Comparison of clothing evaluations by Japanese and Chinese experts

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Abstract: The salability in Japan of clothes designed and sold in China was evaluated by experts from both countries. The salability of clothes designed and sold in Japan was also investigated. Five Japanese jackets were purchased for evaluation from a department store in Tokyo, and 10 items of Chinese clothing (two dresses and eight jackets) were purchased for evaluation from a department store in Beijing. Seven Japanese apparel experts (two university professors, two designers, a pattern maker, and two merchandisers) and 10 Chinese apparel experts (eight university professors, an art director, and a designer) evaluated the clothing items. The experts were not informed of the item specifications, including price, brand, materials, and country of manufacture. The sample items were evaluated on the basis of their 1) materials, 2) colors, 3) silhouette, 4) design emphasis points, 5) designer ability, 6) pattern maker ability, and 7) sewing finish. Each point of evaluation was scored on a 0–2 or 0–3-point scale. Evaluators were required to specify the reason for each score they gave. Points were accumulated to give a general score. We found that Japanese experts focused on general design and sewing finish, while Chinese experts considered more general design points. Materials and sewing finish were evaluated independently of general design points. Thus, our results indicate that clothing is evaluated differently in Japan and China. We conclude that it is necessary to consider the respective evaluation points used in each country as we pursue globalization.

Keywords: Chinese Apparel, Japanese Apparel, Clothing Evaluation, Apparel Expert.

1. INTRODUCTION

The scale of the Chinese clothing market is currently greater than 12 trillion yen, which is second to that of the United States; China thus competes with Japan for second place. The growth rate of the clothing market in China is high [Ministry of Economy, Trade and Industry of Japan, 2013]. Although Japanese fashion products designed by Japanese companies are generally superior in the domestic market, their international presence is considerably small. With few exceptions, most such Japanese fashion products sell poorly in overseas markets, while many European and American luxury brands and a few Korean apparel brands have become famous and shown high sales in China.

Recently, at least 80% of the clothing sold in Japan is manufactured in China [Ministry of Economy, Trade and Industry of Japan, 2013]. While such clothes are considered to be of adequate quality, globally speaking current Japanese quality management standards are said to be too severe and excessively strict [Masuda T., 2010]. In addition, some industry observers believe that Japanese clothing does not sell well in the Chinese market because of differences in design and size [Sakaguchi M., 2006].

On the other hand, the Chinese apparel industry has gradually acquired high-quality manufacturing ability at low costs. Based on this ability, Chinese companies are now trying to enter global markets, including that of Japan [Clothes Industry Network in China, 2013]. To better understand the state of the global fashion market, therefore, it is necessary to know the current state of Chinese apparel in the global market. In the global market, Japanese market is one of the important market for Chinese apparel.

There are some studies on the consumer behavior and marketing in China [Aron O'Cass and Vida Siahtiri, 2013, Sylvie Laforet, Junsong Chen, 2012].The Chinese preferences of brands and body images were also investigated [Susan H.C. Tai, 2005, Bopeng Zhang and Jung-Hwan Kim, 2013]. The effects of consumers' appearance and body on their behavior for shopping were investigated [David Mellor et al, 2013, Luo Y, 2005]. However, those studies were not considered the characteristic of clothing itself. A popular clothing in China may not be popular in Japan or vice versa. Clothing preference is depending on the customers' Kansei. The Kansei will be different from the belonging countries. To understand the characteristics of the preferred clothing in each country will help designer and manufactures to make more satisfying clothing for customers' Kansei of each country.

To understand the difference of the preferred clothing, we investigated the characteristics of clothes designed and sold in China and Japan. The sample clothes were evaluated by clothing experts who has a carrier in apparel industry or education in both Japan and China. We assumed that they understand the customers' preference of each country. The experts described the points of evaluation on which the clothing experts from each country focus. If their focused points were different, it will show the difference of the preference of customers in each country. Thus, we compared these points of focus of both countries and clarified the differences. It will help designer and manufacturers to make clothing which satisfy customers in each country.

