Determinant Factors of Purchase Intention: A case study of imported wine in city of Hangzhou

Chittipa Ngamkroeckjoti, Xuan Bin Lou, and Thongdee Kijboonchoo

Abstract—This study aims to help non-Chinese wine exporters more precisely understand cultural features of Chinese market. It studies factors influencing Hangzhou consumers’ purchase intention (PI) toward imported wine consumption through an incorporated model combining Lee’s modified Fishbein model and Ajzen’s theory of planned behavior (TPB) in 1990. A total of 599 questionnaires were distributed in five administrative districts locating in selected city of Hangzhou. Convenience and quota sampling methods were adopted. The influences of attitude, prestige and purchase intention of both genders were identified. In addition, the casual relationship among prestige, attitude, and purchase intention was also confirmed. This research is one of the first initiator of research model that emphasized on cultural factors.

Keywords— Attitude, China, Imported wine, Prestige, Purchase intention.

I. INTRODUCTION

In 2009, the Chinese wine imported volume and value amounted to 171 million liters and USD 441 million, increased by 4.93% and 22.91% respectively [2]. The total volume of bottled wine imported in 2009 has amazingly increased 20 folds since 2003. Moreover, the growth rate is still amplifying [17]. Although China is the world’s fastest growing market for imported wine, at 1.5 million cases with a gain of 58% over 2008, wine consumption per capita annually amounted at 0.8 liter and is still relatively low, compared with traditional wine-drinking countries like France, 56 liters in France, 25 liters in Australia, and 19 liters in the UK [17]. Therefore, China’s great potential has led world’s exporting wine to predict enormous opportunities in exploring its broad market, though the market is still dominated by domestic production [11].

In spite of relatively low wine consumption per capita and consumer’s demand of imported wine, cultural influence is just another essential contributor of imported wine’s dramatic improvement in terms of both volume and sales. China is just a country fundamentally shaped by Confucian philosophies with Chinese purchase intention being also partially influenced by this culture. One aspect of Confucian social culture is to emphasize individuals’ responsible treatment to others [15], which is typically revealed within wine consumption behaviors. Expensive wine, generally interpreted as imported wine will be consumed to treat with important friends and guests [15]. [5] stated that elements of culture should be taken into consideration while identifying wine selection and drinking occasions. Investigation was only conducted in western countries like Australia, Italy, Greek, and German; a further explanation concerning cultural influences over wine consumption in China is practically needed.

To identify attitudinal influences, another factor that drives Chinese consumers’ pursuit of early imported wine has to be explored. [15] explored consumers’ purchase intention in the terms of qualitative method. [8.1] investigated a formation of purchase intention and concluded social pressure factors were significantly crucial [4, 12]. They provides a deeper understanding of Chinese traditional culture and reflects on how foreign investors should deal with Chinese consumers in China.

II. LITERATURE REVIEW

A. Lee’s Modified Fishbein’s Model

It was emphasized that discrepancy between Western and Oriental is the orientation of society mechanism [10]. Collectivism in Confucian culture presented two instinctively normative features compared with individualism culture: group orientation which stands for priority of group is emphasized, and prestige [7] by which one’s personal normative concern is revealed. Concerning the validation of subjective norm of theory of reasoned action (TRA) in cross-culture environment, Lee modified the TRA by introducing prestige. Likewise, subjective norm failed to capture personal normative—“face” describing self-prestige accordingly influenced by one’s social position or reputation [7, 19]. Self-prestige, applied in this study was proposed for the unique social attribute of Confucian culture.

Researchers have investigated a formation of purchase intention by adopting Lee’s modified Fishbein's purchase intention Model. However, the result was rather inconsistent.
[4] found that prestige moderately influenced the attitude and that led to buying domestic products but excluding imported products [3]. Low direct influences of prestige but no influences of group conformity were found to place on Chinese college youth’s behavioral intention to buy foreign brand jeans [12]. Likewise, only social pressure constructs were found no influences on purchase intention toward American brand apparel, and only prestige was moderately influencing consumer’s attitude [12].

Researchers have given explanations of why the findings were rather inconsistent. Fishbein’s model was proposed two decades ago. Chinese consumer behaviors are changing along with economic development and social modernization [12]. Moreover, collectivism tends to be less effective to Chinese consumer [19]. However, [7] as well as [12] argued that the social attribute of products investigated would influence the result of the investigation. Therefore, this research will investigate a product with stronger emphasis on social attributes.

