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<td>FURUKAWA, ichiro</td>
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EMPIRICAL STUDY OF PERSONAL RELATIONSHIP CLASSIFICATION EFFECT AMONG GROUP-ORIENTED COUNTRIES

ICHIRO FURUKAWA

Abstracts

The theory of reasoned action (Ajzen and Fishbein (1977)) is one of the most well known concepts used in quantitative analysis in marketing research. In addition to its simple structure, predictive power, and diagnostic information associated with marketing actions, it includes two clearly distinct independent factors, that is, attitude and social norm for the intention of choice alternatives. Because characteristics of this model are so attractive and flexible, the theory of reasoned action model can be adapted from collectivistic regions to individualistic regions. However, we have little knowledge about whether or not this model works satisfactorily in strong group-oriented countries where social norms can surpass individual attitudes for choice alternatives (which is the definition of a group-oriented society). In this paper, data collected from Japan, China and Taiwan were analyzed using factor analysis and structural equation modeling. By investigating the empirical results with a focus on the effect of personal relationship classification, we show that care should be exercised in using the reasoned action model in countries that have strong group-orientation.

Keywords: theory of reasoned action, attitude vs. social norm, individualism vs. collectivism, in-group, out-group, personal relationship classification, psychological distance

I. Introduction

In order to persuade someone, one has to provide proper evidence and reason. This is the reason why the theory of reasoned action and its extension, the theory of planned behavior (TPB), play an important role in marketing research for sharing common understandings of target customers (Azjen (1991), Madden and Ajzen (1992), Ajzen and Fishbein (2005)). Explanatory variables of the theory of reasoned action consist of two factors: behavioral beliefs and normative beliefs. Each respondent’s behavioral intension and behavior are explained by these two factors. The simple structure of this model is quite attractive for marketing managers, because the concept that the most preferred alternative should be selected among the feasible choice set is widely believed to be able to properly explain consumers’ choice behavior in real situations, and many empirical studies support this.

In addition to its simplicity and predictive ability, one more attractive characteristic of the theory of reasoned action is that this model involves both independent-self aspects and inter-dependent-self aspects of consumers. Since the publication of the memorable works by Hofstede (1980), and Hofstede et al. (1991), comparison of individualism and collectivism has
attracted many researchers. They revealed that the balance of these two aspects differ from country to country, and are considered to play a very important role in explaining the distinct characteristics of consumer behavior in each country. Owing to this unique feature, this model can be used in multiple regions to compare whether or not the countries have individualistic aspects or collectivistic aspects.

However, it should be noted that the concept of the theory of reasoned action was born in the culture of individualistic countries. In these countries, final decisions should be made by individual behavioral beliefs if it contradicts normative beliefs. In contrast, people in group-oriented countries, including China, Taiwan, and Japan, put much more weight on social normative beliefs. They frequently think that people should obey social normative beliefs—even if it contradicts their individual beliefs (Furukawa et al. (2014)). For example, Furukawa (2013), Furukawa and Jin (2008) show that Chinese consumers often speak ill of Japanese car brands despite the fact that they have actually purchased them. This means that many Chinese consumers have (or at least express) negative attitudes toward Japanese car brands even though they are willing to pay money for them. In this situation, one cannot adapt the reasoned action model to the data, because negative attitudes do not always actually translate into negative behavior. This phenomenon suggests that Chinese people may change their expressed opinion depending on whom they are talking to.

As such, much more research effort should be made to create guidelines or conditions for appropriate use of the reasoned action model. However, most empirical applications are focused on cultural differences among nations, and compare data statistically among individualistic countries and group-oriented countries (Markus and Kitayama (1991), Takano (2008)).

In this paper, data collected from Japan, China and Taiwan were analyzed using factor analysis and structural equation modeling. By investigating the empirical results with a focus on the effect of personal relationship classification, we aim to clarify what problems could occur in countries having strong group-orientation.

II. Review and Background of This Study

1. The Effect of Feelings of Animosity

Feelings of animosity against a country are often caused by past wars and are known to affect consumer behavior. Excellent brands more or less have their own country image. For example, Mercedes Benz can’t avoid having the image of “made in Germany,” and Toyota’s image should be related to Japan. Because such Country of Origin (COO) image usually affects consumer buying behavior positively, it is considered to be a very important part of brand equity (Aaker (1983), Keller (1991)). However, if a brand’s COO is related to strong feelings of animosity in a particular country, such brands may face serious situations because of the negative influence on their brand.

