SEGMENTING THE COLLEGE STUDENT MARKET FOR "PUREBRED" VS. "HYBRID" AUTOMOBILES
ON THE BASIS OF POLITICAL ORIENTATIONS

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ABSTRACT

Hybrid products like automobiles, whose parts are produced in more than one country, are increasing. However, research on the acceptance is limited. In this study students, who will soon be prime consumers for such products, preferred purebred to hybrid automobiles. Purebreds were evaluated better by those students who were more locally oriented and more patriotic. However, these political traits did not influence their evaluation of the hybrid products.

BACKGROUND

The country of origin influences consumers' product evaluations. A great deal of research has substantiated that consumers' perceptions of product quality and their willingness to buy varies by the place where the product is made (Bilkey and Nes, 1982).

Now that researchers have established that country of origin can have an impact on consumers' product evaluations, it is no longer clear to those consumers where many products do in fact originate. The situation is complicated because many products are not made entirely in one country anymore. Instead, they are "hybrids", products which are "assembled in one country from parts produced in one or more other countries" (Czepiec and Cosman, 1983) or are manufactured in one country by a company whose "home" or headquarters is in another country (Seaton and Vogel, 1983). These products can be contrasted to "purebreds" in which there is only one country of headquarters, manufacture, and assembly.

Hybrid products are becoming more common. For example, Chrysler recently began importing cars which were assembled in Mexico with mostly American-made parts (Wall Street Journal, July 23, 1984). Ford, another American based company has also announced plans to build a Japanese designed automobile in Mexico (Wall Street Journal, January 11, 1983). Volkswagen manufactures its cars in West Germany, the corporate headquarters, as well as in the U.S., Mexico and Brazil.

Very little of the "Made In" research has taken into account that many of today's products are truly international in character. Instead, the studies are still based on the assumption that the products are made entirely in one country. Since hybrids have been largely ignored, no attempt has been made to distinguish among the variety of hybrids. Hybrid products, however, vary by the proportion of foreign parts they contain, and the number of different foreign firms which are represented.

However, it is important to operationalize the concept of hybrid products and to analyze how the meaning of "Made in..." changes when the product is no longer made entirely in one country. Some limited evidence suggests that consumers will react differently when they know where the product is produced versus the country in which the company headquarters are located. For example, Seaton and Vogel (1983) found that U.S. car buyers favorably evaluated domestically made cars while the U.S. was least favored as the country of corporate headquarters.

It is also important to study how evaluations of hybrid products are influenced by consumer characteristics. According to previous research, the following influence consumers' evaluations of product quality: consumers' perception of the country's level of economic development and its political system (Wang and Lamb, 1983); consumers' level of nationalism (Czepiec and Cosman, 1984; Bannister and Saunders, 1978); dogmatism (Anderson and Cunningham, 1972; and Bilkey and Nes, 1982) and concern with social status (Anderson and Cunningham, 1972). Other consumer psychological variables have also been strongly suggested as influencing the relationship between country of origin and product evaluation. These include the consumers' familiarity with the country of origin, their knowledge of foreign affairs, and their media exposure. However, no research has focused on the impact of these latter psychological variables on consumer's preference for foreign versus domestic products.

METHODOLOGY

The purpose of this paper is to measure college students' reactions to, and awareness of, a series of purebred and hybrid products. Specifically five purebred/hybrid conditions are set up for automobiles. The first is the purebred condition while the remaining four are alternate hybrid forms. The five conditions for automobiles are as follows: (1) automobiles manufactured entirely in the U.S. with all U.S. parts; (2) automobiles manufactured in the U.S. with mostly U.S. made parts; (3) automobiles manufactured in the U.S. with mostly foreign made parts; (4) automobiles manufactured in the U.S. with entirely foreign made parts; and (5) automobiles manufactured entirely abroad but sold under an American brand name.