B. Theory of Planned Behavior (TPB)

TPB is the function of attitude, subjective norms and perceived planned control was initiated from TRA by extending new construct—perceived behavioral control which refers to personal perception of ease or difficulty to actualize the behavior under the assumption of existed empirical cognition being anticipative obstructions [2]. Many empirical studies have found it is superior over Fishbein’s model [1].

III. MODEL DEVELOPMENT AND HYPOTHESES

This conceptual framework originated from a simple combination of Lee’s modified and Fishbein model [8]. As [8] claimed that prestige would more precisely capture both personal and group norm. Therefore, Lee’s model is more applicable and appropriate to examine purchase intention under Chinese culture settings. In addition, as well as a derivation of Fishbein’s model, many empirical supports were given to TPB as a superior model over the origin. Thus, purchase intention was included in the conceptual framework to identify Chinese consumers’ purchase intention toward imported wine.

Attitude and self-prestige towards imported wine are independent variables while purchase intention of imported wine is the only dependent variable.

A. The relationship between Attitude and Purchase Intention

The relationship between attitude and purchase intention had been testified under enormous business environment settings through TRA [18]. Positive influences of attitude were also indentified within countries or regions of Confucianism, such as China [12], Hong Kong [3, 16], and Korea [2].

Likewise, [9] had similar conclusion that attitude toward Californian wine was the better predictor of wine consumption intention than subjective norm did. Based on extensive literature reviews, it is very likely that Chinese consumers’ attitude would positively affect their purchase intention toward imported wine.

Hypothesis 1: Attitude toward imported wine has positive influence on Hangzhou consumers’ purchase intention toward imported wine classified by gender.

B. The influence of self-prestige over Purchase Intention

Self-prestige was initiated by [13.1] as a social pressure indicator for the research of consumers' purchase intention under Confucian culture settings. [13.1] claimed that one aspect of social life is to enhance the face by offering prestigious treatment for others; and Chinese consumers’ behavior was just significantly shaped by this culture in order to enhance or maintain face value. Therefore, prestige could more precisely describe personal norms than subjective norm did.

[4] found that in Korea, self-prestige had relatively strong indication over purchase intention. In addition, self-prestige was also examined to have stronger impact on purchase intention. The research also confirmed that prestige influenced on attitude [12].

Many investigations had addressed concerns over issues in relation to face. [14] explained how faces shaped Chinese consumer behaviors by specifying the concept of face into self-face, group face and other face orientations. Chinese consumer behaviors were more influenced by face value than American did. Face values were more reflected with consumption of products with strong social attribute like luxury and wine. [15] stated wine’s consuming and buying behavior of China were significantly shaped by traditional social value—self-prestige. Chinese intended to achieve self-prestige by consuming expensive wine on public occasions. Based on pre-mentioned studies, prestige would be proposed to have positive effects over purchase intention.

Hypothesis 2: Self-prestige has positive influence on Hangzhou consumers’ purchase intention toward imported wine classified by gender.

IV. DATA COLLECTION AND RESPONDENTS

Investigation was conducted in five administrative districts which are Shangcheng, Xiacheng, Jiangan, Bingjiang and Xihu Hangzhou. Overall 600 sets of questionnaires classified by 347 males and 252 females were distributed within total 24 supermarkets located in the five administrative districts. The supermarket with wine counters was qualified for distribution, such as Carrefour, Tesco Lotus, and Wal-mart. Reliability of attitude, self-prestige, and purchase intention toward imported wine from 50 respondents were also confirmed with Alpha value of 0.62, 0.76, and 0.76, respectively.

The respondents are Hangzhou residents who had experienced of drinking imported wine, as well as those who have possibility to consume imported wine. Both males and females aged older than 18 years are included in the regulation in China that alcohol and tobacco are only allowed to sell to those who are older than 18 [13].
V. MEASUREMENT

Health concern and taste along with occasions and country of origin are selected as attributes of Attitude. They are based on extensive literature reviews [14, 15].

Self-prestige was used to measure social pressure by [13.1]. Two questions will be asked to evaluate self-prestige based on pilot study. Another three questions proposed by [14] were added to make sure influences of prestige could be precisely reflected. Both variables adopted five Point Likert-Scales as the measurement.

