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## The Effects of Korean Wave and Heuristic on Shopping Behavioral Intention of Chinese Consumers\*

Soon-Hong Kim\*\*, Byong-Kook Yoo\*\*\*

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### Abstract

**Purpose** - This study aims to analyze the effects of preference for Korean Wave and heuristic on shopping satisfaction and switching barriers of Chinese people visiting Korea, and also their positive effects on consumers' behavioral intention with these variables as mediating variables by using the structural equation model.

**Research design, data, and Methodology** - For this study, we collected 264 questionnaires of Chinese consumers' who have experienced tourism and shopping in Korea after excluding questionnaires that were not proper to be analyzed. The residence of Chinese visitor was Shandong Province, Beijing, Shanghai, Shenyang. The data of this study was analyzed using SPSS 23 statistics to verify the reliability and discriminant validity. Structural equation method was used to test the hypotheses in this study.

**Results** - The effects of heuristic variable on shopping satisfaction and the switching barriers variable were statistically significant. The effects variables of Korean Wave effect variable were statistically significant only on the switching barriers variable. However, the Korean Wave effect variable did not have a statistically significant effect on the shopping satisfaction.

**Conclusions** - The shopping satisfaction and Korean Wave effect variables had statistically significant effects on the behavioral intention variable. In the result of indirect analysis, only the heuristic effect had indirect effects on consumers' behavior intention.

**Keywords:** Heuristic, Korean Wave, Consumers' Behavioral Economics, Shopping Store, Shopping Satisfaction, Shopping Behavioral Intention.

**JEL Classifications:** D12, L31, M16, M30, Z33.

### 1. Introduction

The number of Chinese tourists increased by 36.5% in 2016, exceeding approximately 7.5 million (Korea Tourism Organization, 2016). Although there had been political influences such as THAAD, the number of Chinese tourists had been steadily increasing until 2016 when the Chinese government started to artificially control them. Chinese tourists' group tour (Youke) focused on shopping at a low price. Recently, however, the number of young individual

tourists (Sanke) is increasing. The ratio of people in their twenties among Chinese tourists visiting Korea was over 40% in 2016.

The preferences and good memories about Korean Wave are thought to positively affect the purchasing experiences, so satisfaction and customer loyalty of Chinese tourists for Korean shopping stores are thought to be high. These positive effects of Korean-Wave can be explained by the theory of behavioral economics. Behavioral economics is a methodology in which consumers' purchasing behaviors are done not by rationality but by human experience and psychological intuition. Simon (1956), an advocate of behavioral economics, explained that human beings can not be totally rational by the concept of 'bounded rationality'. He also emphasized the importance of emotions that mainstream economics ignores in decision making (Kim, 2013). Developing this concept of 'bounded rationality',

\* This paper was supported by the Incheon National University research grant in 2014.

\*\* First Author, Incheon National University, Korea.  
Tel: +82-32-835-8523, E-mail: snow8817@inu.ac.kr

\*\*\* Corresponding Author, Incheon National University, Korea.  
Tel: +82-32-835-8529, E-mail: bkyoo@inu.ac.kr

Tversky and Kahneman (1974) suggested a theory of heuristic that stored memories or experiences affect people's decision-making (Tomono, 2008). When the consumers choose products during sightseeing, availability heuristic and recognition heuristic can be applied.

Reviewing the existing researches on the satisfaction and behavioral intention of Chinese tourists visiting Korea, there have been many researches verifying the positive effects of preference for Korean Wave on tourism satisfaction such as tourism convenience and shopping satisfaction (Park & Choi, 2013; Kim & Kang, 2007). However, it is rare to find researches on the effects of psychological behavior characteristics such as memory or remembrance made by Korean Wave on tourism or shopping satisfaction. If the existing Korean Wave researches merely reflect the likability and interest in Korean culture, this study is to analyze the factors influencing consumers' behavior intention by further considering the heuristic effect reflecting the psychological behavior characteristics. Meanwhile, as heuristic is a theory showing that positive memories or feelings have effects on consumers' decision-making, heuristic effect can work as switching barriers since one's memories and feelings accumulate and persist on. Thus, the purpose of this study is to analyze the effects of preference for Korean Wave and heuristic on shopping satisfaction and switching barriers of Chinese people visiting Korea, and using these variables as mediating variables, to find out whether there are positive effects on consumers' behavioral intention.

