.7	11.7%	No.3	11.7%
5th	No.2/No.6	11.0%	No.2/No.5	10.8%
6th	No.4	10.4%	No.8	9.2%
7th	No.8	8.4%	No.4	5.0%
8th	No.3	6.5%		

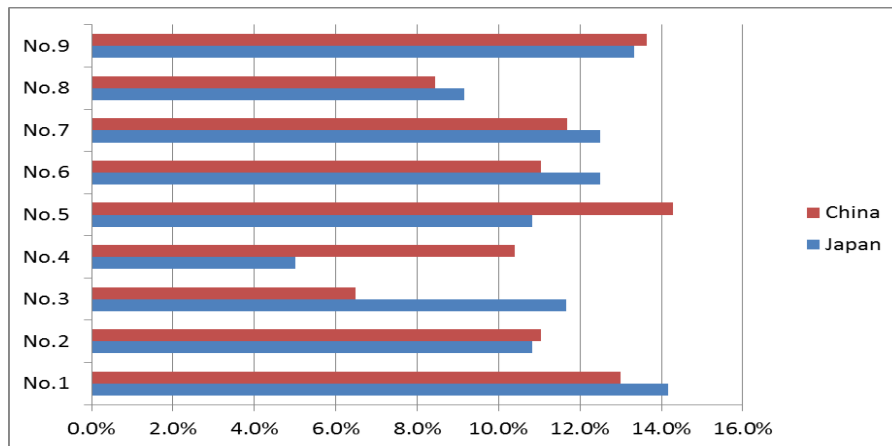


Figure 3: The frequency of selection of pink digital camera

The frequency of selection of pink digital camera was shown in Table 4 and Figure 3. In Japan, No.1 (14.2%) of pink digital camera was the most popular, and in China No.1 (13.0%) is the third most popular one. In China and Japan, the same part is like this, the second popular one was No.9 in both two countries. It also has different part in China and Japan, the most popular pink digital camera in China was No.5 (14.3%), but in Japan No.5 (10.8%) is not so popular as China. No.4 and No.8 were not so popular in these two countries also.

#### 4.2. The Result Of X2 Test for Pink Digital Camera

The result of pink digital camera was analyzed by X2 test using R. The result was that no significant difference of pink digital cameras can be seen ( $X^2=5.4073$ , n. s.).

#### 4.3. The Result of Blue Digital Camera

Table 5 showed the frequency of selection on placing for first of blue digital camera. In China, No.9 of blue digital camera got the highest frequency of selection, and in Japan No.3 and No.5 got the highest frequency of selection. In China, No.5, No.10, and No.15 got the second highest frequency of selection, No.15 got the second highest frequency of selection. It is one big difference in China and Japan, No.1 was the third highest one in China, but in Japan the frequency of selection of No.1 was the second lowest one.

Table 5: Frequency of selection for placing on first of blue digital camera

Country/ Ranking	China	(%)	Japan	(%)
1st	No.9	19.2%	No.3/No.5	15.0%
2nd	No.5/No.10/No.15	9.6%	No.15	12.5%
3rd	No.1	7.7%	No.9/No.12/ No.14	10.0%
4th	No.2/No.7/No.8/ No.12/No.13/No.14	5.8%	No.11	7.5%
5th	No.3	3.8%	No.2/No.6	5.0%
6th	No.4/No.6/No.11	1.9%	No.1/No.4/ No.10/No.13	2.5%
7th			No.7/No.8	0.0%

Table 6: Frequency of selection for placing on second of blue digital camera

Country/ Ranking	China	(%)	Japan	(%)
1st	No.6/No.7/No.9	15.4%	No.14	12.5%
2nd	No.8/No.11	7.7%	No.6/No.8	10.0%
3rd	No.1/No.4/No.10 /No.12	5.8%	No.1/No.2/No.5 /No.7/No.15	7.5%
4th	No.5/No.15	3.8%	No.3/No.9/No.10 /No.12/No.13	5.0%
5th	No.2/No.3/ No.13/No.14	1.9%	No.4/No.11	2.5%

The frequency of selection on placing for second of blue digital camera was shown on Table 6. In China, No.6, No.7, and No.9 (15.4%) of blue digital camera got the highest frequency of selection, and in Japan No.14 (12.5%) got the highest frequency of selection. The second highest one in China was No.8 and No.11 (7.7%), in Japan were No.6 and No.8 (10.0%). The frequency of selection on No.2, No.3, No.13, and No.14 (1.9%) were low. In Japan No.4 and No.11 (2.5%) got low frequency of selection. There are some differences in Japan and China on placing for second of blue digital camera. In China No.11 got the second highest frequency of selection, but in Japan No.11 got the lowest frequency of selection. In the other hand, No.14 got the highest frequency of selection on placing on second of blue digital camera, but in China No.14 was the lowest one in China.