Based on [7], two items were developed to evaluate Chinese consumers’ buying intention. Yet again, five Point Likert-Scales is adopted as the measurement.

In this study, males are the majority of imported wine consumers in Hangzhou, accounting for 58% of the total 599 valid samples. Most purchasers of imported wine age 18-39 years old. The income lies in the category of RMB 4,001-10,000 and above. Most respondents are high school, bachelor, and master levels.

A. Statistical Findings

As Table I (Appendix 1, p. 5) indicates, the p value for male is <0.045 while female 0.001 (<0.01). Thus, both attitude and self-prestige are reliable to predict the purchase intention at significant level of 95%. The Error shown in the variance is not explained by the independent variables.

R-Square shown in Table II, p. 6 presents the original male proportion of purchase intention which can be predicted by attitude, self-prestige for 2% and are left with 98% by residual variability while female 21% and 80%, respectively. Table III presents Parameter estimate or beta coefficient which shows that male’s and female’s attitude affects on purchase intention for 0.11 and 0.32 while male’s and female’s self-prestige affects on purchase intention for 0.04 and 0.71, respectively.

Durbin-Watson results shown in Table IV, p. 6 provides further confirmation of the research model’s prediction. The Durbin-Watson statistic is used to detect the presence of autocorrelation. Table IV shows that value of both genders closed to 1.8. It indicates a positive serial correlation. Finally, attitude and the self-prestige of both gender in Table V, p. 6 indicates the variance inflation factors at lower than 5 which is 1.08. There is very little multicollinearity among independent variables. Also, the tolerances of both attitude and self-prestige is 0.92 which is higher than 0.20 and the highest eigenvalue is at 1.27 which is less than 10. Therefore, these results of variance inflation, tolerance, and eigenvalue correspond among each other.

VI. HYPOTHESES TESTING

The correlations classified by gender with respect to imported wine were identified to be moderately positive at confidence level of 95 percent. Among attitude and self-prestige assumed to be capable of predicting Hangzhou imported wine consumer’s purchase intention, attitude is a stronger predictor for male with beta coefficient rate at 0.11 while female 0.32. As for female, self-prestige is a stronger predictor with beta coefficient rated at 0.71 while male 0.04.

VII. DISCUSSION OF MAJOR FINDINGS

Attitude of Hangzhou wine consumers had positive influence on their purchase intention toward imported wine. Self-prestige was found to be a stronger indicator. Moreover, the identification of these influences could be a reflection of emerging values towards imported wine. Non-Chinese wine exporters to Hangzhou wine market should understand that these two factors are shaped by Confucian culture.

The significant influence of self-prestige on wine purchase intention was viewed as the most crucial finding of this research. Self-prestige is positively influencing Hangzhou consumers’ purchase intention to buy imported wine under the Confucian culture settings. A higher self-prestige would result in a stronger intention to purchase imported wine. This finding indicates that cultural factor is important for Hangzhou wine consumers. Attitude and self-prestige of females have a stronger impact on wine purchase intention.

VIII. IMPLICATIONS AND CONCLUSIONS

The findings of this study provide theoretical implications for future researches. This research emphasized both cultural factors. [29] proposed models of purchase intention with consideration of cultural influence on consumers to be wisely rational. Given that Chinese consumers’ purchase behavior heavily shaped by Confucian culture and purchasing power, it is necessary to study cultural aspect. The identification of the significant influence of prestige and attitude has confirmed the casual relationship introduced by [22].

The findings also provide practical implications for non-Chinese wine exporters who would like to enter Hangzhou market. Hangzhou consumers’ attitude and self-prestige of female have higher predictive power than those of male. Non-Chinese wine exporters should give special attention to these emerging values.

If Hangzhou consumers have the money and knowledge of wine, they are very likely to purchase imported wine. Attitude and self-prestige will influence the purchase of imported wine.

The major findings of this study are attitude and self-prestige. They have influence on purchase intention of imported wine. In addition, the study has also found that attitude and self-prestige of females have a stronger influence on purchase intention when they are compared to males. Moreover, as far as females are concerned, self-prestige has much stronger influence when it is compared to attitude.