2. EXPERIMENTAL

To investigate the differences in clothing evaluation focus points between Japan and China, the salability of clothes designed and sold in Japan was investigated. Five Japanese jackets were purchased for evaluation from a department store in Tokyo, and 10 items of Chinese clothing (two

Table 1: Sample specifications

Sample name	Sample picture	Brand country	Retail price	Sample name	Sample picture	Brand country	Retail price
C1		China	CNY 850 (JPY 13,600)	J9		Japan	(CNY 4,528) JPY 72,450
C2		China	CNY 795 (JPY 12,720)	C10		China	CNY 3,128 (JPY 50,048)
J3		Japan	(CNY 1,575) JPY 25,200	C11		China	CNY 1,149 (JPY 18,384)
C4		China	CNY 589 (JPY 9,424)	C12		China	CNY 799 (JPY 12,784)
C5		China	CNY 1,068 (JPY 17,088)	C13		China	CNY 2,598 (JPY 41,568)
J6		Japan	(CNY 1,575) JPY 25,200	C14		China	CNY 2,897 (JPY 46,352)
J7		Japan	(CNY 1,838) JPY 29,400	J15		Japan	(CNY 1,811) JPY 28,980
C8		China	CNY 2,592 (JPY 41,472)	*Note: "J" refers to Japanese brand; "C" refers to Chinese brand. *Retail price was converted at a rate of 1 CNY = 16 JPY.			

dresses, eight jackets) were purchased for evaluation from a department store in Beijing. The specifications of the samples are shown in Table 1. Seven Japanese apparel experts (two university professors, two designers, a pattern maker, and two merchandisers) and 10 Chinese apparel experts (eight university professors, an art director, and a designer) evaluated the samples. Details about the experts are shown in Table 2.

The experts were not informed of the item specifications, including their purchase price, brand, materials, and country of manufacture. They examined the samples by observing them being worn and/or making put them on a dress maker dummy and by touching them. The sample items were evaluated on the basis of their 1) materials, 2) colors, 3) silhouette (shape and outline), 4) design emphasis points, 5) designer ability, 6) pattern maker ability, and 7) sewing finish.

Each point of evaluation was scored on a 0–2 or 0–3-point scale. Evaluators were required to provide the reason for each score they gave. Points were accumulated to give an average score out of a total score of 100. The evaluation point scoring was performed by principal component analysis (PCA) to investigate the structure of the evaluations.

Table 2: Apparel expert details in Japan and China

No.	Gender	Occupation	No.	Gender	Occupation
JE1	female	university professor	CE1	female	university professor
JE2	male	university professor/designer	CE2	male	university professor
JE3	female	university professor	CE3	female	university professor
JE4	female	university professor/designer	CE4	female	university professor
JE5	female	pattern maker	CE5	female	university professor
JE6	female	merchandiser	CE6	female	university professor/designer
JE7	male	merchandiser	CE7	male	university professor
			CE8	male	university professor/art producer
			CE9	male	university professor
			CE10	male	university professor

3. RESULTS AND DISCUSSION

3.1. Comparison of clothing evaluation results

The average scores (out of 100) of the samples as scored by the Japanese and Chinese experts are shown in Figure 1. The average of all scores for all samples was 47.5 by the Japanese experts and 70.1 by the Chinese experts, indicating that the Japanese experts were stricter in their evaluations than the Chinese experts. The score rankings are shown in Table 3. The rankings of the samples were also different depending on the country.

The Japanese experts gave higher scores to samples J9, C14, and J15, all with scores over 60. For samples C4, C11, C12, and C13, the Japanese experts gave lower scores, all under 40. The Chinese experts, on the other hand, evaluated samples C5, J7, C8, J9, C14, J15 all with scores

over 70. Sample C10 was given the lowest score (under 50) by the Chinese experts. Samples J9, C14, and J15 were highly evaluated by the experts of both countries. These results indicate that there are common points of evaluation with respect to generally highly evaluated clothing in both countries. However, while samples C4, C11, C12, and C13 were poorly evaluated by the Japanese experts, they were given mid-range scores by the Chinese experts. In contrast, samples C2, J3, and J6 were highly evaluated by the Japanese experts but given comparatively lower scores by the Chinese experts. These results indicate that there are some different evaluation points between the two countries.