Klein et al. (1998) adapted the modified TPB model to empirically test how such feelings of animosity of Chinese people against Japan affect their buying intention toward Japanese brands. Similarly, Furukawa and Jin (2008) adapted a modified TPB model to empirically show that the social norm of anti-Japanese feelings of Chinese consumers statistically depressed positive intention toward Japanese car brands. These results show that social norms can reduce
buying intentions for any ordinary brand in specific circumstances. Furukawa and Jin (2008) used a qualitative approach to investigate why Chinese consumers stated negative attitudes toward Japanese car brands even when they actually bought and owned Japanese cars. If people buy products they do not “like,” they will recognize cognitive dissonance. Thus, in the theory of consumer behavior, people do not speak ill of brands they own to avoid such feelings. However, text-mining analysis of words collected from focus group interviews revealed that Chinese people’s social norm called “Chinese Face” strongly affect not only their words, but also their buying behavior. As such, it is critical that much more attention should be paid to adapt these kinds of statistical model to survey data. It should be noted that this concept of face is especially meaningful in group-oriented societies.

2. Face Consumption and Personal Relationship Typology

As a prevalent concept, face is considered to include two distinctive dimensions in China. Hu (1944) originally proposed that Chinese face is divided into “LIAN” and “MIAN.” LIAN represents one’s integrity and moral reputation, and MIAN is related to public image coming from visible achievements such as buying visibly-consumed luxury products. With empirical study, Shi, Furukawa and Jin (2011) and Shi, Zheng and Yang (2016) not only verified the two dimensions of Chinese face concept, but also explored the connotation of LIAN and MIAN. It should be noted that an essential component of face in Chinese culture is morality.

Clearly, this face concept plays an important role, especially in group-oriented countries including China, Taiwan, and also Japan. Because of this, we should pay much more attention to the characteristics of networking of people in society. Though the concept of LIAN and MIAN is closely related to the nature of social network structures, most empirical studies do not measure the personal network relationship. That is, Chinese face consumption attract researchers to investigate how much LIAN and MIAN affect buying intention. However, most of them did not consider how impact differs among in-groups and out-groups, despite the fact that China is a group-oriented country.

In order to investigate the difference of explanatory factors’ impact between in-groups and out-groups, it is necessary to measure the personal relationship. For this purpose, personal relationship types as defined by Fiske (1992) are very useful. Fiske shows four fundamental human relationship types: communal sharing, authority ranking, equality matching, and market pricing. In communal sharing, people treat all members of a category as equivalent. In authority ranking, people attend to their positions in a linear ordering. In equality matching, people keep track of imbalances among them. In market pricing, people orient to ratio values. Cultures use different rules to implement these four models.

3. Group-Oriented Society and the Theory of Reasoned Action

Though personal relationships must be closely related to in-groups (which strongly affect subjective norm and intention), variables about personal relationships are usually neglected in quantitative model analysis, because it is very difficult to measure precise personal relationship in a survey. However, because analytical results are dependent on observed data, they may mislead conclusions if social norms contradict individual attitudes, and communications within in-groups happen to be quite different from those with out-groups.
Hofstede’s pioneering research, which was based on survey data of more than 110,000 IBM employees, found four dimensions to characterize each country’s culture: power distance, collectivism and individualism, femininity and masculinity, and uncertainty avoidance. This study attracts many researchers, especially in the area of collectivism and individualism (Markus and Kitayama (1991), Takano (2008)). Marketing researchers are also interested in this problem because every country has its unique characteristics and different patterns of buying decision processes. Triandis (1995) investigated a lot of books and papers in various academic areas concerning individualism and collectivism, and define collectivism (= group-oriented) as follows:

The simple definition of group-oriented society is that people put more weight on social norms than on individual attitudes, and they usually recognize themselves as part of a group.

If positive attitudes and negative social norms for a brand exist simultaneously in a person’s mind, then what intention and behavior will occur? It is probably easy to estimate parameters in a reasoned action model by adapting structural equation modeling. However, in reality, people should be worried about such decision-making due to cognitive dissonance. How can a person escape such feelings? Can we truly observe honest opinions under circumstances where a person has to confess that a reluctant decision was made against their will? It is likely that such consumers will not reveal their true opinions to people belonging to an out-group. So, it is necessary to check if people think and act differently inside and outside of their in-group.

