

EVALUATION OF LEVELS OF KAWAII RIBBONS BETWEEN JAPANESE AND SAUDI ARABIANS

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ABSTRACT Kawaii is a Japanese word that represents one critical kansei value in Japan. Kawaii is generally translated into English as cute, lovely, or adorable. However, it has a deeper meaning since it also represents an element of Japanese culture and not just a word with a single meaning. With the wide dissemination of Japanese animation, dramas, and manga, kawaii expression have become familiar to many people around the world, including the young generations of Saudi Arabians. Even though the word kawaii is used by non-Japanese, the same image for it doesn't have to be embraced worldwide. Cultural differences and other factors impact how people adapt kawaii expression. This research observes levels of kawaii rather than evaluating the attributes themselves and also examines the differences and similarities of kawaii levels between Japanese and Saudi Arabians. We developed a web questionnaire system to perform our experiment and distributed a link to our website in both Japan and Saudi Arabia. Different colored ribbons in different patterns were compared. Participants had to choose the most kawaii combination and justify their selections. Using the analysis results of the collected data, we compared the selection tendencies of levels of kawaii ribbons between Japanese females and Saudi females living in Japan. Their selection tendencies were almost the same.

1. INTRODUCTION

In recent years, kansei engineering became crucial in industrial fields. The Japanese Ministry of Economy, Trade and Industry (METI) believes that a special type of positive economic value is created when industrial production is derived from kansei (METI, 2007). This declaration motivated researchers to study different kansei values, including kawaii values.

The term kawaii has been used in Europe and the rest of the world since the 1990s when such items of Japanese popular culture as manga, extravagant street fashions, and video games began to be exported (Koma, 2013). Kawaii can be considered a 21st century transnational piece of culture that has been disseminated outside of Japan's borders (Koma, 2013). It is a word with a positive meaning that can be translated as cute, lovely, or adorable (Sakurai, 2009). However, it represents an important element of Japanese culture rather than just a word with a single meaning.

Kawaii culture has been introduced into many countries, including Saudi Arabia. To some extent, it has already become a familiar expression among Saudi youth. Even though the word kawaii is used globally, the same images for it don't have to be adapted worldwide. Cultural differences, geographical differences, and other factors impact how people worldwide adapt kawaii expression. Kyoko Koma argued that research is required to determine how kawaii culture is seen and interpreted as a reflection of globalized culture/orientalism in individual foreign countries (Koma, 2013).

Many researches have studied kawaii from different points of view. Some research evaluated kawaii design in Japan and different cultures in term of cars and fashion attire (RAHMAN, et al.). Other research evaluated kawaii ribbons among genders and different ages in Japan (Michiko, et al., 2012).

This study observes the levels of kawaii rather than evaluating its attributes to determine the differences and similarities of the selection tendencies of Japanese females and Saudi females in Japan. The evaluation's object was ribbons with different colors and patterns. Our

evaluation method was a web-based questionnaire system that was developed and distributed in both countries.

2. METHODOLOGY

2.1 Kawaii Ribbon Candidates

In our study we have one ribbon shape, three patterns, and seven colors for a total of 21 ribbon candidates (Fig.1). The following are the meanings of the color codes (Fig.1): YR: yellow-orange, R: red, RP: reddish-purple, P: purple, BG: blue-green, G: green, N: achromatic color. The shape and patterns were selected from a reference (MdN, 2010). Six colors were selected from the results of previous research and an achromatic color was added.






















	(1)	(2)	(3)
YR			
R			
RP			
P			
BG			
G			
N			

Fig. 1 Kawaii ribbon candidates

2.2 Ribbon Compression Method

Our experiment only compared ribbons with identical patterns and different colors (Fig.2) and ribbons with identical colors and different patterns (Fig.3). The total number of compared ribbons was 84 and each ribbon appeared eight times.

2.3 Overview of Web Questionnaire System

For our experiment, we developed a web questionnaire system (using PHP and MySQL) that is accessible worldwide through such web browsers as Internet Explorer and Google Chrome.

The first page of the web questionnaire was an instruction page which explains the experiment, including the necessity of using keyboard arrows to make the selections during the comparisons. Then, the selection page of participant's attributes such as gender, age group, and country. After that, the ribbon comparison will start. Each ribbon pair will only appear for five seconds and then it will disappear, thus participants need to make their selection quickly. When the comparison is done, participants need to answer a 5-scale questionnaire about