## 2. Literature Review

### 2.1. Korean Wave

As Korean pop culture like Korean TV-shows or K-pop was widely known, in order to express this phenomenon, in the end of 1990s, Chinese media started using the term 'Korean Wave'. Kim and Kang (2007) defined Korean Wave as a cultural tendency to long for and to learn K-stars and K-cultural products including Korean TV-shows, stars, and music. They found the cause for the formation of Korean Wave from the absence of alternative culture within the Korean Wave region and the closeness originated from similar appearance/sentiment. Kim and Kang (2007) set up the operational definition of Korean Wave as the number of viewing TV-shows, the number of viewing Korean films, and hours of listening to K-pop music while these only had partial effects on the image of Korean tourist sites in the regression analysis.

Park and Choi (2013) defined Korean Wave as a cultural tendency to long for and to follow Korean fashion and visual images from Korean Wave products such as Korean TV-shows, film, and pop music. On top of items of preference such as 'I like Korean TV-shows/film/pop music' as an operational definition, 'I have a positive attitude toward

Korean TV-shows/film/pop music/fashion' was selected as a measuring item. Setting up Korean visual image and Korean fashion as factors of Korean Wave, the empirical analysis about the positive effects of Korean Wave on the image of tourist site and tourist satisfaction was performed. Lee et al. (2010) analyzed the effects of Korean Wave products on the perception of national brand image, and the effects of national brand image on the perception of companies and products, by dividing Korean Wave factors into Korean fashion, Korean food, and Korean visual image.

Regarding precedent researches, definitions of Korean Wave were mainly about simple preference or positive attitudes. So for analyzing the causal relationship between Korean Wave and satisfaction for tourism and shopping, only preference factors were considered. Such simple interest and preference for Korean Wave are not good enough to analyze the causal relationship. Other than just simple preference for Korean Wave, heuristic factors like memories or remembrance for Korean wave should be additionally considered as independent variables for the causal relationship. Chinese people visiting Korea are more likely to recall their memories stored in their minds and purchase goods when shopping.

### 2.2. Heuristic theory

Simon (1956) argued that humans are not always rational but with bounded rationality which can be explained by dependence on heuristic. The consumer behavioral process where accumulated images, memories, and experiences affect the decision-making is called 'heuristic effect' which is a main concept of behavioral economics. There are many kinds of heuristic theory (Tomono, 2008). One of the important theories of heuristic is availability heuristic. Availability heuristic is a type of decision making process where people recall certain cases that can be easily evoked from stored memories, and on the basis of these cases, set the criteria for judging certain behaviors (Tversky & Kahneman, 1974). Availability heuristic can also be applied to the purchase of products or brand selection. People think that the more remarkable and vivid the memory of an event is, the more likely it is to occur because it is easy to pull out from memory. The recognition heuristic is the theory that the events which people have known about or heard about affect the decision of human behavior. People are also affected by reputation and memory when evaluating companies, products and brands, or evaluating universities. In addition, Tversky and Kahneman (1974) proposed anchoring heuristic. This theory of heuristic suggests that the information initially entered acts as a mental anchor that will continue to influence the subsequent judgment. For example in relation to this theory, there are experimental results indicating that people with higher end positions in their social security numbers are more likely to choose higher commodity prices than those with lower ones (Ahn & Kwak,

2011). Considering the above availability heuristic and recognition heuristic, this paper define the heuristic effect of Korean Wave as a phenomenon that Chinese tourists want to buy Korean products or to visit a place where they have seen or heard in Korean Wave media.

Although experimental methods are mainstream for research about heuristic, still there are many researches using methods based on the questionnaires. Researches with the questionnaires related to heuristic are mainly applied to the study of the structural equation model such as how the heuristic factors affect the dependent variables through the mediating variables like attitude and satisfaction. As a research using questionnaires related to heuristic, Chaiken and Maheswaran (1994) conducted a survey to investigate the influence of heuristic on consumer attitudes. This paper aims to analyze the influence of heuristic on shopping satisfaction, switching barriers and behavior intention by questionnaire analysis method. This paper used questionnaire analysis method because it is difficult to conduct the experiment method by gathering Chinese tourists visiting Korea in one place.

### 2.3. Switching Barriers

Switching barriers are all the factors that make it difficult or costly to change the goods, services, or stores that consumers use. According to Ping (1993), switching barriers are sometimes mixed with switching costs and are often used as a broad concept covering switching costs. Bendapudi and Berry (1997) and Jones et al. (2000) classified the types of switching barriers into switching costs, attractiveness of alternatives, and customer relationships. Switching costs mean the psychological burden due to monetary and non-monetary costs that customers incur when switching to another store for a product or service. This burden of customers makes a barrier that prevents them from switching to other stores and leads to customer loyalty. Attractiveness of alternatives means that customers decide whether to continue the relationship in comparison with the attractiveness and merits of other stores to replace existing ones. Customer relationship theory suggests that, as long as the intimacy is maintained for the stores and employees in the existing stores, there will be switching barriers that will prevent customers from switching to other stores.

