



Research Article

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Customer preferences for kitchen cabinets in China using conjoint analysis

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ABSTRACT

Facing fierce competitiveness, it is one useful strategy to accurately know customer preferences. This paper, using a conjoint analysis approach, reports the results of an empirical study that aims to assess customers' preferences for kitchen cabinet products in China. The main objective of this study is to reveal which attributes of products are the truly important for customers with different family income and illustrate the comparison, and the final goal is to provide some effective information for kitchen cabinet industry. The findings from this study indicated that environmental quality and price were the top two attributes influencing consumers' behavior when purchasing kitchen cabinets for all groups, ranking in 1 and 2. Additionally, Group1 and group3 paid more attention to door panel surface treatment and countertop material than group2. Instead, group2 had more interesting in other two attributes: access & comfort and storage space. The style was nearly the least important attribute for groups.

Keywords: Kitchen cabinets; Cabinets products; Conjoint analysis; Consumer preferences

INTRODUCTION

The kitchen cabinet industry has a steadily rapid grow in the past several years in China. Driven by the robust development of housing market and home decorating industry, the kitchen cabinet has become an important part in the Chinese furniture industry. A study on customer needs showed that in the next five to ten years the market of kitchen cabinets was expected to be around US\$100 billion in China [1]. 2012 Chinese White Paper on the Consume of Kitchen Cabinet Industry revealed that the production gross of kitchen cabinets in 2011 had increased by 30% than that in 2010, reaching up to RMB one trillion [2]. The statistics from Shanghai Institute for Home Furnishing showed that in 2008 and 2009 only 6%-7% of family had kitchen cabinets in China while in developed country nearly one family had one set of kitchen cabinet [3]. Obviously, there is a big gap compared with developed countries. Instead, the gap also offers a great opportunity to kitchen cabinet enterprises. Although the market is enormous, the competitiveness is still fierce among producers. In china, the kitchen cabinet industry mainly consists of over 2000 small and medium-sized companies and the annual production has been more than 2 million sets [4]. To be successful, producers must offer customers better products, in comparison with other existing products [5]. Nowadays the manufacturing companies have been facing the particular challenge of quick response to customer needs [6]. Responding dynamically customer desire and customer preference is becoming more and more imperative than ever before for product development [7]. Therefore, it is necessary for us to investigate consumer preferences for kitchen cabinets, confirming what customers really want. Customer preferences has been widely studied in various fields including agriculture, tourist products, fishery, wine industry, and composting industry et al.[8-12]. Customer preferences are formed on the basis of customer perceptions of the value of a product and the result of an evaluation of benefits and sacrifices related to its acquisition and use [13]. The benefits and sacrifices can consist of social, functional, emotional, financial, or non-monetary attributes [14]. Such attributes that influence customers' purchasing decisions may include product functionality, design, quality, brand, after sales service, credit availability and numerous other factors[15].

Conjoint analysis is one of the most popular techniques to measure customer preferences among multi-attribute products or services [16-17]. Numerous studies [8, 18, 10, 15] have suggested that conjoint analysis was a useful and statistical technique to assess why customers prefer one product to another. An abundant explanation of the conjoint analysis technique can be found elsewhere [19]. The idea of this technique is that consumers determine the value of a product by combining the separate amount of value provided by each traits, or attribute, of the product [10]. A quantity for respondents' overall preference in conjoint analysis is called utility and it reflects a measure of subjective judgment. It is considered to be based on the value of each feature of the product, and is determined by the values of each feature. The result is that there is a high utility if customers would prefer to choose a value.

Table1. Attributes and levels used in the experiment

Attributes	Levels
Price ^a	1.RMB1000-2499/m 2.RMB2500-3999/m 3.More than RMB4000/m
Style	1.Classic European Style 2.Country Style 3.Modern Style
Hardware	1.Dious ^b 2.Archie ^c 3.Hettich ^d
Access & comfort	1.Normal 2.Good 3.Perfect
Storage space	1. Little 2.Average 3. Much
Door Panel Surface Treatment	1.Lacquer 2.Acrylic 3.Solid wood
Countertop material	1.Stainless Steel 2.Artificial Quartz 3.Marble
Environmental quality	1.Not Important 2.Important 3.Very important

^aThe price for one meter consists of ground cabinet price per meter and wall cupboard price per meter.