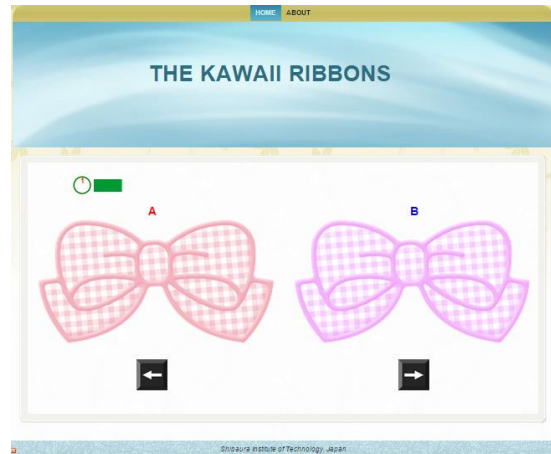


Fig. 2 Pairs with identical patterns and different colors

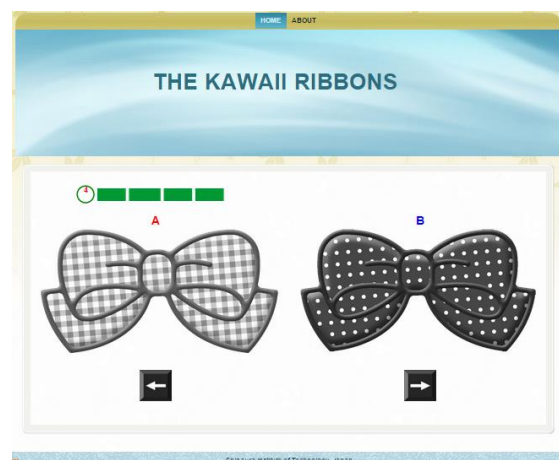


Fig. 3 Pairs with identical colors and different patterns

the selection reason (5: strongly agree, 4: agree, 3: natural, 2: disagree, 1: strongly disagree).

Q1: Kawaii designs

Q2: Kawaii colors

Q3: Kawaii whitish ribbons

Q4: Total impression

Q5: First impression

The data were collected by distributing links to the system in Saudi Arabia and Japan. The collected data were saved in a database, and the necessary results were extracted by My SQL.

3. RESULT

3.1 Participants

Japanese and Saudi Arabian men and women from different age groups participated in our web questionnaire system. We had two categories for the Saudi Arabian participants, Saudi Arabians living in Japan and Saudi Arabians do not live in Japan. The reason is that we want to examine the impact a new culture might have on the selection of Saudi Arabians living in Japan. However, in this paper we are exclusively focusing on the selection

tendencies of Japanese females and Saudi females living in Japan. We got 20 female participants: ten Japanese females in their 20's and ten Saudi females in Japan in their 20's and 30's.

3.2 Questionnaire Data for Each Participant Group

Each participant was shown a total of 84 pairs (one pair at a time) and told to select the most kawaii one within five seconds. Figures 4 and 5 illustrate the selection tendencies of the Japanese and Saudi females. The total number of cumulative comparisons of each ribbon was 80. The vertical axis shows the ribbon types, and the horizontal axis shows the number of selections.

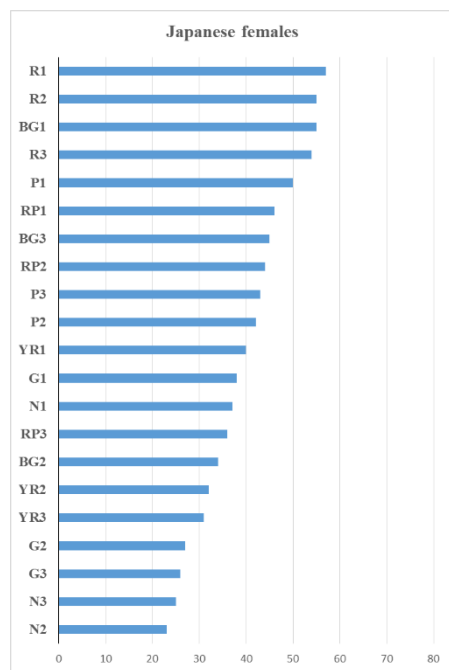


Fig. 4 Cumulative data of numbers selected for each ribbon (Japanese)

These results show that the selection tendencies of both groups are almost the same. All of the women from both countries agreed that pattern 1 is the most kawaii and pattern 3 is the least kawaii. Both groups also agreed that red (R) is the most kawaii color. On the other hand, Saudi females chose yellow-orange (YR) as the least kawaii color, but Japanese females chose the achromatic color (N) as the least kawaii.

3.3 Results of 3-factor Analysis of Variance

In this analysis, color, pattern, and country served as factors for a 3-factor analysis of variances. In addition to an overall analysis of the groups of both countries, we performed a special analysis for the top- and bottom-three selected ribbons. The result of the top-three analysis showed that patterns and colors had a main effect at a 5% significance, but country had no significant effect. On the other hand, there was no significant effect in the two-way interaction between pattern and country, pattern and color, and country and color.

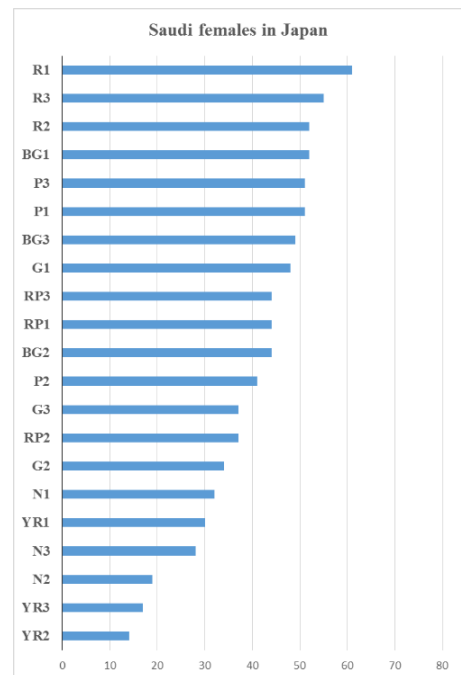


Fig. 5 Cumulative data of numbers selected for each ribbon (Saudi)

The result of the bottom-three analysis showed that patterns and country had a main effect at a 5% significance, but color had no significant effect. On the other hand, there was no significant effect in the two-way interaction between pattern and country, pattern and color, and country and color.