Ganesan (1994) suggested that consumers show customer loyalty to the existing stores because psychological costs and additional efforts to get used to the new store act as switching costs. The relationship between customer loyalty and customer satisfaction is a positive causal relationship in which high customer satisfaction leads to high customer loyalty. However, many studies have suggested that customer satisfaction had no positive effects on customer loyalty due to the switching barriers (Jones & Sassen, 1995; Kim & Kim, 2004).

### 2.4. Shopping Satisfaction and consumer Behavioral Intention

The satisfaction with purchase attributes means the difference between recognized importance of attributes considered while purchasing and recognized satisfaction after utilization of products (Cho & Lee, 2011). According to Zeithmal et al. (1996), the behavioral intention could be defined as individual consumer's will and belief to express a specific future behavior after forming an attitude toward a certain object. It is classified into positive behavioral intention and negative behavioral intention.

According to Lee et al. (2014), in case when consumers are satisfied with products or services after purchase or use, the positive behavioral intention such as intention to revisit, intention to continuously use, intention to recommend, and word of mouth is shown as customer loyalty behavior. In case of negative behavioral intention, behaviors like consumer dissatisfaction, negative word of mouth, and breakaway are shown (Hwang, 2016). Kim (2013) suggested that customer satisfaction affects consumers' intention to revisit in study on the effects of Super-Supermarket service quality. The results of a research by Cronin and Taylor (1992) also verified the effects of customer satisfaction on purchase intention. According to Fornell (1992), customer satisfaction would have positive effects on behavior after purchase (Kim & Kang, 2007).

## 3. Research Design, Data and Methodology

### 3.1. Research Design and Hypothesis

#### 3.1.1. The influence of Korean Wave and heuristic on shopping satisfaction

Qin and Lee (2014) suggested that the higher the evaluation of the Korean wave factors was, the higher the product purchase satisfaction was. According to Lee (2006), after Chinese consumers experienced Korean Wave, their evaluation of Korean product quality, design, durability, price, and service was increased, and their intention to purchase Korean products was also increased. Especially, the satisfaction with Korean TV-shows in China had significant effects on the intention to purchase Korean cell phones. On top of TV-shows, the preference for Korean films, fashion, and food had effects on the intention to purchase Korean products.

According to preceding researches, heuristic had effects on customer satisfaction and behavioral intention. In the study on consumer behavior in coffee shop, Kim and Kang (2016) revealed that behavioral intention was more influenced by the model of 'TRA(Theory of Reasoned Action) + Heuristic' than TRA(Theory of Reasoned Action) model. Park (2016) performed a research on the positive effects of

participants' attitude, subjective norms, perceived behavior control, and heuristic on behavioral intention with TRA (Theory of Reasoned Action) and heuristic as independent variables. And the effects of heuristic on behavioral intention were analyzed using perceived usefulness as a mediating variable (Park, 2016). Hwang (2016) suggested brand, social proof, and subjective norms as preceding factors having effects on heuristic focusing on purchase behavior of wine products. Depending on the type of heuristic such as availability heuristic, representativeness heuristic, and adjustment anchoring heuristic, wine consumers' behavioral intention was differently influenced. And Ahn and Kwak (2011) suggested that product information and brands stored in memory, in other words, available heuristic would have a positive effect on consumers purchasing products. Based on the researches above, It can be assumed that the effect of Korean Wave preference and the heuristic effect will have a positive effect on customer satisfaction.

**<Hypothesis 1-1>** Korean Wave effect will have a positive effect on shopping satisfaction.

**<Hypothesis 1-2>** Heuristic effect will have a positive effect on shopping satisfaction.

### 3.1.2. The influence of Korean Wave and heuristic on Switching Barriers

Lee and Lee (2005) set up the degree of service use and the degree of experience in alternatives as antecedent factors of switching barriers regarding credit card choice, and suggested that these factors would have effects on the switching barriers as mediating variable and also the intention of continuous usage as dependent variable (Burnham et al., 2003).

