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Product Evaluation by Chinese Consumers: An Intra-National Comparison

Charles Chin Chiu Tam, Greg Elliott, Macquarie University

Abstract

A fundamental premise which underpins much of the study of international marketing and international consumer behaviour, is that there exist significant differences between the domestic and foreign markets. Further, the foreign country is frequently treated latter as a single, homogeneous entity, in that the research is commonly reported at the level of the foreign country. This paper explores the question of whether, or not, there exist significant differences in the product evaluation processes among Chinese consumers from different geographic regions within China. Results from a survey of consumers in Hong Kong, Shanghai and Chongqing indicate that, indeed, there exist significant differences in attitudes towards country of origin, brand, price, products and purchase intentions.

Introduction

The field of international marketing is, by now, a topic which has been extensively researched and documented. An underlying premise of international marketing is that, significant differences exist between marketing in the “home” and “foreign” countries, typically based on differences in the behaviour of buyers or consumers and/or selling firms. (After all, if no differences existed, the study of international marketing would be largely superfluous.) A principal focus of research in this field is product evaluation processes and choice behaviours. Typically, the focus of international marketing studies is at the level of the foreign country-as-a-whole, in which results are reported at the level of the foreign country (or countries) and buyers in foreign countries are implicitly treated as a single, homogeneous group. For many relatively homogeneous countries, this may be a safe assumption. For some countries, however, this may be misleading. Thus, for large and or culturally diverse country, such as China, the implicit assumption of homogeneity in consumer behaviour may be erroneous. This study explores the question as to whether significant differences exist in the product evaluation processes between consumers in different geographic regions in China. Of course, the alternative proposition that there are significant differences in consumer behaviour based on geographical differences is neither novel nor radical. It is however, a question which is still relatively ignored in the international marketing literature.

Product Evaluation Processes

Over the past 30 years, a great deal of research has been done in studying the role and influence of information cues used by consumers in evaluating products (Schooler, 1965; Olson and Jacoby, 1972; Szybillo and Jacoby, 1974; Zeithaml, 1988; Tellis and Gaeth, 1990; Samiee, 1994; Ahmed and d’Astous, 1996; Li, Fu and Murray, 1997; Erevelles, Roy and Vargo, 1999). Consumers often judge the quality of a product or service on the basis of multiple informational cues (Bednall, Schiffman, Watson, and Kanuk, 1997). Fundamentally, information cues can be categorized into two major types: intrinsic cues and extrinsic cues (Olson et al., 1972; Szybillo et al., 1974; Jacob, Szybillo, and Schach, 1977). Intrinsic cues are information directly associated with the physical characteristics of a product such as
product design, color, size, or aroma (Bednall et al., 1997). On the other hand, extrinsic cues are information indirectly associated with a physical product such as country-of-origin, brand name, price, warranty and word-of-mouth. These intrinsic and extrinsic cues, either jointly or separately, provide the basis for the perceptions of product and service quality (Bednall et al., 1997). Because of the multiplicity of intrinsic and extrinsic cues, the task of inferring or predicting consumers’ evaluation processes and predicting their outcomes is thus often difficult and unreliable. Despite these challenges, the current research seeks to develop a product evaluation model which incorporates, inter alia, country of origin, brand and price. The potential influence of these variables on consumers’ judgements has been extensively researched and a brief review of this literature is discussed below.

**Country of Origin**

One widely discussed product cue is that of “country-of-origin” (COO hereafter). When consumers make use of COO as an information cue to assess the quality of a product and ultimately affect the purchase decision for that product, this phenomenon is referred to as the COO effect. Since Schooler’s pioneering (1965) work, many studies have demonstrated that consumers have different perceptions of products made in different countries. In research on Chinese consumers, Zhang (1996) found that products from Japan and the US were preferred to those from South Korea. COO was thus identified as a significant factor in the product evaluation process of Chinese consumers. While COO is generally found to be a significant influence in consumers’ decision-making, its importance relative to other extrinsic cues, such as price and brand, is less conclusive (Okechuku, 1994; Lee and Ganesh, 1999; Elliott and Acharya, 2003; Hamin and Elliott, 2006).

**Brand Name**

A second commonly used extrinsic cue is brand name. Consumers form impressions of a brand name which is a composite of elements including product knowledge, packaging, advertising and pricing (Ahmed et al., 1996). An important function of brand name is to minimize the information searching costs (Zeithaml, 1988). While brand name is undoubtedly important (Okechuku, 1994), its relative importance compared with COO is the subject of conflicting research findings. A number of studies (Tse and Gorn, 1992; Andaleeb, 1995; Han and Qualls, 1985; Nebenzahl and Jaffee, 1996; Hulland, 1999) suggest that COO can be more influential than brand. However, the effect of brand image was found to be stronger than that of country image in other studies (Lee et al., 1999; Elliott et al., 2003; Hamin et al., 2006).

