EXAMINING THE ROLE OF HYBRID PRODUCTS IN A CONSUMER ANIMOSITY SETTING

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ABSTRACT
This paper aims to examine the effects of animosity on consumers’ willingness to buy hybrid products (i.e. products that involve affiliations of two or more countries - such as branded in Japan but made in China). By examining the Chinese consumers’ animosity towards the Japanese, the study’s findings revealed a high level of animosity present that resulted in the Chinese consumers’ unwillingness to buy Japanese products. More importantly, results showed that the Chinese consumers are not any more receptive to hybrid products as such domestic affiliations have not diluted the animosity.

KEYWORDS: Country-of-origin, Consumer animosity, Consumer ethnocentrism, Hybrid products
INTRODUCTION

The concept of consumer animosity, drawn from sociology, is defined as remnants of antipathy (anger) related to previous or ongoing political, military, economic, or diplomatic events that will affect consumers’ purchase behaviour (Klein et al., 1998). These antipathies tend to be country-specific and, in many instances, would lead to consumers being reluctant to purchase or even boycott products from the country that they have animosity towards (Klein & Ettenson, 1999; Klein, 2002). While consumers’ reluctance to purchase foreign products from countries that they have animosity towards is clearly evident in the current literature, little is known about consumers’ attitudes towards hybrid products. As such, this paper introduces a new construct (i.e. willingness to buy hybrid products) to the animosity model to determine if animositic consumers would be more willing to accept hybrid products where the animositic tendencies towards foreign countries in question can be negated by the products’ domestic affiliations.

RELEVANT LITERATURE, CONCEPTUAL DEVELOPMENT AND HYPOTHESES

There are substantive amounts of literature written in the area of Country-of-Origin (COO) studies and it has clearly resulted from the recognition of its implication in our marketplace. The “made-in” cue does not only serve as an informational cue for consumers; marketers are also taking advantage of countries’ positive image to indicate their product quality (Bilkey & Nes, 1982; Johansson et al., 1985; Maheswaran, 1994). Similarly, researchers have found and demonstrated a vast variety of factors, such as consumers’ nationalism, dogmatism, xenophobia, ethnocentrism, and among many others, that will influence consumers’ behaviours and purchase decisions regarding local and foreign products (Shimp & Sharma, 1987; Han, 1988; Wall & Heslop, 1991; Wang & Chen, 2004).

In more recent COO research, Klein et al. (1998) have identified consumer animosity as a vital marketing issue that had been overlooked by the literature. As they have asserted, if countries can lead up to armed conflicts or atrocities because of the tensions and
hostilities between them, it is reasonable to suggest that these animositic tendencies can also be reflected in the marketplace. This suggestion has indeed proved to have astonishingly serious implications with the initial test of the animosity model (Klein et al., 1998) and many subsequent research studies (Witkowski, 2000; Shin, 2001; Nijssen & Douglas, 2004; Shimp, et al., 2004; Ang et al., 2004; Shoham et al., 2006, Riefler & Diamantopoulos, 2007) demonstrating the effects and seriousness of animosity on consumers’ purchase decisions and the global economy.

With the rapid phenomenon of globalisation and increasing growth in international trade, businesses are operating in immense competition and challenge. Marketers have clearly identified the need to create competitive advantages in order to stay ahead of their competitors. As such, companies have began sourcing for cheaper locations to develop or manufacture their products to increase their profits (Erickson et al., 1984; Li et al., 2000; Andersen & Chao, 2003). At the same time, companies are also looking for countries that have a strong reputation for quality, expertise or even technological advancement that they are able to associate their products with (Han & Terpstra, 1988; Chao, 1993; Iyer & Kalita, 1997; Phau & Prendergast, 2000). This resulted in the emergence of hybrid products that may have components derived from several countries all over the world. As such, the distinction of products being foreign or locally made became much more complicated for consumers. Similarly, researchers and marketers are also finding it difficult to study consumers’ underlying motivations in such market conditions (Samiee, 1994; Li & Dant, 1997).

Extending on Klein et al.’s (1998) animosity model, a conceptual model introducing a new construct “consumers’ willingness to buy hybrid products” is developed (see Figure 1) with the following hypotheses:

H1- Consumer Animosity will have a direct and negative impact on the Willingness to Buy Japanese Products, if Product Judgments and Consumer Ethnocentrism are held constant.
H₂ - Consumer Animosity will have a direct and negative impact on the Willingness to Buy Hybrid Products, if Product Judgments and Consumer Ethnocentrism are held constant.