III. Theoretical Framework

Figure 1 shows the theoretical framework. Here, we rely on the theory of reasoned action. However, in order to check the different patterns of attitude and subjective norm among personal relationship classifications, it is necessary to measure responses separately by personal relationship types. In addition, the survey was conducted in Japan, China, and Taiwan, which are all considered to be group-oriented countries. So, it is possible to analyze by both personal relationship types and by country. Comparison of the survey data can clarify guidelines on how to use the reasoned action model in group-oriented countries. In the following section, research design and hypotheses are explained.
IV. Research Design and Hypotheses

1. Personal Relationship Classification

A survey was conducted in Japan, China, and Taiwan during November 2014. 300 samples from each country for a total of 900 samples were collected. Each respondent was asked to answer the following questions.

Q0: Your friend is seriously ill. How much of your money will you spend to help your friend? Here, you are supposed to have 3 million Japanese yen (100,000 Renminbi in China and 1 million TND in Taiwan).

The amount of money that the respondent answered was transferred into a ratio since currency units differ by country. This support ratio represents how strongly each respondent wants to help their friend, and is set as the dependent variable in the theory of reasoned action model.

It should be noted that when respondents answered questions, they were instructed to imagine their “friend” as classified below, in reference to Fiske (1991). As shown below, the relationship between a respondent and a “friend” gets weaker going from type 1 to type 4. The 300 samples of each country were divided into these 4 classifications.

1. Very intimate friend, you share about personal problems with your friend.
2. Good friend, you and your friend hang out or travel alone together.
3. Ordinary friend, you and your friend hang out with other friends.
4. You know your friend’s name and talk to each other.

In the theory of reasoned action, attitude and social norm for intention are required to be
measured. So, independent variables are measured by the following questions. Because the dependent variable is “support ratio” in this survey, attitude toward support ratio can be measured by the intention of making a more close relationship with the friend. And social norm toward support ratio can be measured by subjective norm between the respondent and the other party. These questions reflect “MIAN” in group-oriented country like Japan, China, and Taiwan.

Measurement of attitude toward the other party:
Q1: Sometimes, you offer to pay for your friend in order to maintain your relationship with them.
Q2: You will ask for your friend’s help if you have any trouble with money.

Measurement of subjective norm:
Q3: You would be anxious if your friend found out that your watch is just an imitation of a luxury brand.
Q4: You suffer from feelings of inferiority if the car and house you own are inferior to your friend’s.
Q5: You want to show off to your friend.
Q6: You pretend to your friend that you are an expert in an area and know all the answers.
Q7: You sometimes tell your friend that everything is all right, even if you have some problems with what your friend is asking about.

2. Hypotheses

1) Effectiveness of personal relationship classification:

As explained above, if one perceives more intimacy with a friend (or the closer a relationship becomes), the higher the support ratio is likely to be. This tendency should be the same in both group-oriented countries and in individualistic countries. Though Triandis (1995) states that there are fewer in-groups in group-oriented countries and relationships within an in-group are more homogeneous compared to individualistic countries, there could be more minute classification in group-oriented countries. Among three countries, according to Triandis, Japan is the least group-oriented country and China is the most group-oriented country. Thus, comparing the three countries’ data with each other, we can test the following hypotheses.

**Hypothesis 1**: The closer the relationship with the friend, the higher the support ratio will be.

**Hypothesis 2**: Japan has the most simple classification structure, while China has the most complex classification structure.

2) The structure of independent factors: attitude and subjective norm

In the theory of reasoned action, attitude and subjective norm are independent factors. If one increases the support ratio, it would make the friend more pleased. This means that a respondent’s attitude can be measured by how eager the respondent is to shorten their psychological distance from their friend. Similarly, subjective norm can be measured by what characteristics of relationship exist between the respondent and the friend. How these factors
differ by country and by type of relationship with the friend are examined.

The collected data concerning psychological distance and characteristics of relationship between the two parties were analyzed using factor analysis, and estimated factor scores were compared by each country and personal relationship type. The result was tested using the following hypotheses.

**Hypothesis 3**: Factor score concerning MIAN (face) is relatively large for a weaker personal relationship (= further psychological distance) as compared to a stronger personal relationship (= closer psychological distance). This is because one feels more pressure when the distance of the two is further apart.

**Hypothesis 4**: Factor score concerning expectations for a stronger relationship is relatively large for a stronger personal relationship (= closer psychological distance) as compared to a weaker personal relationship (= further psychological distance).

**Hypothesis 5**: The classification of “friend” is more precise in China than in Japan. This is because group-oriented tendency is stronger in China.