The degree of experience in a specific product & brand could be viewed as a similar concept with Korean Wave effect and heuristic of behavioral economics. In other words, when the preference for Korean Wave is strong, and when great feelings and positive memories about Korean Wave are continued, the switching barriers to change consumption for Korean products to the products of other countries/shops would be increased, so that positively affecting behavioral intention. The cases above could be applied to the case where Chinese tourists shop at Korean stores such as duty free shops. It can be assumed that Korean Wave effect and heuristic have a positive effect on the switching barriers.

**<Hypothesis 2-1>** Korean Wave Effect will have a positive effect on switching barriers.

**<Hypothesis 2-2>** Heuristic will have a positive effect on switching barriers.

### 3.1.3. The influence of shopping satisfaction on consumer behavioral intention

The researches on the effects of satisfaction with

products purchased during tour on consumer behavioral intention are as following. As a research on antecedent variables of behavioral intention related to tourism, Kim and Kang (2007) set up a model that the perception of Korean Wave would have effects on the images from Korean tour of Japanese tourists, and tourist satisfaction could be expressed as customer loyalty behavior such as intention to revisit, continuously use and recommend (Kim & Kang, 2007). It shows that the heuristic effect influences the satisfaction after purchase of products and also customer loyalty as positive behavioral intention.

In the research on the effects of store attributes on shopping satisfaction targeting Chinese people visiting Korea, Qin and Lee (2014) suggested 13 items including product quality, price, product explanation, salesclerk's service, and kindness as questions about the satisfaction with store attributes. They (2014) also suggested shopping satisfaction had a positive effect on revisit intention. Based on the researches above, it is possible to assume that shopping satisfaction with Korean products will have significant effects on the purchase behavioral intention.

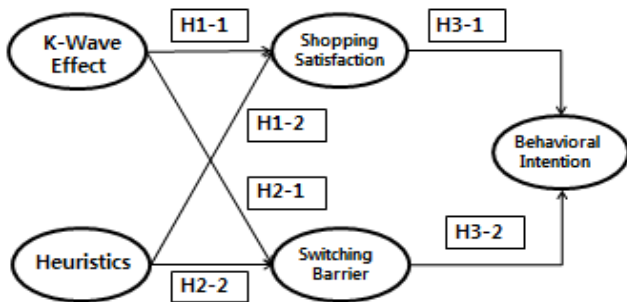
**<Hypothesis 3-1>** Shopping satisfaction will have a positive effect on behavioral intention.

### 3.1.4. The Effects of Switching Barriers on consumer behavioral intention

The results of the empirical studies on the causal relationship between switching barriers and behavioral intention are as follows. Some studies show that switching barriers have moderating effects on customer satisfaction and customer loyalty (Jones et al., 2000; Lee et al., 2001; Sharma, 2003), and there are a number of research findings that switching barriers directly affect customer satisfaction (Burnham et al., 2003; Lam et al., 2004; Caruana, 2003; Sharm, 2003). Fornell (1992) also added switching barriers, as well as customer satisfaction, as factors affecting customer loyalty. Sharman and Patterson (2000) also suggested switching barriers as a major variable affecting customer loyalty (Um, 2006; Kim, 2012).

Meanwhile, as a research on switching barriers and behavioral intention, Cho and Park (1999) suggested that the higher customer satisfaction was, the higher switching barriers were. And higher switching barriers had significant effects on positive behavioral intention. Based above, this study set up a hypothesis that switching barriers would have positive effects on behavioral intention of Chinese tourists shopping in Korea.

**<Hypothesis 3-2>** Switching Barriers will have a positive effect on behavioral intention.



<Figure 1> Model of Korean Wave and Heuristic Effects on the Intention of Behavior Intention

### 3.2. Sample Design and Data Collection

For this study, we collected 264 questionnaires of Chinese consumers who have experienced tourism and shopping in Korea after excluding questionnaires that were not proper to be analyzed. The residence of Chinese visitors was Shandong Province, Beijing, Shanghai, Shenyang etc. Questionnaires were conducted in May 2015 by Chinese student in Chinese on the Chinese web site. The questionnaire used a nominal scale and Rikert 5-point scale was applied. The data of this study was analyzed using SPSS 23 statistics to verify the reliability and discriminant validity. Structural equation method was used to test the hypotheses in this study.

### 3.3. Operational Definitions of Variables

#### 3.3.1. Operational Definitions of Korean Wave Effect

Korean Wave Effect was defined with three items based on the papers of Qin and Lee (2014), Kim and Kang (2007) and Park and Cho (2013): 'I want to shop Korean goods used by Korean Wave stars', 'I think Korean products are

good because Korean stars are attractive', 'I think Korean products are good because Korean TV shows are fun'.