APPENDIX

Testing result by Multiple Linear Regression of 347 males, 252 females, and both genders
TABLE I
ANALYSIS OF VARIANCE

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Male</th>
<th>Female</th>
<th>Both genders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pr&gt;F</td>
<td>0.043</td>
<td>0.013</td>
<td>0.001</td>
</tr>
<tr>
<td>F value</td>
<td>3.14</td>
<td>3.22</td>
<td>3.26</td>
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<tr>
<td>Mean Square</td>
<td>0.322</td>
<td>0.20</td>
<td>0.26</td>
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<tr>
<td>Error</td>
<td>0.103</td>
<td>0.16</td>
<td>0.13</td>
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TABLE II
OVERALL MODEL FIT

<table>
<thead>
<tr>
<th>Overall Model fit</th>
<th>Male</th>
<th>Female</th>
<th>Both genders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Root MSE</td>
<td>0.32</td>
<td>0.32</td>
<td>0.36</td>
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<tr>
<td>Dependent Mean</td>
<td>3.30</td>
<td>3.30</td>
<td>3.47</td>
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<tr>
<td>Coeff. Var</td>
<td>0.16</td>
<td>0.16</td>
<td>0.17</td>
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<tr>
<td>R-Square</td>
<td>0.02</td>
<td>0.21</td>
<td>0.082</td>
</tr>
<tr>
<td>Adj-R-Sq</td>
<td>0.012</td>
<td>0.012</td>
<td>0.008</td>
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TABLE III
TESTING RESULT OF PARAMETER ESTIMATES

<table>
<thead>
<tr>
<th>Overall Model fit</th>
<th>DV</th>
<th>Male</th>
<th>Female</th>
<th>Both genders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Std error</td>
<td>Attitude</td>
<td>0.043</td>
<td>0.037</td>
<td>0.032</td>
</tr>
<tr>
<td>T value</td>
<td>Attitude</td>
<td>2.50</td>
<td>5.27</td>
<td>6.97</td>
</tr>
<tr>
<td>Pr&gt;F</td>
<td>Attitude</td>
<td>0.013</td>
<td>&lt;0.0001</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Parameter estimate</td>
<td>Self-prestige</td>
<td>0.16</td>
<td>0.16</td>
<td>0.16</td>
</tr>
<tr>
<td>Std error</td>
<td>Self-prestige</td>
<td>0.056</td>
<td>0.056</td>
<td>0.056</td>
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<tr>
<td>T value</td>
<td>Self-prestige</td>
<td>0.70</td>
<td>4.46</td>
<td>3.25</td>
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<tr>
<td>Pr&gt;F</td>
<td>Self-prestige</td>
<td>0.49</td>
<td>&lt;0.0001</td>
<td>0.0012</td>
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<tr>
<td>Standardize estimate</td>
<td>Self-prestige</td>
<td>0.30</td>
<td>0.14</td>
<td>0.28</td>
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TABLE IV
DURBIN-WATSON D OUTPUT

<table>
<thead>
<tr>
<th>Durbin-Watson D Output</th>
<th>Male</th>
<th>Female</th>
<th>Both genders</th>
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</thead>
<tbody>
<tr>
<td>Durbin-Watson</td>
<td>1.87</td>
<td>1.81</td>
<td>2.03</td>
</tr>
<tr>
<td>Number of Observations</td>
<td>347</td>
<td>252</td>
<td>599</td>
</tr>
<tr>
<td>1st Order Autocorrelation</td>
<td>0.065</td>
<td>0.087</td>
<td>-0.016</td>
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TABLE V
TESTING RESULT OF MULTICOLLINEARITY STATISTICS

<table>
<thead>
<tr>
<th>Collinearity Statistics</th>
<th>Male</th>
<th>Female</th>
<th>Both genders</th>
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<tr>
<td>Intercept</td>
<td>Attitude</td>
<td>0.000</td>
<td>0.035</td>
</tr>
<tr>
<td>Variance inflation</td>
<td>Self-prestige</td>
<td>0.99</td>
<td>0.96</td>
</tr>
<tr>
<td>Tolerance</td>
<td>Attitude</td>
<td>1.08</td>
<td>1.08</td>
</tr>
<tr>
<td>Eigenvalue</td>
<td>Self-prestige</td>
<td>0.92</td>
<td>0.92</td>
</tr>
</tbody>
</table>

ACKNOWLEDGMENT

We would like to take this opportunity to express my sincere appreciation and gratitude to all key commentators who have contributed and sacrificed their time to provide guidance, recommendations, and support.

REFERENCES

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