Table 7: Frequency of selection for placing on third of blue digital camera

Country/ Ranking	China	(%)	Japan	(%)
1st	No.10	17.3%	No.9	22.5%
2nd	No.6	11.5%	No.3	15.0%
3rd	No.1/No.4/No.5/No.7 /No.9/No.13	7.7%	No.7/No.12	10.0%
4th	No.8	5.8%	No.1/No.2 /No.13/No.15	7.5%
5th	No.2/No.3/ No.12/No.15	3.8%	No.8/No.10	5.0%
6th	No.11/No.14	1.9%	No.5	2.5%
7th			No.4/No.6/ No.11/No.14	0.0%

Table 7 showed the frequency of selection for placing on third of blue digital camera. In China No.10 (17.3%) got the highest frequency of selection for placing on third of blue digital camera. No.9 got the highest frequency of selection for placing on third of blue digital camera in Japan. The frequency of selection for placing on third of blue digital camera in China was No.6 (11.5%), in Japan it was No.3 (15.0%). There are some similar places in Japan and China on the frequency of selection for placing on third of blue digital camera. No.11 and No.14 (1.9%) got the lowest frequency of selection for placing on third in China, nobody placed No.11 and No.14 on third of blue digital camera in Japan. So, No.11 and No.14 were not so popular in these two countries. There are some differences yet on the frequency of selection for placing on third of blue digital camera in these two countries. In China No.10 was the highest one for placing on third of blue digital camera, but in Japan No.10 (5.0%) got the third lowest frequency of selection for placing on third of blue

digital camera, it was not so popular as it in China. No.6 was the second highest one in China, but in Japan, nobody placed No.6 on third of blue digital camera. In the other hand, No.3 got the second highest frequency of selection for placing on third of blue digital camera, but in China No.3 (3.8%) was the second lowest one.

Table 8: Frequency of selection of blue digital camera

Country/ Ranking	China	(%)	Japan	(%)
1st	No.9	14.1%	No.9	12.5%
2nd	No.10	10.9%	No.3	11.7%
3rd	No.6/No.7	9.6%	No.15	9.2%
4th	No.1/No.5	7.1%	No.5/No.12	8.3%
5th	No.8	6.4%	No.14	7.5%
6th	No.15	5.8%	No.2	6.7%
7th	No.4/No.12/No.13	5.1%	No.1/No.7	5.8%
8th	No.2/No.11	3.8%	No.6/No.8/No.13	5.0%
9th	No.3/No.14	3.2%	No.10	4.2%
10th			No.11	3.3%
11th			No.4	1.7%

Table 8 and Figure 4 showed the frequency of selection of blue digital camera. No.9 got the highest frequency of selection of blue digital camera in both two countries. The second one in China was NO.10 (10.9%), in Japan it was No.3 (11.7%). The same place in these two countries was that No.9 was the most popular one. And No.11 was not so popular in these two countries. There are some big differences in Japan and China yet. No.3 was the second popular one in Japan, but in China No.3 was the most unpopular one. And No.10 was the second popular one in China, but in Japan it was not so popular as it in China.

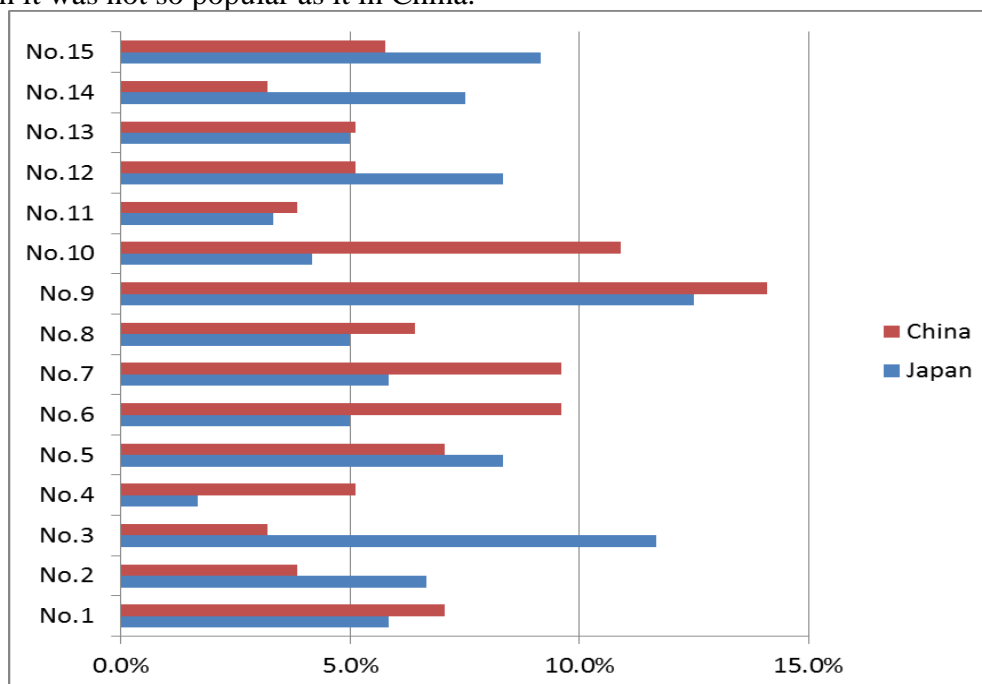


Figure 4: The frequency of selection of blue digital camera



## 5. Conclusion

This study was to find out the most popular blue digital camera and the most popular pink digital camera in Japan and China. From the result above, the most popular blue digital camera is No.9, because the frequency of selection was the highest in Japan and in China No.9 also got the highest frequency of selection.

The most popular pink digital camera in Japan was No.1, the most popular pink digital camera in China was No.5. To find out the most popular digital camera in Japan and China commonly, X2 test was done. But no significant difference was seen by X2 test. In China, No.5 (14.3%) got the highest frequency of selection, and No.1 (13.0%) got the third the highest frequency of selection. In Japan, No.1 (14.2%) got the highest frequency of selection, the frequency of selection of No.5 was 10.8%. Therefore, No.1 was popular in Japan and China commonly. No.5 was popular in China, but in Japan it was not popular.

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