#### 3.3.2. Operational Definitions of Heuristic

In this study, availability heuristic was defined with three items based on the papers by Tversky and Kahneman (1974) and Hwang (2016): 'I decide to visit Korea because I can meet the Korean Wave culture from Korean TV shows', 'I want to go to Korea because there are places I saw on the Korean TV shows', 'I want to shop in Korea because there are products I saw on the Korean TV show'.

#### 3.3.3. Operational Definitions of Shopping Satisfaction

Shopping Satisfaction was defined with three items based on the papers by Qin and Lee (2014) and Lee(2006): Shopping product quality, Customer relationship management, Comfortable shopping store facilities.

#### 3.3.4. Operational Definitions of Switching Barriers

Switching barriers were defined with three items based on the papers by Lee and Lee (2005) and Burnham et al. (2003): 'I am willing to continue shopping in Korea because I am accustomed to shopping in Korea', 'I am willing to continue shopping in Korea because the quality of the products is excellent', 'Shopping in Korea is more convenient than in other countries'.

#### 3.3.5. Operational Definitions of behavioral intention

Behavioral intention was defined with the following three items considering the study of Kim and Kang (2016), Park (2016) and Lee (2014): 'I am willing to revisit Korea for shopping', 'I am willing to revisit the shopping stores I used in Korea', 'I am willing to recommend Korean shopping stores to friends and family'.

<Table 1> Operational Definitions of Variables and References

| Variables             | Items      | Operational definition   | References   |
|-----------------------|------------|--|--|
| Korean Wave           | KW1        | I want to shop Korean products used by Korean Wave stars.                                    | Qin & Lee, 2014<br>Kim & Kang, 2007<br>Park & Choi, 2013 |
|                       | KW2        | I think Korean products are good because Korean stars are attractive.                        |  |
|                       | KW3        | I think Korean products are good because Korean TV shows are fun.                            |  |
| Heuristic Effect      | HEU1       | I decide to visit Korea because I can meet the Korean Wave culture from Korean TV shows.     | Tversky & Kahneman, 1993.<br>Hwang, 2016                 |
|                       | HEU2       | I want to go to Korea because there are places I saw on Korean TV shows.                     |  |
|                       | HEU3       | I want to shop in Korea because there are products I saw on Korean TV shows.                 |  |
| Shopping satisfaction | Satis1     | Shopping product quality   | Qin & Lee, 2014<br>Lee, 2006                             |
|                       | Satis2     | Customer relationship management   |  |
|                       | Satis3     | Comfortable shopping store facilities  |  |
| Switching Barriers    | Barrier1   | I am willing to continue shopping in Korea because I am accustomed to shopping in Korea      | Lee & Lee, 2005<br>Burnham et al., 2003                  |
|                       | Barrier2   | I am willing to continue shopping in Korea because the quality of the products is excellent. |  |
|                       | Barrier3   | Shopping in Korea is more convenient than in other countries.                                |  |
| Behavioral intention  | Intention1 | I am willing to revisit Korea for shopping.  | Kim & Kang, 2016<br>Park, 2016<br>Lee, 2014              |
|                       | Intention2 | I am willing to revisit the shopping stores I used in Korea.                                 |  |
|                       | Intention3 | I am willing to recommend Korean shopping stores to friends and family.                      |  |

## 4. Results

### 4.1. Characteristics of Samples

In this study, We surveyed 264 questionnaires of Chinese consumers who have experienced tourism and shopping in Korea. According to the results of analysis, 33.3% of males and 66.7% of females were in the age group. The age group was mainly composed of young people and ordinary people 49.6% in their 20s, 34.8% in their 30s, 11% in their 40s, and 4.6% in their 50s. 56.4% were single persons and 43.6% were married persons, while the income levels were 29.9% for 7,000 yuan or more per month, 28.8% for 5,000 to 7,000 yuan, 28.4% for 3,000 to 5,000 yuan, and 12% for less than 3,000 yuan. The residence of Chinese residents was in the order of Shandong Province (15.2%), Beijing (11%), Shanghai (4.9%), Shenyang (3.8%), etc. The occupations of visitors were 32.6% for private companies, 31.8% for office workers, 14.4% for teachers, 10.2% for public officials, and 5.3% for housewives. The education level of visitors was 62.5% for college graduates, 21.6% for graduate students, 9.8% for high school graduates, and 4.9% for doctoral graduates. Most of them were highly educated. As a route to obtain tourist information about Korea, 47% were friends/relatives, 28% were Internet users, 13.3% were travel agencies, and 11.7% were advertising/TV/magazines. Thus, the recommendation effect of acquaintances and the Internet seems to be considerable. The number of visitors who visited Korea more than 5 times was 23.5%, and this result shows that the rate of those returning to Korea is considerable. 17.4% came for a second visit and 10.2% for a third visit. The ratio of visitors returning more than once is 54.9%.