H₃ - The negative magnitude of Consumer Animosity on Willingness to Buy Hybrid Products will be lower than Japanese Products.

The Japanese occupation of China in World War II, and more recently, the territorial disputes, political differences and the Japanese government’s attempt to distort or deny previous war-time wrongdoings has resulted in long-standing tensions between China and Japan (Beehner, 2005). Given the background and relationship between the two countries, they become an ideal setting for the examination of the animosity model.

METHODOLOGY AND ANALYSIS

Data with a sample size of 435 were collected in Nanjing, China, with the assistance of a reputable Chinese university. Adopting Sharma et al.’s (1995) sampling method to achieve a diverse demographic representation, half of the data were administered with the University students and the other half were administered with one of the parents of those students who have participated in the survey.

The study adopting established scales from Klein et al.’s (1998) empirical examination of the animosity model has been slightly modified to better cater for the study. The analysis of the study consists of both traditional techniques and Structural Equation Modelling (SEM) techniques. The reliability of the constructs was determined based on Cronbach’s alpha (α) and the discriminant validity of the measurement models, as well as the fit of their multi-indicator (-item) scales, were subjected to latent variable SEM analysis (Jöreskog & Sörbom, 1993). Using Maximum Likelihood (ML) estimation as the estimation procedure, the study adopted the prescribed logical SEM procedure that begin in the order of model specification, model identification, parameter estimation, model testing and, finally, model modification/re-specification (Hair, Anderson, Tatham & Black, 1998; Schumacker & Lomax, 1996). Confirmatory Factor Analysis (CFA) and
goodness-of-fit were assessed at single-factor measurement model level before a full measurement model was tested. Finally, the study’s proposed structural model with all the hypothesised causal pathways were established for interpretations (Schumacker & Lomax, 1996; Holmes-Smith, Coote & Cunningham, 2004).

RESULTS


Subsequently, a full measurement model was tested to ensure discriminant validity among them. Discriminant validity was evidenced in the full measurement model with all items significantly related ($p < .001$) to their respective constructs with adequate factor loadings, therefore allowing the development of a full structural equation model to test the study’s hypotheses. Table 1 provides a summary of the results for the single-construct measurement model as well as the full measurement model.

<table>
<thead>
<tr>
<th>Constructs</th>
<th>No. of Item</th>
<th>$\alpha$</th>
<th>Mean</th>
<th>$\chi^2$</th>
<th>df</th>
<th>$p$-value</th>
<th>RMSEA</th>
<th>SRMR</th>
<th>GFI</th>
<th>AGFI</th>
<th>TLI</th>
<th>CFI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Judgments</td>
<td>6</td>
<td>.826</td>
<td>4.988</td>
<td>14.65</td>
<td>3</td>
<td>.101</td>
<td>.038</td>
<td>.023</td>
<td>.989</td>
<td>.974</td>
<td>.988</td>
<td>.993</td>
</tr>
<tr>
<td>Consumer Ethnocentrism</td>
<td>5</td>
<td>.839</td>
<td>2.691</td>
<td>15.90</td>
<td>4</td>
<td>.053*</td>
<td>0.71</td>
<td>.027</td>
<td>.984</td>
<td>.953</td>
<td>.975</td>
<td>.988</td>
</tr>
<tr>
<td>Willingness to Buy (Japan)</td>
<td>6</td>
<td>.857</td>
<td>2.887</td>
<td>3.221</td>
<td>9</td>
<td>.955</td>
<td>.000</td>
<td>.009</td>
<td>.998</td>
<td>.994</td>
<td>1.01</td>
<td>1.00</td>
</tr>
</tbody>
</table>
The table above shows the results of the structural equation modeling analysis. The table includes the following columns: the type of animosity (Hybrid, War, Economic, Animosity), the number of items (2, 4, 2), the factor loadings (0.727, 0.857, 0.693), the mean (6.021, 5.256, 5.343), and the variance (0.000, 0.008, 0.000). The full measurement model presented an adequate level of fit, with $\chi^2 (416) = 663.299$, $p < .001$, RMSEA = 0.037, SRMR = 0.059, GFI = 0.909, AGFI = 0.892, TLI = 0.952, and CFI = 0.957. The structural model with standardised parameter estimates is presented in Figure 1.