3) The fitness of reasoned action model:

Overall, support ratio (= intention) is expected to be explained by factors concerning MIAN (=social norm) and attitude toward the friend. Several hypotheses can be derived about estimated parameters.

**Hypothesis 6**: The reasoned action model is statistically supported.

**Hypothesis 7**: The estimated parameter of the path from MIAN factor to the support ratio is negative, which means larger MIAN suppresses the relationship.

**Hypothesis 8**: The estimated parameter of the path from attitude to the support ratio is positive, which means stronger attitude promotes intimacy of the two parties.

V. Results and Analysis

1. Is Classification of Personal Relationship Effective?

Figure 2 shows that the shorter the psychological distance between the two, the higher the support ratio is. It should be noted that this relation works in every country, which means that personal relationship classification is a very important factor to explain how much money respondents wish to spend for others. This supports hypothesis 1.

However, as expected, how to classify friends differs by country. Investigating classification patterns more carefully, we can find more classifications that are statistically significant in China as compared to those in Japan. Table 1 shows the results of the statistical test: differences in the mean of the support ratio among personal relationship types. The difference between type 3 and type 4 is statistically significant in China and Taiwan, but not significant in Japan. This supports hypothesis 2. In Japan, China, and Taiwan, people seem to think that type 1 and type 2 are included in the same in-group. On the other hand, though type 3 and type 4 are the same out-group in Japan, they are considered as different out-groups in China and
Taiwan. It seems interesting that each country has their own personal classification patterns. This means that the definition of “friend” is different from country to country even in group-oriented countries. The level of support ratio is highest in China and lowest in Japan, and Taiwan is in between the two. This seems related to each country’s strength of collectivism. This indicates that care should be exercised when making a survey questionnaire about social relationships.

2. What Are Each Country’s Characteristics of Perception of Personal Relationships?

In this section, we investigate the structure of attitude and subjective norm regarding the friend. Data was analyzed using factor analysis. Two factors were extracted by judging the calculated eigenvalues, and about 55% of variance was explained by the two factors. Table 2 shows factor loadings after varimax rotation and factors were named the “MIAN factor” and the “relationship factor” respectively by judging factor loadings. For example, the first factor (MIAN factor) is strongly correlated with questions like Q3, “You would be anxious if your friend found out that your watch is just an imitation of a luxury brand,” and Q4, “You suffer

Table 1. Support Ratio and p-value

<table>
<thead>
<tr>
<th>Support ratio</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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<tbody>
<tr>
<td>Japan</td>
<td>0.18</td>
<td>0.15</td>
<td>0.03</td>
<td>0.03</td>
</tr>
<tr>
<td>China</td>
<td>0.42</td>
<td>0.39</td>
<td>0.26</td>
<td>0.10</td>
</tr>
<tr>
<td>Taiwan</td>
<td>0.26</td>
<td>0.24</td>
<td>0.12</td>
<td>0.05</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>p-value</th>
<th>1~2</th>
<th>2~3</th>
<th>3~4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>0.587</td>
<td>0.001</td>
<td>0.842</td>
</tr>
<tr>
<td>China</td>
<td>0.388</td>
<td>0.003</td>
<td>0.000</td>
</tr>
<tr>
<td>Taiwan</td>
<td>0.686</td>
<td>0.001</td>
<td>0.004</td>
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from feelings of inferiority if the car and house you own are inferior to your friend’s,” which are negative face. Similarly, the second factor (relationship factor) is strongly correlated with

<table>
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<th>Variables</th>
<th>Attitude for relationship</th>
<th>MIAN (Face)</th>
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<tr>
<td>Q1</td>
<td>0.797</td>
<td>0.227</td>
</tr>
<tr>
<td>Q2</td>
<td>0.808</td>
<td>0.365</td>
</tr>
<tr>
<td>Q3</td>
<td>0.270</td>
<td>0.679</td>
</tr>
<tr>
<td>Q4</td>
<td>0.270</td>
<td>0.674</td>
</tr>
<tr>
<td>Q5</td>
<td>0.227</td>
<td>0.619</td>
</tr>
<tr>
<td>Q6</td>
<td>0.797</td>
<td>0.107</td>
</tr>
<tr>
<td>Q7</td>
<td>0.788</td>
<td>0.127</td>
</tr>
</tbody>
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Note: J: Japan  C: China  T: Taiwan  1 to 4: personal relationship type 1 to 4
Q1, “Sometimes, you offer to pay for your friend in order to maintain your relationship with them,” and Q2 “You will ask for your friend’s help if you have any trouble with money.”