^b Dious comes from a small-Middle-sized enterprises in Zhongshan city, in China, representing Chinese small and medium-sized brand.

^c Archie is a famous hardware brand from Guangzhou, in China, representing Chinese best-known brand.

^d Hettich is a well-known hardware brand from Germany, representing worldwide famous brand.

There have been some studies of customer preferences towards wood products. Lihra et al. [15] studied customer preferences for customized household furniture through a choice-based conjoint, measuring the value that US American consumers assigned to availability of customization when they buying furniture. The result was that price was the vital factor for customers' choice, roughly 50%, followed by product customization, delivery time and the time needed to customize the product. Toivonen [20] conducted a cross-section study to uncover product quality and value perceived by consumers using the empirical survey data from wooden products in Finland and found that the quality of the tangible product was more important than the quality of the product intangible for wooden products, and also found that perceived product value was determined by customers' judgment of the relationship between perceived product quality and price. Lihra and Graf [21] evaluated US consumers' channel use at different steps in buying process of residential furniture and showed that the furniture retail store was the most important communication channel. The study also showed that women cared more communication than men. Andresen and Hansen [22] used a conjoint analysis approach to evaluate the impact of environmental certification on consumer preferences for wooden products and identified that there existed a segment market that would be prepared to pay a price premium for the products. Bigsby and Ozanne [23] studied customer attitudes to five different wood outdoor furniture attributes using conjoint and cluster analysis. Rametsteiner [24] showed that 60% consumers considered that the origin of wood was an important factor in their purchasing decision. Ozanne et al. [25] declared that New Zealand consumers preferred to environmentally friendly and certified products and would pay a premium for environmentally certified wood products. However, customer preferences for kitchen cabinets are still not received attention. This paper reports the results of an empirical study that aims to assess customers' preferences for kitchen cabinets by quantifying subjective evaluations of products factors, using a conjoint analysis approach and illustrates

the comparison among three groups with different family income. Concretely, the objective of this research is to find answers to the following question: which characteristics of kitchen cabinet products would be of most importance to various income groups? The results of the study present an indication of the relative importance and each level utility of different attributes about kitchen cabinets and the final goal is to offer effective information for kitchen cabinet companies. Consequently, it is an important and indispensable work to develop this research in this field.

EXPERIMENTAL SECTION

Methods

Conjoint analysis is a stated preference method and measures how a respondent state that he or she will react in certain situation [20] and estimates attributes that influence product purchase decisions. The estimation of part-worth utilities (PWU) for each level of an attribute and the calculation of relative attribute importance scores (RI) are the significant basic of this analysis. Data are generated from a survey where a wide of respondents are asked to estimate products with alternative levels of important characteristics [8]. A conjoint evaluation model was originally developed by Luce and Tukey [16], and then has been widely used in the field of marketing: marketing segmentation, product development and pricing. A general mathematical form of conjoint analysis can be modeled by Eq.(1) [15]:

$$U(X) = \sum_{i=1}^m \sum_{j=1}^{k_i} PWU_{ij}x_{ij} \quad (1)$$

where $U(X)$ is the total utility of alternative, PWU_{ij} is the part-worth utility connected with the j th level of the i th attribute; k_i represents the number of level of attribute i ; m is the number of attributes; and $x_{ij}=1$, if the j th level of the i th attribute is present and $=0$, otherwise. The relative important of each attribute is calculated by dividing the range of part-worth utilities (PWUs) over all levels (j) of a given attribute by the total range of part-worth utilities (PWUs) across all attributes (i) as shown in Eq.(2)[15]:

$$RI_i = \frac{\max(PWU_{ij}) - \min(PWU_{ij})}{\sum_{i=1}^m \max(PWU_{ij}) - \min(PWU_{ij})} \quad (2)$$

Where RI_i represents the relative importance of the i th attribute.