**Price Level**

Price is an obviously important extrinsic cue which has been studied extensively in product evaluation research (Erickson and Johny, 1985; Erevelles et al., 1999; Yoon and Kijewski, 1997). Price has two opposite implications to consumers in terms of risk taking (Erickson et al., 1985). The first implication is that consumers may want to buy a product of higher price because of less risk expected with the performance of a more expensive product: “price seeking behaviour”, (Leavitt, 1954; Tellis et al., 1990). The second implication is that consumers may be exposed to a greater financial risk for buying a more expensive product. Higher price will eventually become a greater barrier to product purchase. In “price aversion behaviour”, consumers will choose the lowest-priced brand to minimize immediate costs. (Kahneman and Tversky, 1979; Tellis et al., 1990) Empirical evidence on this question is
mixed. Owing to the divergent results, it has been argued that the price-quality relationship may be product dependent and culture specific (Erevelles et al., 1999).

**Inter-Regional Differences**

While the questions of product evaluation processes and the relative influence of COO, brand and price have received substantial attention in the international marketing literature, an issue which has gone relatively undiscussed is the question of inter-regional (or ‘intra-national’) differences in product evaluation. In this context, the dominant approach in studying international consumer behaviour is to study aggregate differences between the home and foreign markets in an effort to uncover what, if any, changes need to be made in marketing activities in foreign countries. This is, of course, sensible but it ignores the potential problem that, in large and heterogeneous foreign countries and markets, significant differences may exist between regions. China is one such country and the issue is therefore to investigate if significant differences exist in the product evaluation processes of consumers in different regional markets. This question could be regarded as a “no-brainer” (sic.) by some academics and practising marketers who may argue that, of course, international marketers would never presume that foreign countries are homogeneous national markets. While this may be true in practice, it is equally valid to assert that much of the discussion of international consumer behaviour is focussed on differences between countries with little discussion of (geographical) differences within. Beyond this question is also the issue of whether, or not, international marketing activities are resulting in “convergence” (e.g. Farley and Lehmann, 1992; Statt, 1997; Levitt, 1983) or “divergence” (e.g. Boddewyn, 1981; Fisher, 1984; Fournis, 1962) in international consumer behaviour. In other words, are cultural differences increasing or not and are such differences reflected in increasing differences in consumer buying behaviour? The literature in support of both positions is extensive.

**The Current Study**

**Objective**

The objective of the current study therefore is to examine how consumers in different regional markets in China evaluate the extrinsic cues of COO, brand and price in the formation of their product preferences and purchase intentions. This question is expressed in the following hypothesis.

“There are differences between Chinese groups in their product evaluation characteristics.”

Product evaluation characteristics are described by the variables in the product evaluation base model, namely total COO attitudes, total brand attitudes, total price attitudes, total perceived product quality, total product attitudes, and purchase intentions. Therefore, H1 can be divided into the following six sub-hypotheses.

H1: There are differences between Chinese groups in their total COO attitudes.
H2: There are differences between Chinese groups in their total brand attitudes.
H3: There are differences between Chinese groups in their total price attitudes.
H4: There are differences between Chinese groups in their total perceived product quality.
H5: There are differences between Chinese groups in their total product attitudes.
H6: There are differences between Chinese groups in their purchase intentions.
(Note that the terms “total COO attitudes”, “total brand attitudes”, “total price attitudes”, “total perceived product quality” and “total product attitudes” in the above hypotheses signify that multiple item scales were used to construct composite measures.)

Methodology

To answer these (and other) research questions, sample survey research was conducted in three Chinese regional locations, namely, Hong Kong (SAR), Shanghai and Chongqing. These three locations were chosen as representative of different location along a “Traditional/Chinese-Modern/Western” continuum. It was felt that these three locations would provide a sufficiently wide range of responses as to answer whether, or not, there exists any significant differences in the product evaluation behaviours of consumers in these three diverse locations. The hypothetical product chosen was domestic air conditioners, of Samsung (South Korea) and Midea (China) brands, made in China or South Korea and at high and low price levels. Both brands of air-conditioners are available in all three Chinese locations. The choice of domestic air-conditioners was made carefully as the study sought to focus on a relatively high-involvement product, but also one which was within the purchasing power of a broad cross-section of Chinese consumers. Similar published studies have used cars (e.g. d’Astous and Ahmed, 1992; Schaefer, 1997) and televisions (e.g. Andaleeb, 1995; Kim and Pysarchik, 2000; Hamin et al., 2006), but, in this case, it was felt that cars would not be within the purchasing power of the majority of respondents. Conversely, televisions are probably almost universal in China which would have made the purchase scenarios unrealistic (eg a high priced Midea television made in Korea). A further reason to choose air-conditioners is the importance of selecting a gender-neutral product (Hong and Toner, 1989). The limitations imposed by such artificial purchase scenarios are, however, acknowledged.