<Table 2> Demographic Characteristics

| Variables | Items                 | Frequency | Percentage |
|-----------|-----------------------|-----------|------------|
| Sex       | Man                   | 88        | 33.3       |
|           | Woman                 | 176       | 66.7       |
| Age       | Twenties              | 131       | 49.6       |
|           | Thirties              | 92        | 34.8       |
|           | Forties               | 29        | 11         |
|           | More than 50          | 12        | 4.6        |
| Income    | Less than CN ¥ 3 ,000 | 34        | 12.9       |
|           | CN ¥ 3,000-5,000      | 75        | 28.4       |
|           | CN ¥ 5,000-7,000      | 76        | 28.8       |
|           | More than CN ¥ 7,000  | 79        | 29.9       |
| Job       | Student               | 103       | 51.5       |
|           | Office worker         | 50        | 25.0       |
|           | Specialized job       | 17        | 8.5        |
|           | Housewife             | 7         | 3.5        |
|           | Self-employed<br>Etc. | 18<br>5   | 9.0<br>2.5 |

The number of days during the visit was 35.2% for 3-4 days, 26.9% for 5-6 days, and 34.5% for over 7 days. The kind of accommodation that visitors use was 54.5% for

hotels, 26.9% for home stay/friends, 14% for pensions, and 4.5% for luxury hotels. The amount of consumption for tourism in Korea was 41.7% for 10,000-15,000 yuan, 40.2% for over 15,000 yuan, and 12.1% for 5,000-10,000 yuan. As travel companions, 47.0% were colleagues/friends, 23.9% were family members, 18.9% of them were alone, and 10.2% of groups were surveyed. Cosmetics were the most prevalent item for shopping in Korea with 52.7%, clothing/fashion 19.3%, household appliances 11.7%, and traditional souvenirs 4.9%. It was confirmed that many products related to Korean Wave such as cosmetics, clothing, and fashion were sold. It is a good thing that Chinese people have positive heuristic effect due to Korean Wave and K-Pop. However, it should be noted that the purpose of Chinese tourists' visit is not simply to buy traditional Korean goods or to sightsee in Korea.

### 4.2. The Results of Analysis

#### 4.2.1. Confirmatory Factor Analysis

In <Table 3>, in order to test the fit of the model, confirmatory factor analysis (CFA) was conducted. If values such as Goodness-of-Fit Index (GFI), Adjusted Goodness-of-Fit Index (AGFI), IFI, CFI, and NFI are 0.9 or more and RMR and RMSEA are 0.05 or less, CMIN / DF 1.871, there is a fit of the model (Kim, 2007). As a result of the CFA analysis on the total variables, In <Table 3>, the fitness index values were found to be less than 0.9 in some indexes, but they are satisfactory as a whole. The path coefficients of the latent variables used in the model are significant at p=0.01 level. And the standardized Regression Weights index values are 0.5 or more. As a whole they passed the goodness-of-fit criterion.

#### 4.2.2. Reliability and Validity Analysis

A validity analysis should be conducted to test how well the measured attributes are measured.

The validity test requires a convergent validity test in which the correlations between the items in the factor should be high and a discriminant test of validity that should not be correlated between factors. Average variance extracted is used as an index to measure convergent validity and all of the factor variables were above 0.5. In addition, Composite Reliability Index is 0.7 or more, indicating that it is internally consistent. The reliability and convergent validity of the items set out in this study can be considered to be satisfactory. Therefore, the reliability and convergent validity of the items set in this paper satisfy the reliability and convergent validity. As a method of discriminant validity testing, if the variance extracted exponent AVE value obtained from each factor is larger than the square of the correlation coefficient of each factor, the discriminant validity is satisfied among the factors.