1. Selection of attributes and levels

Selecting the appropriate attributes is one of the first steps for a successful conjoint analysis study [20]. People have strong preferences about the storage space for dishes, pans, utensil and tools and the faces appearance of the cabinets, and the convenience of use of the cabinets [26]. Therefore, storage space, door panel surface treatment, countertop material, style, access & comfort and hardware were selected for attributes because they were greatly connected with the storage, appearance and convenient use of the cabinets. Those attributes above were also the basic of the esthetic and function of kitchen cabinets. Price and environmental quality were also selected because they were particular relevance to consumers and were often studied for wood products [15, 25]. Finally, eight attributes above were considered for this study, with three levels for each attribute (Table1). Regarding the price, three different levels (RMB1000-2499/m, RMB2500-3999/m, more than RMB4000/m) were chosen, representing requirements of customers with different family income in China. Concerning the type of style, Classic European style, Country style and Modern style were considered as three levels according to the popular trend. With respect to hardware, three different brands (Dious, Archie and Hettich) were selected, representing low, medium and high levels. The measure of normal, good and perfect was used for the levels of access & comfort attribute. For storage space, the levels include little, average and much. According to commonly used type, the door panel surface treatment was mainly divided into lacquer, acrylic and solid wood. For countertop material, stainless steel, artificial quartz and marble were chosen based on mainstream materials in market. Finally, three different attitudes (not important, important and very important) were selected for the levels of environmental quality.

2. The design of conjoint analysis

Based on the attributes and levels above (eight attributes and three levels of each attribute), the number of possible profiles would be $3^8 = 6561$ in full factorial design, which make data collection quite impractical. We need to reduce the number to a manageable size using an orthogonal array design or a fractional factorial design [27]. For the questionnaire, the statistical software SPSS17.0 was used to make an orthogonal analysis from potential products, and finally a list of 27 full-profile stimuli was generated. In conjoint analysis, the term used to describe a potential product is a stimulus, which is formed from the combination of different attributes selected [10]. Respondents were asked to give an overall evaluation of the product, and then the overall utility would be generated by customer

judgments to each attribute. In this experimental design, the way we choose was the full-profile method and each profile was shown in the form of a card representing a hypothetical kitchen cabinet that was described in terms of the levels of attributes.

Table 2. Sample characteristics of subjects (N=128)

Demographic characteristic	Category	Percent (%)	Subject (no.)
Gender	Male	44.5	57
	Female	55.5	71
Age	20-29	27.3	35
	30-39	42.2	54
	40-49	30.5	39
Education level	University or higher	50.0	64
	High school	35.2	45
	Junior high school	11.7	15
	Primary school or below	3.1	4
Family incomes(RMB)	10000 and over	40.0	46
	5000-9999	40.6	52
	Less -4999	23.4	30

3. Participant

The population of this survey was 20-49 years old because they are the potential target market for kitchen cabinets [28] and most of those people really involved in kitchen cabinets purchase. The survey sites we finally choose were 6 urban districts (Dongcheng, Xicheng, Chaoyang, Fengtai, Haidian and Shijingshan) in Beijing city, where a lots of famous kitchen cabinet companies were located there and good design philosophies were placed more emphasis on kitchen cabinet industry. In addition, people in Beijing possess a stronger sense of consumption, and could represent people's consumption demand. Other socio-demographic data such as gender, education level, and family income were recorded (Table 2).

The sample size in conjoint studies varies greatly. Cattin and Wittink [29] declared that the size of sample in commercial conjoint analysis studies was the most typical range from 300 to 550. However, Akaah and Korgaonkar [30] reported that less than 100 sample sizes were typical in academic research. In this experiment, a total of 180 surveys were done and finally 128 questionnaires were valid for an effective response rate of 71% with rejection of 52 invalid questionnaires.

4. Data collection

Conjoint data were collected in central location in each of 6 urban districts (Dongcheng, Xicheng, Chaoyang, Fengtai, Haidian and Shijingshan) mentioned above in September 2013. A questionnaire survey was conducted among target population by random sampling. Respondents were asked to indicate whether they purchased kitchen cabinets or often used kitchen cabinets in past two years. Only those people really known the characteristics of kitchen cabinets and discerned which kitchen cabinets they exactly wanted to possess. 27 different cards, one for each product profile, were created and presented to respondents in a random order. Each card was identified with a 9-point scale to assess customer preferences. Respondents were asked to give their value for each product, indicating that how likely they would buy the kitchen cabinet. At the one extreme, respondents may specify a rating of one, implying that it is impossible to purchase the product at all. At the other extreme a rating of nine would suggest they are certain to buy it. The quantity of questionnaires distributed in each district was 30 and surveys were performed between 10:00 and 18:00. A typical respondent approximately needed 13 min to complete the questionnaire.

5. Statistical methods

All analyses were performed with SPSS version 17.0 software in order to assess the utility values and the relative importance.