The test of the hypotheses in the structural model indicated both the hypothesised pathways to be significant at $p < .001$. The path from Consumer Animosity to Willingness to Buy Japanese Products was significant with a factor coefficient of -0.45 while a significant factor coefficient of -0.34 was reported for the path from Consumer Animosity to Willingness to Buy Japanese Products. These results thus indicate that Consumer Animosity is negatively influencing both Willingness to Buy constructs and hence both H1 and H2 are accepted.

To test H3, a test of equivalence of the Consumer Animosity construct to Willingness to Buy Hybrid Products and to Willingness to Buy Japanese products was conducted. The test is done by comparing an unconstrained model where the parameter estimates

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*Table: Structural Equation Modeling Results*

<table>
<thead>
<tr>
<th>Construct</th>
<th>Number of Items</th>
<th>Factor Loadings</th>
<th>Mean</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hybrid</td>
<td>2</td>
<td>0.727</td>
<td>6.021</td>
<td>0.000</td>
</tr>
<tr>
<td>War Animosity</td>
<td>4</td>
<td>0.857</td>
<td>5.256</td>
<td>0.000</td>
</tr>
<tr>
<td>Economic Animosity</td>
<td>2</td>
<td>0.693</td>
<td>5.343</td>
<td>0.000</td>
</tr>
<tr>
<td>Animosity</td>
<td>2</td>
<td>0.408</td>
<td>1.792</td>
<td>0.008</td>
</tr>
<tr>
<td>Full Measurement</td>
<td>-</td>
<td>0.002</td>
<td>416</td>
<td>0.053</td>
</tr>
</tbody>
</table>

---

*a* The data presented non-normality with multivariate kurtosis of 23.211, hence Bollen-Stine $p$-value is recorded (Bollen & Stine, 1992).

*b* The data presented non-normality with multivariate kurtosis of 9.949, hence Bollen-Stine $p$-value is recorded.

*c* Re-specification of model due to misfit in the higher-order animosity construct resulted in the removal of one item from the initial 3-item scale.

*d* The data presented non-normality with multivariate kurtosis of 72.793, hence Bollen-Stine $p$-value is recorded.

Following the establishment of the measurement models, pathways between the constructs were specified in the full structural model to test the study’s hypotheses. The model presented an adequate level of fit, $\chi^2 (418) = 663.299$, $p < .001$, RMSEA = 0.037, SRMR = 0.059, GFI = 0.909, AGFI = 0.892, TLI = 0.952 and CFI = 0.957. The structural model with standardised parameter estimates is presented in Figure 1.
between Consumer Animosity to Willingness to Buy Hybrid Products and Willingness to Buy Japanese products are freed, to a constrained model where the parameter estimates had its regression weights fixed. The results of the unconstrained model showed $\chi^2 (418) = 663.299$ and the constrained model to be $\chi^2 (419) = 663.412$. While it appears that the negative magnitude of Consumer Animosity on Willingness to Buy Hybrid Products (-.34) is indeed lower than Willingness to Buy Japanese products (-.45), the results of the $\chi^2$ difference test indicated $\Delta \chi^2 (1) = .113$; which is not significant. Hence, this suggests that respondents do not appear to differentiate between buying Japanese products and hybrid products. As such, H3 is not being supported.

This finding may be interpreted that the anti-Japanese sentiment was so strong that respondents did not want products that had any association with Japan, regardless of whether it was directly or indirectly related to the Japanese. This suggests that they do not see any distinction between Japanese products and hybrid products as long as there are elements of the Japanese involved, and this in spite of hybrid products being identified as partly Chinese.

**CONCLUSION**

The most significant marketing implication that the study has offered is that when consumers’ animosity towards a specific country is extremely high, products (regardless of being fully or partially associated with the offending country) would not be accepted or tolerated. As such, companies from offending countries should consider downplaying their business activities, or focus less on the “made-in” cue in the short-term, and perhaps even consider alternative markets if animosity effects continue to remain strong after a long period of time. It is unlikely to be effective even if managers from offending countries are considering focusing or promoting their products based on their speciality or superiority in any other attributes (such as price and quality). However, if companies choose to enter a lucrative but highly animosistic foreign market by attempting to introduce hybrid products, planning on advertising and branding strategies, such as whether to have standardised or a localised campaign, should be carefully considered.
Figure 1 – Conceptual Model (Full Structural Model)

Notes: All coefficients are standardised. Willingness to Buy is abbreviated with WTB. All path coefficients are significant at p < .001 (except for dotted paths - which are non-significant.)
References


Phau, I. & Prendergast, G. 2000, ‘Conceptualizing the country of origin of brand’, *Journal of Marketing Communications*, vol. 6, iss. 3, p. 159.