3.2. Expert comments regarding their clothing evaluations

According to the comments provided by the Japanese experts, some of them scored sample C11 as being of poor quality because of its silhouette, sewing finish, and pattern. They also poorly evaluated the pattern and sewing on the shoulders and armholes of the sample. However, the Chinese experts did not object to this particular design of the shoulders and armholes, and poor sewing. Samples C12 and C13 were also poorly evaluated by the Japanese experts because of their poor sewing finish and defective aspects, such as pressing marks and wrinkles. In particular, they evaluated such samples as being regarded as low quality in the Japanese market. However, the Chinese experts noted only that the designer ability of these samples was comparatively low.

In addition, among the comments provided regarding samples J3, J6, and J7, the Chinese experts noted that such items could not be sold in China. The reasons they gave were that Chinese consumers had different preferences with respect to color and design. The color, sewing, and silhouette of sample J3, for example, was evaluated as being too ordinary—that is, not having any special characteristics—as well as being an outdated design. Samples J6 and J7 were also evaluated as unsalable in China because of their color and silhouette, which, the experts noted, looked like clothing of 10 years ago. The design was also evaluated as being an older fashion without any notable design emphasis points. Taken together, these results suggest that it is important to have designs that incorporate the preferences of Chinese consumers to be salable in China.
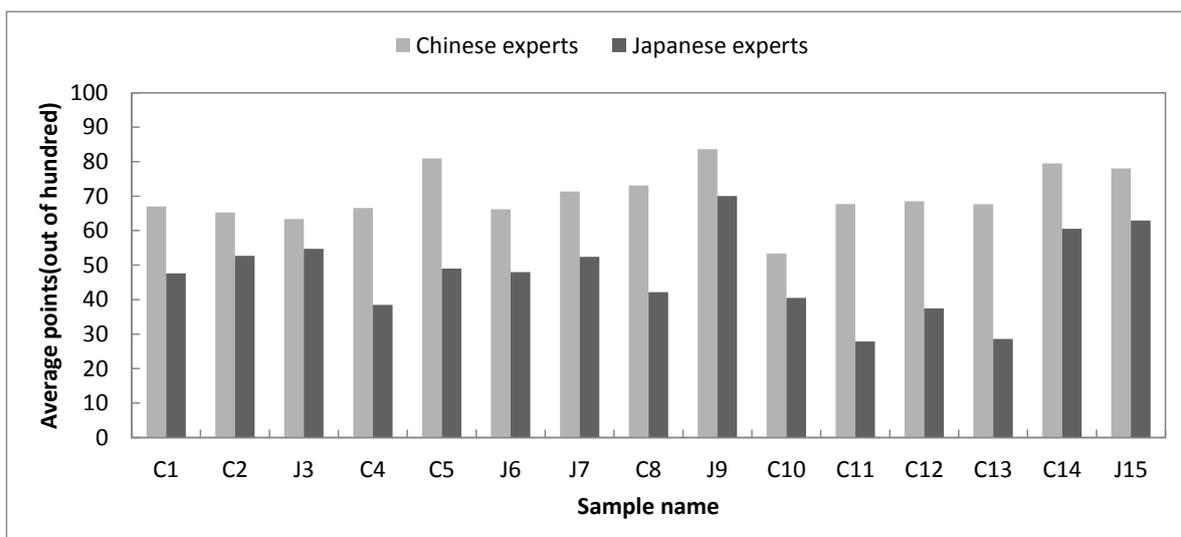

Figure 1: Average evaluation scores of samples (out of 100)

Table 3: Sample rankings according to the obtained scores

Sample	RANK	
	Chinese	Japanese
C1	10	9
C2	13	5
J3	14	4
C4	11	12
C5	2	7
J6	12	8
J7	6	6
C8	5	10
J9	1	1
C10	15	11
C11	8	15
C12	7	13
C13	9	14
C14	3	3
J15	4	2