RESULTS AND DISCUSSION

Table 3. Utilities of each level and relative importance of each attribute for three groups

Attributes	Group1		Group2		Group3	
	Utility	Relative importance	Utility	Relative importance	Utility	Relative importance
Price		14.53%		16.62%		18.41%
RMB1000-2499/m	0.052		-0.088		-0.060	
RMB2500-3999/m	0.221		0.592		0.732	
More than RMB4000/m	-0.273		-0.504		-0.671	
Style		7.66%		9.80%		9.59%
Classic European Style	-0.127		-0.098		-0.138	
Country Style	-0.007		0.127		-0.027	
Modern Style	0.134		-0.029		0.164	
Hardware		9.30%		9.37%		10.97%
Dious	-0.320		-0.113		-0.075	
Archie	0.019		0.056		-0.005	
Hettich	0.300		0.056		0.080	
Access & comfort		8.14%		11.30%		9.83%
Normal	0.166		0.334		0.164	
Good	0.008		-0.148		-0.024	
Perfect	-0.173		-0.186		-0.140	
Storage space		8.24%		11.61%		8.69%
Little	-0.171		-0.088		-0.198	
Average	-0.059		-0.199		-0.005	
Much	0.230		0.286		0.203	
Door Panel Surface Treatment		10.14%		10.77%		11.69%
Lacquer	-0.314		-0.153		-0.174	
Acrylic	0.087		0.155		0.215	
Solid wood	0.227		-0.002		-0.041	
Countertop material		11.91%		10.23%		11.86%
Stainless Steel	-0.027		0.003		-0.063	
Artificial Quartz	-0.057		0.097		0.140	
Marble	0.084		-0.1		-0.077	
Environmental quality		30.09%		20.30%		18.96%
Not Important	-1.059		-0.454		-0.481	
Important	-0.659		-0.418		-0.394	
Very important	1.718		0.872		0.874	
Pearson's R	0.988		0.978		0.990	
Pearson's R Significance	0.000		0.000		0.000	
Kendall's tau	0.917		0.871		0.894	
Kendall's tau Significance	0.000		0.000		0.000	

1. Participant characteristics

The survey generated a total of 128 valid questionnaires. Table 2 shows the sample characteristics by gender, age, education level and family incomes. The overall sample consisted of 57 men (44.5%) and 71 women (55.5%). The most common age group of the respondents was between 30 and 39, reaching to 42.2%. The fact can be explained that people with 30-39 years old have more use and purchasing experience for kitchen cabinets. It was clear that well educated respondents dominated the sample (50%). Finally, according to the income level in China we identified three individual groups: group1 with family income per month RMB 10000 and over, group2 with family income per month RMB 5000-9999 and group3 with family income per month RMB less-4999. Clearly, group1 and group2 with family income over 5000 were the heart part of respondents (80.6%).

2. Response to the kitchen cabinet profiles among three groups

The detail of this conjoint analysis results for group1, group2 and group3 were given in table 3, demonstrating the utility score of each level of attributes and the relative importance of eight factors: price, style, hardware, access & comfort, storage space, door panel surface treatment, countertop material and environmental quality. As can be seen from table 3, it was clear that all consumers considered environmental quality and price were the top two attributes. The preference structure of three groups was examined and stated below.

2.1 Price

Within the attitude of price, the relative importance for group1, group2 and group3 were 14.53%, 16.62% and 18.41%, respectively and was the second important attribute influencing consumers' purchase behavior. We found that group3 were more sensitive to price when they bought kitchen cabinets, reaching to 18.41% while group1 was merely 14.53%. It is concluded that economic resources significantly influenced consumer behavior [31]. The study also showed that the most popular price was RMB2500-3999, and the second popular price was RMB1000-2499, and the last one was more than RMB 4000. The finding declared that the low price was not the most important

factor when purchasing furniture products and it can be supported by a previous research [32]. Instead, Price was usually perceived as an indicator of the expected quality [33]. Consumers seem to be willing to pay a higher price as a guaranty of quality [34]. The existence of price-perceived quality relationship was reinforced by the study. The people with low-income still tend to have higher price product and this finding may reveal an implication that in China the families with low-income level, especially for 80s and 90s doesn't mean the weakness at purchasing power because their parents always are able to offer fully financial support, especially for building a new home. In fact, some of them have stronger purchasing power. In china, the demand of kitchen cabinets is usually from living in a new home and a set of kitchen cabinet is often regarded as an eternal and durable goods. Therefore, consumers are reluctant to pay more money for a high quality product [15] in case of a repair or replacement trouble. But a set of kitchen cabinet at more than RMB4000 per meter was considered as too expensive and accordingly it had lowest utility scores: -0.273,-0.504,-0.671, indicating the attitude of rejection, especially for Group3.