**<Table 3>** Results of Confirmatory Factor Analysis

| Constructs            | Items      | Std. Estimate | S.E.  | C.R.   | Composite Reliability | AVE   |
|-----------------------|------------|---------------|-------|--------|-----------------------|-------|
| Korean Wave Effect    | KW1        | 0.761         | -     | -      | 0.870                 | 0.690 |
|                       | KW2        | 0.859         | 0.085 | 13.904 |                       |       |
|                       | KW3        | 0.844         | 0.089 | 13.697 |                       |       |
| Heuristic Effect      | HEU1       | 0.718         | -     | -      | 0.846                 | 0.650 |
|                       | HEU2       | 0.706         | 0.090 | 10.196 |                       |       |
|                       | HEU3       | 0.696         | 0.091 | 10.070 |                       |       |
| Shopping Satisfaction | Satis1     | 0.792         | -     | -      | 0.893                 | 0.735 |
|                       | Satis2     | 0.749         | 0.084 | 12.383 |                       |       |
|                       | Satis3     | 0.823         | 0.074 | 13.693 |                       |       |
| Switching Barriers    | Barrier1   | 0.781         | -     | -      | 0.860                 | 0.673 |
|                       | Barrier2   | 0.792         | 0.076 | 12.757 |                       |       |
|                       | Barrier3   | 0.653         | 0.081 | 10.375 |                       |       |
| Behavioral Intention  | Intention1 | 0.826         | -     | -      | .912                  | 0.775 |
|                       | Intention2 | 0.793         | 0.069 | 14.117 |                       |       |
|                       | Intention3 | 0.819         | 0.062 | 14.682 |                       |       |

Model fit= GFI 0.932, AGFI 0.898, NFI 0.934, IFI 0.968, CFI 0.968, RMR 0.023, RMSEA 0.058, CMIN/DF 1.871.

**<Table 4>** Correlation coefficient and Results of Discriminant validity Analysis

\* (A. V. coefficient)

| Factors               | Korean Wave effect | Heuristic Effect | Shopping satisfaction | Switching Barriers | Behavioral Intention |
|-----------------------|--------------------|------------------|-----------------------|--------------------|----------------------|
| Korean Wave Effect    | 0.689*             |                  |                       |                    |                      |
| Heuristic Effect      | 0.531              | 0.650*           |                       |                    |                      |
| Shopping Satisfaction | 0.386              | 0.648            | 0.735*                |                    |                      |
| Switching Barriers    | 0.573              | 0.581            | 0.584                 | 0.673*             |                      |
| Behavioral Intention  | 0.402              | 0.585            | 0.608                 | 0.632              | 0.775*               |

**<Table 5>** Hypotheses testing results

| Hypotheses | Path   | Unstd. Coefficients | Std. Coefficients | S. E. | C. R.  | P     | Result       |
|------------|--|---------------------|-------------------|-------|--------|-------|--------------|
| H1-1       | Korean Wave Effect → Shopping Satisfaction   | -0.019              | -0.022            | 0.094 | -0.201 | 0.841 | Not Accepted |
| H1-2       | Heuristic → Shopping Satisfaction            | 0.964               | 0.873             | 0.147 | 6.550  | ***   | Accepted     |
| H2-1       | Korean Wave Effect → Switching Barriers      | 0.268               | 0.312             | 0.084 | 3.220  | 0.001 | Accepted     |
| H2-2       | Heuristic → Switching Barriers               | 0.674               | 0.599             | 0.122 | 5.536  | ***   | Accepted     |
| H3-1       | Shopping Satisfaction → Behavioral Intention | 0.414               | 0.432             | 0.084 | 4.993  | ***   | Accepted     |
| H3-2       | Switching Barriers → Behavioral Intention    | 0.456               | 0.485             | 0.085 | 5.391  | ***   | Accepted     |

P\*\*\*<0.001

In <Table 4>, the squared and diagonal values (\*) of the correlation coefficients of each factor show the variance extraction index of the concept. The variance extraction index (A.V.) obtained among the factors is larger than the square of the correlation coefficient of each factor and the coefficient of determination, so it can be considered that the discriminant validity is meet between the factors.

4.2.3. Results of the Path Analysis of the Research Model

The final model analysis showed 0.825 GFI, 0.786 AGFI,

0.905 IFI, 0.904 CFI, 0.041 RMR, 0.078 RMSEA, and 2.592 CMIN/DF. In some indices, a value of 0.9 or less was found, but the CFI value and the IFI value were 0.9 or more, so that the fitness of the study model can be accepted as a satisfactory overall value.

The results of the hypotheses are summarized as follows: First, the effect of heuristic variables on the shopping satisfaction <H1-2> was statistically significant (C.R.=6.550). However, the effect of the Korean Wave Effect variable on the shopping satisfaction <H1-1> was not statistically

significant (C.R.=0.201, P=0.841). The effect of Korean Wave Effect variable on switching barriers and the effect of heuristic variable on switching barriers <H2-1>, (CR=3.220) and the effect of Korean Wave Effect variable on switching barriers <H2-2> were statistically significant (CR=5.536). The effect of shopping satisfaction variable on behavioral intention <H3-1> was statistically significant (C.R.=4.993) and the effect of switching barriers variable on behavioral intention <H3-2> was also statistically significant (C.R.=5.391).