3.3. Results of principal component analysis

We performed a principal component analysis (PCA) to summarize the evaluation structure of each evaluator group. The principal component loading results are shown in Table 4. The PCA results showed that the principal component loadings of the first principal component by the Japanese experts were as follows: silhouette 0.94, materials 0.89, designer ability 0.87, pattern maker ability 0.85, colors 0.82 and sewing finish 0.80. The contribution ratio of the first principal component was 63.8%. In the second principal component of the Japanese experts, the principal component loadings of design emphasis points showed a large value, -0.96. The contribution ratio of this second principal component was 15.4%. Therefore, the correlation of each evaluation item was high by Japanese experts, indicating that they evaluated the samples while taking into consideration each sample's general design qualities in a comprehensive manner.

The principal component loading results of the first principal component by the Chinese experts were as follows: silhouette 0.94, designer ability 0.89, and pattern maker ability 0.86. The contribution ratio of the first principal component was 57.3%. These results indicate that the Chinese experts took the factors of silhouette, designer ability, and pattern maker ability into consideration more compared with the Japanese experts. As for the results of the principal component loading of the second principal component by the Chinese experts, the characteristics of materials, sewing finish, and design emphasis points showed higher values than the others. The contribution ratio of this second principal component was 22.9%.

Figures 2 and 3 show a comparison of the principal component loading results of the first and second principal components by the Japanese and Chinese experts, respectively. Comparing both sets of results, we can conclude that the Chinese experts took design emphasis points into consideration more than the Japanese experts did, as shown in Figure 2. The Japanese experts, on the other hand, took the factors of materials and sewing finish into consideration more than the Chinese experts did, as shown in Figure 3. The relationship between the first and the second principal component results between Japanese and Chinese experts is shown in Figure 4. The

Japanese experts evaluated design emphasis points independently from the other evaluation items, while the Chinese experts evaluated materials and sewing finish independently from the other evaluation items. These results also show that the evaluation points are different depending on the country.

Table 4: Principal component loading of the first and second principal components

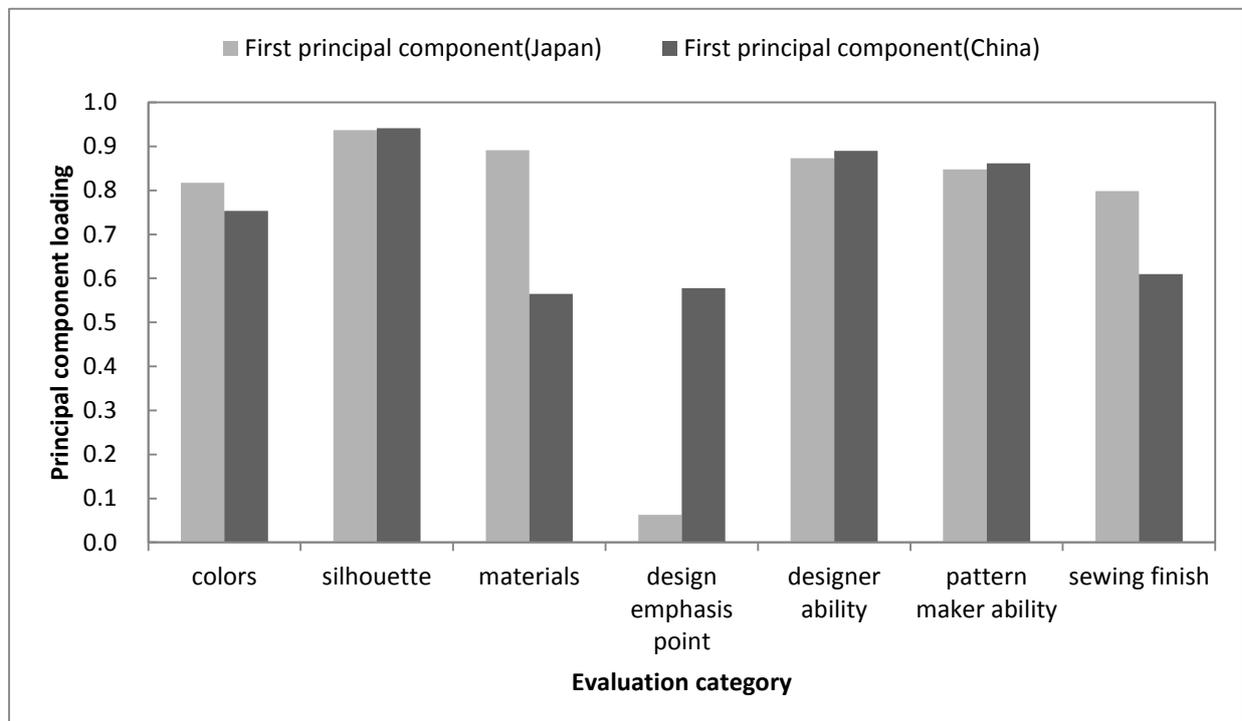| Experts / Variable	Japanese experts		Chinese experts	
	First principal component	**Second principal component**	**First principal component**	**Second principal component**
silhouette	0.94	0.03	0.94	-0.11
materials	0.89	-0.21	0.56	-0.65
designer ability	0.87	0.02	0.89	0.30
pattern maker ability	0.85	0.25	0.86	0.06
colors	0.82	-0.16	0.75	0.26
sewing finish	0.80	0.14	0.61	-0.72
design emphasis point	0.06	-0.96	0.58	0.69