Sample size

In order to infer significant differences between each of the factorial combinations of hypothetical products, a minimum quota of thirty respondents per cell was specified. A total of 795 responses were obtained by the combination quota/convenience sampling. Interviews were conducted face-to-face in suburban shopping malls in each of the three regional Chinese cities, namely, Shanghai, Chongqing and Hong Kong.

Analysis

For H1 to H6, the six product evaluation variables are tested for statistically significant differences among the three Chinese groups. ANOVA tests were carried out with the six product evaluation variables tested as a dependent variable with the Chinese groups treated as the independent variable. Testing for each dependent variable separately raises the possibility of increased risk of Type I error, which can be reduced by setting a more stringent alpha value using Bonferroni adjustment. The normal alpha value (normally 0.05) is divided by the number of ANOVA tests (six) to give a p value of 0.008.

1 The transformations of the dependent variables are summarized as follows:
1. Total COO attitude = COO attitude (quality) + COO attitude (technology) + COO attitude (reputation)
2. Total brand attitude = brand attitude (quality) + brand attitude (technology) + brand attitude (reputation)
3. Total price attitude = price attitude (quality) + price attitude (technology) + price attitude (reputation)
4. Total perceived product quality = perceived quality (innovation) + perceived quality (design) + perceive quality (prestige) + perceived quality (workmanship)
5. Total product attitude = overall rating + overall confidence
Chronbach’ alpha ranged from .84 to .89 for all composite indices, indicating satisfactory reliability.
Results

The ANOVA tests indicate that there are overall significant differences among the three groups for all the hypotheses at a level of 0.05. Therefore, the hypothesis that: “There are differences between Chinese groups in their product evaluation characteristics” is supported.

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Dependent Variable</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig. p value</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>CITY</td>
<td>Total COO attitude</td>
<td>240.431</td>
<td>2</td>
<td>120.216</td>
<td>34.314</td>
<td>.000</td>
<td>.080</td>
</tr>
<tr>
<td>CITY</td>
<td>Total brand attitude</td>
<td>203.903</td>
<td>2</td>
<td>101.951</td>
<td>26.153</td>
<td>.000</td>
<td>.063</td>
</tr>
<tr>
<td>CITY</td>
<td>Total price attitude</td>
<td>61.984</td>
<td>2</td>
<td>30.992</td>
<td>4.798</td>
<td>.008</td>
<td>.012</td>
</tr>
<tr>
<td>CITY</td>
<td>Total perceived product quality</td>
<td>537.641</td>
<td>2</td>
<td>268.821</td>
<td>40.837</td>
<td>.000</td>
<td>.094</td>
</tr>
<tr>
<td>CITY</td>
<td>Total product attitude</td>
<td>112.442</td>
<td>2</td>
<td>56.221</td>
<td>35.449</td>
<td>.000</td>
<td>.082</td>
</tr>
<tr>
<td>CITY</td>
<td>Purchase intention</td>
<td>29.407</td>
<td>2</td>
<td>14.703</td>
<td>17.853</td>
<td>.000</td>
<td>.043</td>
</tr>
</tbody>
</table>

The post hoc analyses (not shown) further demonstrate that there are significant differences within each pair of groups except $H_3$ (SH – HK, HK - CQ) and $H_5$ (SH - CQ) (at p<.05).

Implications and Conclusions

From the above results, it can be concluded that there are significant differences among the three cities on the six product evaluation characteristics: total COO attitude, total brand attitude, total price attitude, total perceived product quality, total product attitude, and purchase intention. These results imply that it is therefore inappropriate to assume that customers in different Chinese regions will respond in a similar way to the same marketing program by making use of COO, branding, and pricing in a uniform way. Quality perceptions and attitudes towards a product could be very different in response to common national marketing tactics and strategies. A successful marketing program in one city may therefore not achieve similar results in another city. These results therefore imply, unsurprisingly, that China is a heterogeneous market. Beyond the process of product evaluation, it also seems likely that other types of consumer behaviour, such as information seeking and actual purchases may vary by regions as well.

Results show that the more developed cities, Hong Kong and Shanghai, tend to choose foreign air-conditioners. This contrasts with the tendency to buy local air-conditioners in the less developed city of Chongqing. In addition, both Hong Kong and Shanghai groups prefer Samsung air-conditioners. In contrast, the Chongqing group does not show a significant preference. Third, there is a general preference for high-priced air-conditioners in the three cities, presumably because less risk is expected with the performance of a more expensive product (Erickson et al., 1985) – “price-seeking” rather than the “price-aversion” (Kahneman et al., 1979; Tellis et al., 1990).

For marketing theorists, these results suggest two important conceptual implications. Firstly for international marketing scholars and practitioners, these results imply that international marketers should consider the possibility of intra-national or inter-regional differences in export markets; rather than confining themselves to exploring for gross differences between the domestic market and the foreign market-as-a-whole. Secondly, while there is a conspicuous trend in domestic marketing towards (geographic) “micro-marketing” these findings suggest that market segmentation based on geography within individual foreign markets is certainly worthy of closer investigation.
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