2.2 Style

As can be seen from the table 3,the preference for style was unanimous among all respondents between group1 and group3 and was the least important attribute compared with other attribute, accounting for 7.66% and 9.59% respectively while for group2 the relative importance of style was still the second lowest, merely9.8%. The conclusion showed that little attention was given to the style when purchasing kitchen cabinets and companies considering style as a competitive advantage could possess a very small market niche, consistent with the study of Pakarinen and Asikainen [35]. Based on the utility values, it was clear that Modern style was the favorite attribute and positively was accepted for group1 and group3 and it seemed that group3 (0.164) slightly enjoy the style more than group1 (0.134), reflecting that in China most of people tend to a product with an appearance of Modern style when purchasing kitchen cabinets. The preference for Modern style was completely also demonstrated by Wang [36]. Therefore, some design elements consisting of modern aesthetics should be considered by designers or companies. However, Country style was more attractive for group2 than other two groups with the unity score 0.127. The result pointed out that Country style had remained some fractions of the kitchen cabinets market. Sou Fun [37] showed that In Guang Zhou Country style for kitchen cabinets was very popular, accounting for roughly 33% of the total market in 2011. The Classical European style kept the lowest level of preference among three groups and this finding also declared that kitchen cabinets with Classical European style had only a limited market share in China[36].

2.3 Hardware

Hardware was regarded as the fifth important attribute for group1 and group3 while forgroup2, hardware ranked eighth and was the last one attribute when purchasing. The result stated that the importance of hardware had not attracted sufficient attention. In fact, cabinet hardware is easy way to improve the look and the effectiveness of use. According to the results, there was an overwhelming observation that Hettich, a well-known worldwide hardware brand from Germany, was considered as the most preferred choice and the utility score for three groups were 0.300, 0.056 and 0.080 respectively. In contrast, Dios, coming from a small-middle-sized company in Zhongshan in China was poor at the utility score (-0.320, -0.113, -0.075), showing a negative attitude. Obviously, there was a steady trend for the utility score from Dios to Hettich among three groups. This finding declared that consumers tended to choose higher quality hardware in order to keep their kitchen cabinets in good condition because the quality of hardware directly mattered to the service life, the effectiveness and convenience of kitchen cabinets. Besides, the preference of group1 with higher family income was more prominent to the hardware with high utility grade (0.300).

2.4 Access & comfort

Regarding access & comfort, all consumers tended to be "Normal". However, an unexpected finding was that the relative importance of group1 was 7th with 8.14%; group3 was 6th with 9.83% while for group 2 it was in 4th position with 11.30%. The low level of importance placed on "perfect" was still a rather unexpected result in disagreement with previous studies [20]. This finding reflected that in China other attributes were more important than access & comfort for most consumers. A person to experience comfort and satisfaction during use was needed but not importance in comparison with other attributes reflected by the "Normal" attitude.

2.5 Storage space

There was a wide range of levels for storage space and much storage demand was consistently needed. This supported the conclusion that consumers' strong preferences to the storage space were needed for dishes, pans and utensil *et al.* [20].The relative importance was emphasized by group2 rising to 3rd in rank with 11.61% but in group1 and group3 the rankings were only 6 and 7, respectively. Significant variations existed among different populations when considering this attribute although they tended to possess much storage space. The group2 with family income RMB 5000-9999 per month has higher requirements on storage space of cabinets, the utility score being 0.286. Higher preference can be explained by higher focus of daily life. Most of group1 with high-income were always busy in working and other social activities, so the cabinets weren't frequently used and they seemed

less concerned with cabinets than group2. Additionally, although consumers who had low-income often used the kitchen, they hadn't higher requirements of the quality of use due to limited income and expenditure.