Figure 2: Comparison of principal component loading results of the first principal components by the Japanese and Chinese experts
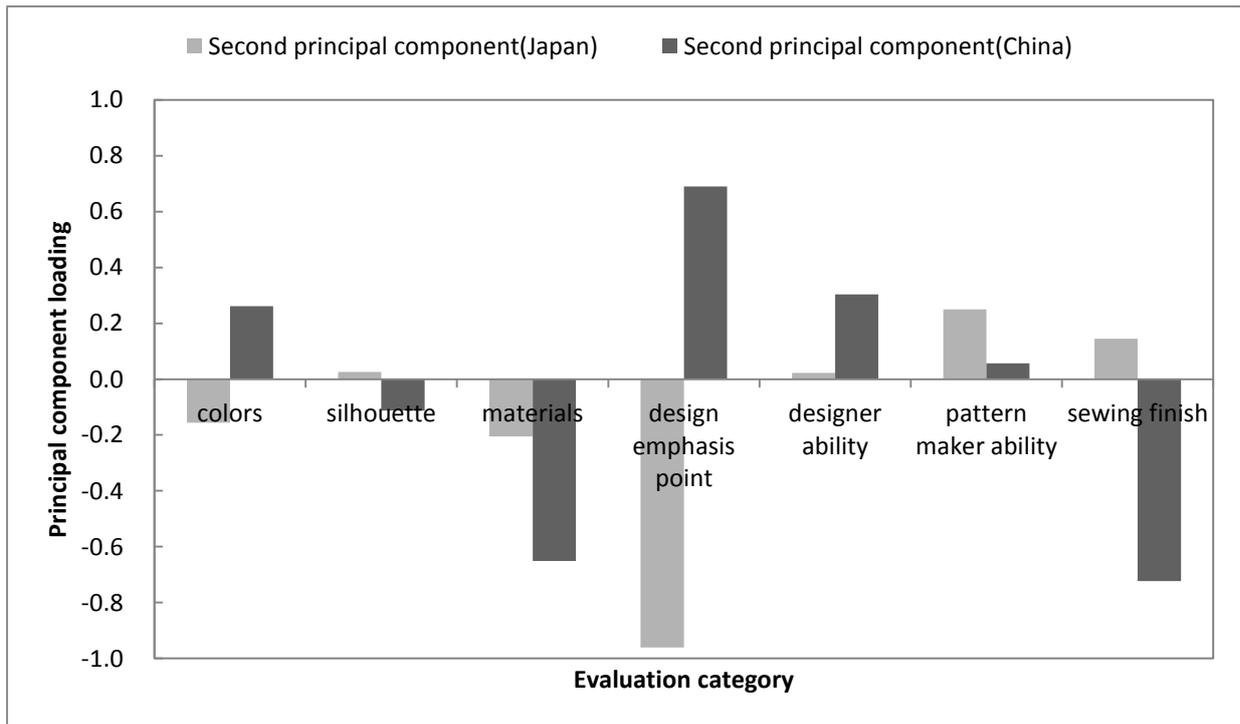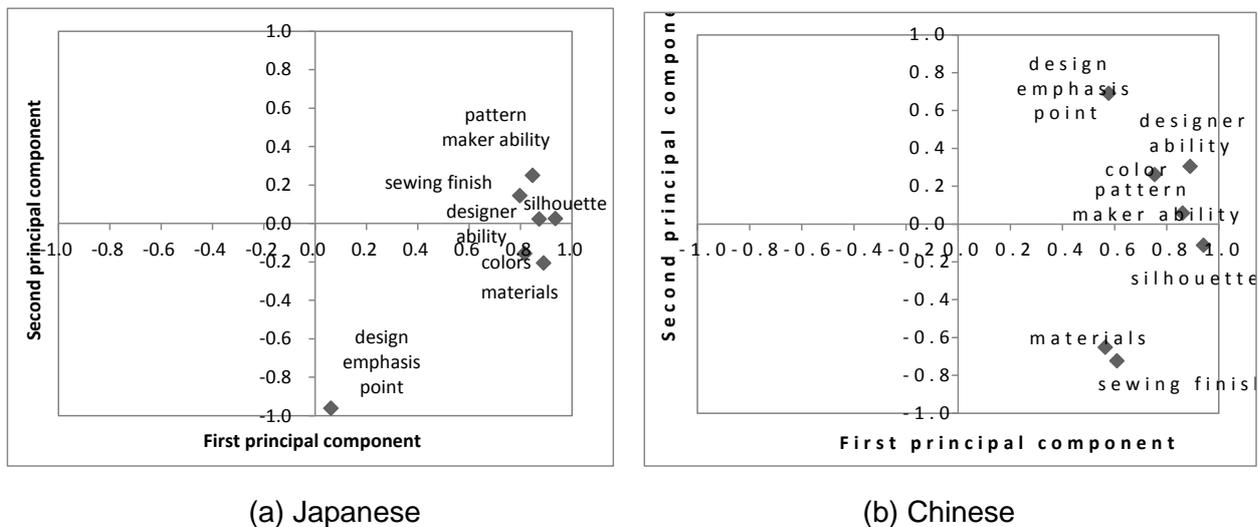
Figure 3: Comparison of principal component loading results of the second principal components by the Japanese and Chinese experts