The reason why Korean Wave effect variable has no statistical significance in shopping satisfaction variable is that it is not enough to explain the causal relationship with the satisfaction of shopping in Korea only by the product preference effect based on Korean Wave preference. This analysis confirms that factors such as accumulated memories and remembrance/recall due to Korean Wave influence shopping satisfaction of Chinese tourists and also have an indirect effect on consumer behavior such as repurchase or recommendation to others.

Korean Wave did not show a direct causal relationship with shopping satisfaction and behavioral intention, but the preference for Korean Wave acted as switching barriers, so that Chinese tourists felt more familiar and convenient with shopping in Korea than in other countries and were willing to revisit Korea for shopping. The indirect effect value of the heuristic variable factor for the behavioral intention variable is 0.668, which is statistically significant because the significance probability (0.012) is smaller than the p-value. However, the indirect effect of the Korean Wave effect variable on the behavioral intention variable, 0.142, is not statistically significant because the significance probability (0.273) is greater than the p-value.

In this result of indirect analysis, only the heuristic effect had indirect effects on consumer behavior intention. The significance probability for the indirect effect value (0.668) of the heuristic variable for the behavioral intention variable is statistically significant because it has a value of 0.012, which is smaller than the significance level  $\alpha$  value of 0.05. However, the indirect effect value (0.0142) of the Korean Wave effect variable for the behavioral intention variable is not statistically significant because it exceeds the significance level with p value of 0.142. In this result of indirect analysis, only the heuristic effect has indirect effects on consumer behavior intention.

## 5. Conclusion

### 5.1. Results of Analysis

This study analyzed the effects of Korean Wave on behavioral intention with shopping satisfaction on Korean products and switching barriers as mediating variables,

driven by heuristic effect. In the results of the analysis, Korean Wave and heuristic had positive effects on behavioral intention. The effects of Korean Wave effect variable were statistically significant only on the switching barriers variable. However, the Korean Wave effect variable did not have a statistically significant effect on the shopping satisfaction. The shopping satisfaction and Korean Wave effect variable had a statistically significant effect on the behavioral intention variable. In the result of indirect analysis, only the heuristic effect had indirect effects on consumer behavior intention.

### 5.2. Implications and limitations of research

The results of <H1-1> suggest that preference for Korean Wave does not lead to shopping satisfaction of Chinese consumers because it is hard to see that preference leads to direct buying.

The results of <H1-2> show that stored memories and remembrance from Korean Wave media contact affect shopping satisfaction. The results of <H2-1> suggest that the preference for Korean Wave has the effect of preventing Chinese consumers from leaving the Korean shopping stores.

The results of <H2-2> suggest that stored memories and remembrance of Korean Wave enhance the effect of switching barriers. As results of CFA analysis, the standardized coefficient of <H2-2> was greater than <H2-1>. The results of <H3-1> reflect the existing theory of consumer behavioral intention that consumers satisfied with shopping are willing to revisit or recommend to others. The results of <H3-2> also reflect the existing theory of consumer behavioral intention that consumers with switching barriers are willing to revisit or recommend to others. The results of indirect effect analysis suggest that only heuristic effect affects consumer behavioral intention among preference effect and heuristic effect.

The results of this analysis indicate that Korean Wave Effect variable has no statistical significance in shopping satisfaction variable. The reason why Korean Wave effect variable does not directly affect the shopping satisfaction in Korea is that not only the preference for Korean Wave itself affects shopping satisfaction or behavior intention, but Psychological action of consumers affects the behavior intention.

Korea and China are geographically close to each other and highly active in trade, so they are important countries for each other. To benefit better from this heuristic effect, government, related institutions, and the private sector should share endeavors to improve Image of Korean wave such as Korean TV-shows and K-pop. Also, it is necessary to establish the foundation where both countries could respect and enjoy cultures of each other in ways like planning Korea-China joint TV-shows, films, or performances. Such tour/cultural products should be promoted through



diverse channels such as on and offline. This study is aimed at Chinese people who have had a visit to Korea, but the number of samples is somewhat lacking in order to target various levels of people in various regions of China.

In addition to heuristic, various behavioral economic factors as like anchoring, prospect theory need to be added to the structural equation model.

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