The result of the overall data analysis showed that patterns and colors have a main effect at a 5% significance. The result also identified a main effect at a 5% significance in the two-way interaction between country and color. On the other hand, there was no significant effect in the two-way interaction between pattern and country and pattern and color. The result also showed no significant effect in the three-way interaction among pattern, country, and color.

For the low-level test, we got the following result for the tendencies of the averaged scores of the kawaii degree: Color: R>BG>P>RP>G>N&YR
Pattern: Pattern 1>Pattern 3>Pattern 2.

3.4 Analysis of Selection Reasons

Figures 6 and 7 show a histogram of the 5-scale questionnaires for the Japanese and Saudi females. More than half of them agreed that the design was kawaii. Half of the Saudi participants and more than half of the Japanese participants strongly agreed that the color was kawaii. Half of the Saudi participants thought that a whitish color is natural, while more than half of the Japanese participants agreed that a whitish color was more kawaii. Both country's participants put more emphasis on their first impression of their kawaii observations rather than the total impression.

4. DISCUSSION AND CONCLUSION

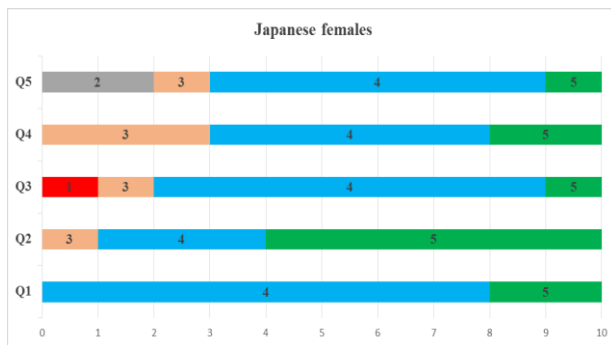


Fig. 6 Histogram of 5-scale questionnaire (Japanese)

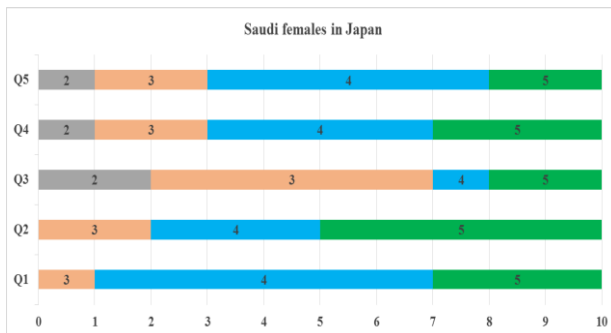


Fig. 7 Histogram of 5-scale questionnaire (Saudi)

In this paper, we represented our attempt to discover the similarities and differences in the selection tendencies of kawaii levels for Japanese females and Saudi females living in Japan. Our overall results showed that the tendencies of both country's participants are almost the same. Both Japanese and Saudi participants chose R1 as the most kawaii ribbon. Both groups chose R, BG, and P as the top-three colors. They both agreed that pattern 1 is the most kawaii and pattern 2 is the least kawaii. However, there is a clear distinction in the selection of the least kawaii ribbon. The Japanese participants chose N2 as least kawaii, but the Saudi participants chose YR2.

Analysis of the top- and bottom-three selected ribbons provided a deeper explanation of the overall data. In the top-three selected ribbon analysis, the patterns and colors significantly affected the kawaii selection. But country had no significant effect on the kawaii selection since the selection tendencies of both country's participants were almost the same for the top-three selected colors. In the bottom-three selected ribbon analysis, the patterns and country significantly affected kawaii selection, but color had no significant effect. We offer two possible explanations for this outcome: 1) since the colors are not kawaii for the bottom three, the participants focused on selecting patterns that would make the color acceptable; and 2) the importance of whitish colors was reflected by the Japanese participants who preferred YR over N, but for the Saudi participants whitish colors did not matter.

The overall data analysis for the 3-factor analysis of variances showed a significant effect in the two-way interaction between country and color because of the distinction in the selection tendencies of the top and least kawaii colors. Since we found no significant effect in the

two-way interaction between pattern and country, this finding can be explained by the similar tendencies of observing the level of kawaii patterns by the Japanese and Saudi participants.

We identified the patterns and colors with significant effects on kawaii observations for both the Saudi and Japanese participants and clarified the similarities and the differences of the selection tendencies of the levels of kawaii ribbons and the reasons for the selections between Japanese and Saudi females who live in Japan. However, more research is required to understand the impact of cultural and environmental differences on the kawaii observations of Saudi Arabians.

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