(a) Japanese

(b) Chinese

Figure 4: Relationship between the first and second principal component results for Japanese and Chinese experts

In conclusion, we found that the Japanese experts focused on overall design and sewing finish, while the Chinese experts tended to focus more on design emphasis points. The materials and sewing finish of the samples were evaluated by the Chinese experts independently from the overall design points. Thus, we can conclude that clothing is evaluated differently in Japan and China. We further conclude that it is necessary to consider the primary evaluation points considered to be most important in each country as we pursue globalization.

4. CONCLUSION

To investigate and compare the evaluation points considered to be more important by both Japanese and Chinese apparel makers when entering the Japanese and Chinese markets, apparel experts in Japan and China evaluated jackets and dresses that were purchased in China and a Japanese department store. Results showed that Japanese experts considered general design and sewing finish in a comprehensive manner when evaluating clothing. The Chinese experts, on the other hand, put more emphases on design points, while tending to evaluate materials and sewing finish independently. Taken as a whole, our results reveal that clothing evaluating viewpoints vary between Japan and China, despite there being some common points of evaluation. These results also will be related with the differences of customers' preference of each country. Further, our results clarified that it is necessary to take into account the evaluation points considered to be more important in each country when making efforts to increase the globalization of apparel products. This result will help designer and manufacturers to make clothing which satisfy customers in each country.

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BIOGRAPHY

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