This paper tests two hypotheses regarding the effects of (1) consumers' local versus international events orientation or "localism", and (2) the level of consumers' nationalism on their evaluations of these purebred/hybrid conditions. The hypotheses are as follows: H1: Higher levels of local versus international orientation will be associated with
higher preference levels for the purebred automobiles. H2: Higher levels of nationalism will be associated with higher preference levels for the purebred automobiles.

According to previous research, highly conservative and highly dogmatic individuals were less receptive to foreign made products than were less conservative and less dogmatic consumers (Anderson and Cunningham, 1972). Therefore, consumers with high local orientation and nationalism are also likely to be less receptive to hybrid products.

Consumer "localism" was measured by a Likert scale of agreement with the following statement: "Despite all the newspaper and TV coverage, national and international happenings rarely seem as interesting as events that occur right in the local community in which one lives (Dye, 1966)." Respondents who "strongly" or "somewhat" agreed with the statement were classified as having a high local orientation. Respondents who "strongly" or "somewhat" disagreed were classified as having a low local orientation.

The respondents' nationalism was measured by their level of agreement on a five-point scale to the following statement: "The United States is closer to being an ideal country than any other nation has ever been (Perguson, 1942)." Respondents who "strongly" or "somewhat" agreed with the statement were classified as having high nationalism. Respondents who "strongly" or "somewhat" disagreed were classified as having low nationalism.

The data was based on a pilot study representing students in two regions of the country. A questionnaire was administered to 287 graduate and undergraduate students from DePaul University, (Chicago, Illinois) and the University of Houston Downtown Campus (Houston, Texas). The campuses selected in this study were both urban commuter colleges whose student bodies were similar in demographic composition. Two geographic locations were selected to provide a more representative cross-section of student opinion.

FINDINGS

Both H1 and H2 were accepted. A t-test indicated that there were significant statistical differences at the .05 level between the mean ratings of the "high" and the "low" local orientation groups as well as between the "high" and "low" nationalism consumer groups for the purebred automobile (Table 1).

TABLE 1

INFLUENCE OF LOCALISM AND NATIONALISM ON COLLEGE STUDENTS' PERCEPTION OF PUREBRED PRODUCTS

<table>
<thead>
<tr>
<th>Consumer Group*</th>
<th>Mean Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Group</td>
<td>Low Group</td>
</tr>
<tr>
<td>Locally vs. Internationally Oriented (Localism)</td>
<td>2.29</td>
</tr>
<tr>
<td>Level of Nationalism</td>
<td>2.32</td>
</tr>
</tbody>
</table>

* Based on a scale of 1 to 5 with 1 being "very good" and 5 being "very poor" for cars assembled entirely in the U.S. with U.S. parts. **Significant at .05 level.

Localization and nationalism, however, did not seem to have an effect on the respondents' evaluation of the hybrid conditions. There were no significant statistical differences in the rating of the "high" and "low" localization and nationalism groups evaluations of the hybrids.

Over all, the respondents rated the hybrid conditions worse than the purebred one. On a five-point scale, with one being "very good," the mean response for cars manufactured entirely in the U.S. with all U.S. parts was 2.51. The mean rating declined for cars assumed to have a higher proportion of foreign parts. For example, the mean rating for cars manufactured in the U.S. with mostly U.S.-made parts was 2.61; cars manufactured in the U.S. with mostly foreign made parts 2.75; and for cars manufactured in the U.S. with entirely foreign made parts 2.77. (Table 2).

TABLE 2

MEAN QUALITY RATINGS OF PUREBRED/HYBRID CONDITIONS

<table>
<thead>
<tr>
<th>Conditions</th>
<th>Mean Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufactured entirely in the U.S. with all U.S. Parts</td>
<td>2.51</td>
</tr>
<tr>
<td>Manufactured in the U.S. with mostly U.S. made Parts</td>
<td>2.61</td>
</tr>
<tr>
<td>Manufactured in the U.S. with mostly foreign made parts</td>
<td>2.75</td>
</tr>
<tr>
<td>Manufactured in the U.S. with entirely foreign made parts</td>
<td>2.77</td>
</tr>
<tr>
<td>Manufactured entirely abroad but sold under an American brand name</td>
<td>2.39</td>
</tr>
</tbody>
</table>

*Based on 287 student ratings utilizing a 5-point scale with 1 as "very good" and 5 as "very poor."