Figure 3 is a perceptual map of personal relationships. The mean of estimated factor scores were plotted by country and personal relationship type. The horizontal axis represents the MIAN factor and the vertical axis represents the relationship factor. If a respondent’s factor score is positively large on the horizontal axis, the psychological distance between the respondent and the other party is further, and if the respondent’s factor score is negatively large, psychological distance is closer. Similarly, if a respondent’s factor score is positively large on the vertical axis, the psychological distance between the respondent and the other party is closer, and if the respondent’s factor score is negatively large, psychological distance is further.

From figure 3, we can observe several important characteristics. First, the configuration of personal relationship types for each country seems similar. Second, type 1 and type 2 of each country are positioned closely, which means that psychological distance between respondents and the friend is close. This implies that type 1 and type 2 construct an in-group. On the other hand, type 3 and type 4 of each country are positioned relatively closely and psychological distance between respondents and the friend is further, which implies that type 3 and type 4 construct an out-group. Third, the distance from type 2 and type 3 is statistically significant in each country except Japan (refer to table 3). Japan seems to be unique among these three countries because all differences among personal relationship types are not statistically significant excluding the difference between type 2 and type 4 along the vertical axis. And finally, though the configuration pattern of each country is similar, the location of each country differs from each other. This is statistically tested and the result is shown in table 4. It should be noted that all of the locations are significantly different along the vertical (= relationship factor) axis. Overall, hypothesis 3, 4, and 5 are statistically supported.

3. Is the theory of reasoned action useful to explain ‘intention’ in group-oriented countries?

Figure 4 shows the path diagram of the structural equation modeling. Table 5 shows the
estimated parameters and all parameters are statistically significant at 0.001. The overall model fit is fairly good: GFI=0.986, AGFI=0.971, RMSEA=0.046.

Parameters of the path from relationship factor and MIAN (face) factor to support ratio are 0.755 and -0.301 respectively. The sign of directions are in line with hypothesis expectations. In this case, the relationship factor is more important to decide the support ratio. Overall, hypothesis 6, 7, and 8 can be considered to be supported. Estimated parameters of each country are presented in the appendix. It is interesting to note that if the model is adapted separately by country, some of the parameters become statistically not significant—especially in Japan as expected.

VI. Conclusion and Implication

This paper empirically investigated the usefulness of the theory of reasoned action in Japan, China, and Taiwan—all of which are thought of as group-oriented countries. To
summarize, the empirical results are as follows:

1. In all countries (Japan, China, and Taiwan), respondents were more eager to support their friend if the respondent wanted to have a better relationship with this friend, and the relationship between them was less suppressed by the MIAN (face) factor.

2. The fit of the reasoned action model was quite good. This is because all data was measured separately by each personal relationship type, which represents psychological distance of the respondent and the friend.

3. The strength of personal relationship and subjective norm differs by country. Comparing the mean factor score, the order of personal relationship factors are China > Taiwan > Japan. This means that the suppression of social norms gets stronger and the number of classifications of personal relationship gets larger as the culture of the country is more group-oriented.

4. What to say and what to do are deeply dependent on the personal relationship in group-oriented countries. Especially in China, intention and behavior for people belonging to the in-group is quite different as compared to people in the out-group. In contrast, there are relatively smaller differences in Japan, especially in terms of the MIAN (face) aspect.

The theory of reasoned action is considered to have superior characteristics in terms of diagnostic information and predictive ability. It also seems attractive that models based on the theory have two clearly different independent factors, which are attitude and social norm for the object. Because of this feature, this model can be applied to various situations in which culture and social norm play an important role in individual decision-making. However, there is little empirical research in terms of how to use this model properly.

This research reveals that what to say and what to do are quite different under strong group-orientation. As such, much more care should be exercised to collect data, especially in circumstances where social norms can contradict individual attitudes for an object. It is interesting that people tend to communicate their true intentions only with people belonging to the same in-group, and may merely express what is considered socially acceptable to people belonging to an out-group. Therefore, it is unwise to simply adapt statistical models with normally collected survey data.

There is empirical support here that coincides with the observation of Chinese consumer’s anti-Japanese feelings as found in Furukawa (2013). That is, Chinese people often speak ill of Japanese branded product in public even if they like and own the product themselves.

When doing marketing research in group-oriented countries, marketing researchers should at least clarify the possible response bias when respondents are confused whether or not the problem concerns their in-group or out-group. And, it is important to keep in mind that it is very difficult to collect data as an in-group member, as marketing researchers usually belong to an out-group.