2.6 Door panel surface treatment

The results on door panel surface treatment showed that solid wood and acrylic were two types for consumers' preferences and the relative importance was similar among three groups, ranking in 4 and 5, respectively. For group 1, solid wood was the most preferred surface treatment. Donovan and Nicholls [38] showed that consumer preferred cabinet doors with knots and color variation and were willing to pay price premiums for a variety of character features. Therefore, Natural and beautiful texture was the key factor for solid wood preference. Besides, perfect environmental quality was a big motivator for the popularity. However, in general, the door made from wood solid had high price. Acrylic as door panel surface material was popular for group2 and group3. The result can be attributed to its good performances and cheaper prices.

2.7 Countertop material

Apparently, three groups held difference arguments to the countertop material mentioned in table3: stainless steel, artificial quartz and marble. Group1 and group3 paid more attention to this attribute than group2, the relative importance being in 3 positions. The preference for marble countertop was obviously stressed for group1 and the score peaked at 0.084. The key reason was that group 1 preferred to cabinet appearance. The marble countertop could just provide more aesthetic appeal due to beautiful and natural patterns. In contrast, for other two groups, marble countertop was the bottom of acceptance, only reaching to -0.1 and -0.077 respectively. The other observation was that the countertop preference for group2 and group3 was artificial quartz material, suggesting that these consumers tended to cabinet products with better value. There was no natural appearance like marble but artificial quartz material obtained excellent characteristics, for example higher strength, superior resistance to abrasion, easy to clean and resistant heat. Besides, the price was more attractive than marble material and was suitable for the two groups.

2.8 Environmental quality

As can be seen from the table 3, all consumers consider that environmental quality was the most significant attribute with the highest relative importance, whereas people who overlooked environmental quality were few. The table 3 showed that there was an obvious decrease occurred from "very important" to "not important". The result was found to be similar among groups, illustrating that the opinion of three groups were consistent with each other. The result reflected that the concept of environmental friendliness had gone deep in the heart of people in today's society. This finding also suggested that the families with higher income required higher material quality and focused more on the living environmental issue. Obviously, we can draw a conclusion that consumers' purchasing intentions were greatly influenced by environmental quality. This observation was in accordance with previous research [21].

Pearson's R and Kendall's tau are used to indicate that how well the model fits the data [10, 24]. The higher the coefficients, the better correlations between the observed and estimated utilities. In this study, as was shown in table 3, for group1, Pearson's R was found to be .988, .000 and Kendall's tau was found to be .917, .000; for group2 Pearson's R was found to be .978, .000 and Kendall's tau was found to be .871, .000; finally, for group3, Pearson's R was .990, .000 and Kendall's tau was .894, .000. These data indicated that there was a positive correlation between the observed and the estimated utility values. The correlations also gave an indication that the model provided a good fit to the data, showing that the experimental results for the three groups were reliable.

Research Limitations

In this paper, there existed research limitations. First, it used a limited sample scale and respondents couldn't represent all consumers in China. Different ages, educational background and family status could differ in their preference. Thus, a future work with a large sample was encouraged to fully examine the preferences. Second, these attributes chosen in this experiment were limited. The study did not include all factors influencing customers' purchasing intention. Therefore, we encourage a further research to discuss more factors. Third, the study used an orthogonal design to identify the potential profiles and preference structure. However, an orthogonal array reduced the factor of testing and only revealed principal effects without including all attributes, encouraging us to uncover the interaction effects [39]. Fourth, reader should understand our findings in the context of China because some of them may reveal the specificity of China. Thus, we encourage a future research to be done across the world.

CONCLUSION

This paper analyzed consumers' preferences for the attributes of kitchen cabinet products and showed that environmental quality and price from eight factors (price, style, hardware, access & comfort, storage space, door panel surface treatment, countertop material and environmental quality) clearly seem to be the most significant to

consumers when they purchasing kitchen cabinets, occupying the first and second position respectively. For group1 and group3, door panel surface treatment and countertop material were more stressed than group2. However, group2 had more interesting in other two attributes: access & comfort and storage space. Additionally, the style was nearly the least important attribute for groups.

This study confirms that environmental quality should be a key trend for the kitchen cabinet products in China. It has become a special strength of furniture products and has an important impact on many consumers' preferences [40]. These empirical results also reveal that it is feasible for enterprises to offer more eco-friendly materials at expense of price. The attractive price is not the most important attribute when they decide to purchase. Between quality and price, quality is evaluated first, and then compared with market price [41-43]. Therefore, the message above is the perfect implication of this investigation and can provide an indicator for kitchen cabinet enterprises. Undoubtedly, this study would make a remarkably useful contribution to the development of kitchen cabinet industry.

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