Surprisingly the college students rated most highly those cars which were manufactured entirely abroad but sold under an American brand name (mean = 2.39) (Table 2). Perhaps the students actually considered these cars to be purebred or hybrid, providing further support that purebreds are preferable. It also offers further support that entirely foreign-made cars are preferable to entirely American made automobiles (Czesiec, 1984). Perhaps this is related to the "import designs" which U.S. manufacturers are directing at the young urban professionals, or "yuppie" market.

Most of the sample (82.1%) believed that American brand automobiles were made in the U.S. with all U.S. made parts (17.6%) or mostly U.S. made parts (64.4%). Very few believed that American cars were manufactured in the U.S. with mostly foreign-made parts (14.32); manufactured in the U.S. with entirely foreign made parts (2.2%); and manufactured entirely abroad but sold under an American brand name (1.5%). Since the respondents were unfamiliar with hybrid automobiles, feeling that they are not prevalent, perhaps they assumed hybrid automobiles are inferior (Table 3).
TABLE 1
RESPONDENTS' BELIEFS ON FOREIGN VS. DOMESTIC CONTENT OF AMERICAN BRAND AUTOMOBILES

<table>
<thead>
<tr>
<th>Statement</th>
<th>% of Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>American brand automobiles are:</td>
<td>17.5</td>
</tr>
<tr>
<td>Manufactured entirely in the U.S.</td>
<td>56.4</td>
</tr>
<tr>
<td>with all U.S. parts</td>
<td></td>
</tr>
<tr>
<td>Manufactured in the U.S. with mostly U.S.-made parts</td>
<td>14.3</td>
</tr>
<tr>
<td>Manufactured in the U.S. with mostly foreign-made parts</td>
<td>7.1</td>
</tr>
<tr>
<td>Manufactured entirely abroad but sold under an American brand name</td>
<td>1.5</td>
</tr>
<tr>
<td>N = 287</td>
<td>100.1</td>
</tr>
</tbody>
</table>

CONCLUSIONS

College students perceived hybrid products differently from purebred products. Generally speaking, this sample preferred purebreds to products which they could neither categorize as fish nor fowl. Their evaluations deteriorated when they believed that the amount of foreign involvement had increased. This sample generally seemed to be unaware of the growing number of hybrids in the automobile industry.

As expected, based on previous research, consumers' localism and nationalism were found to influence their evaluation of purebred products. Unfortunately, these variables did not have a similar impact on evaluations of hybrid products. Psychological variables which have been helpful in explaining consumers' reaction to entirely American-made products seem to be less useful for explaining their reaction to hybrids.

With respect to future research, it is necessary to carefully redefine the hybrid conditions and perhaps adapt these to the product categories being investigated. For example, products made in a foreign country but sold under an American label were perceived differently from the other forms of hybrids. Perhaps they were not perceived to be hybrid at all. Also, it might be necessary to include other variations of hybrids such as foreign cars made entirely in the United States like the Volkswagen Rabbit. It is also necessary to replicate the study for other products where the foreign made counterparts are not rated as well as are foreign made automobiles. It is important to substitute specific countries for the more generic designation of foreign made to determine what impact various countries have on the evaluation of hybrids. It is also important to examine the impact of other personality, as well as demographic, characteristics on consumers' evaluation of hybrid products. Finally, it would be appropriate to expand the study to include non-college student "yuppies".

REFERENCES


Wang, Chin-Kuan and Charles W. Lamb (1980), Journal of Academy of Marketing Science, 8, (Fall) 245-258.