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Developing and managing brand image is an important part of a firm's marketing program. However, little research has been done (1) on linking the use of brand image strategies to product performance or (2) on managing brand images in global markets. The author examines the brand image-performance linkage for consumer goods in two categories marketed internationally. He also develops a conceptual framework that identifies various cultural and socioeconomic environmental characteristics of foreign markets that are hypothesized to affect brand image performance. Results from a 10 country/60 region study indicate that cultural power distance, cultural individualism, and regional socioeconomics affect the performance of functional (problem prevention and solving), social (group membership and symbolic), and sensory (novelty, variety, and sensory gratification) brand image strategies. The author then discusses the implications for managers marketing brands internationally and the directions for further research.

## The Effects of Culture and Socioeconomics on the Performance of Global Brand Image Strategies

Brand image management is a critical part of a company's marketing program. Communicating a clearly defined brand image enables consumers to identify the needs satisfied by the brand (Park, Jaworski, and MacInnis 1986) and differentiate the brand from its competitors (DiMingo 1988; Reynolds and Gutman 1984), and has been prescribed by both marketing practitioners (Ogilvy 1963) and researchers (Gardner and Levy 1955) as a key to product success. In fact, brand image is an integral component of a brand's equity, that is, the value of a brand in the minds of consumers (Keller 1993). Developing a needs-based image strategy provides the foundation for marketing program development and enables the brand to create a clear and distinct position within its category. Although much conceptual work has been written on defining and managing brand image (Keller 1993; Park, Jaworski, and MacInnis 1986), very little empirical research exists to guide managers' image management efforts. Two important areas must be addressed by studies examining and prescribing brand image strategies: (1) the effect of brand image strategies on product performance and (2) the management of brand images across global markets.

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First, research should link brand image strategies and product performance. Although research on brand extensions has begun to examine the effects of using established versus new brands on market share (Simon and Sullivan 1993; Smith and Park 1992), the relationship between brand image strategies and performance has received little attention. Yet brand image strategies can affect measures of relative performance (e.g., market share) as well. Specifically, a need-based image strategy establishes a brand's position (relative to competition) within a product category, defining its niche and establishing its market potential. Research has shown that serving larger niches typically leads to better long-term product performance than serving smaller niches within the same category (Lambkin and Day 1989; Montgomery 1982; Romanelli 1987). Thus brand image strategy should affect product performance, because images appealing to large niches should capture a larger share of a product category than brands whose images are targeted to smaller niches.

Second, research should address international as well as domestic brand image management. Given that effective brand image management centers on satisfying customer needs (Park, Jaworski, and MacInnis 1986), and that cultural, social, and economic dimensions of international markets shape consumer needs (Dannhaeuser 1987; Daun 1983; Hondrich 1983; Reilly and Wallendorf 1987; Tan and Farley 1987; Tse, Wong, and Tan 1988), global aspects of image management must be understood. Although there are strategic advantages to targeting the same customers and satisfy-

ing the same types of needs cross-nationally (Levitt 1983), in many cases, the niche or positioning opportunities differ across markets (Douglas and Wind 1987; Jain 1989). For example, Levi's blue jeans creates different brand images for customers in different parts of the world. A very social, group-oriented image is used in the United States, whereas a much more individualist, sexual image is maintained in Europe. Similarly, Reebok varies the image of its athletic shoes on the basis of national and regional differences it perceives in consumer tastes and preferences. In the United States, Reebok tries to balance both lifestyle and athletic images, whereas in Western Europe, the brand image focus is more narrowly on athletics and performance. Some brands have successfully targeted the same types of customers using the same brand image strategies cross nationally (e.g., Coca Cola, Nike), but many firms have failed internationally by not adapting their strategies to cultural, economic, and other differences among markets (Hill and Still 1984; Ricks 1983). Therefore, it is imperative that managers identify, assess, and respond to global market conditions that can affect the size of niches for particular brand image strategies.

My purpose is to provide managers with a framework for selecting brand image strategies for international markets. Specifically, I examine the linkage among brand image strategies, cultural and socioeconomic factors, and market share in international markets. The international brand image strategies used by consumer goods firms in two industries were identified, indicating the type of needs the brands seek to satisfy and their positioning strategy in each market. Because the relative performance of a brand position depends on the size of the niche targeted, I also investigated cultural and socioeconomic factors hypothesized to affect the size of the targeted niche and, therefore, the market potential of the image strategy. Because marketers have long noted that countries are heterogeneous and comprised of unique cultural and socioeconomic regional markets (e.g., the Flanders and Wallonia regions in Belgium, and the Quebec province in Canada; cf. Douglas and Wind 1987; Hill and Still 1984; Jain 1989), the study included both a national and a more micro regional focus.

The article is organized as follows. The next section presents a conceptual framework that links brand image strategies, cultural and socioeconomic market characteristics, and product performance. Next, I discuss the research design, which involved secondary data and surveys given to product managers. I then present results, followed by discussions of the managerial and theoretical implications of the findings. Finally, I present directions for further research.

#### CONCEPTUAL FRAMEWORK

Much of international marketing research has focused on marketing mix customization versus standardization (for a recent review, see Aulakh and Kotabe 1993). Yet, before one makes marketing mix decisions, brand image strategies for international markets must be developed. Brand image strategies must be designed to appropriately position the product for the targeted market segments. Although managers have many image and positioning alternatives from which to choose, international marketers must explore how cultural and socioeconomic characteristics affect the performance of brand image strategies.

Using the normative model proposed by Park, Jaworski, and MacInnis (1986), I investigate three types of brand images—functional, social, and sensory images. These images are based on the fulfillment of basic consumer needs—problem solving and problem prevention (functional), group membership and affiliation (social), and novelty, variety seeking, and sensory gratification (sensory)—and are consistent with other descriptions of relationships involving persons, environment, and sociocultural systems (Malinowski 1944), Maslow's (1954) need hierarchy, frameworks of motivating forces driving consumer behavior (Rossiter and Percy 1987), and a typology of consumer needs developed from a review of behavioral science research on needs and values (Hanna 1980). It is not uncommon for brands within a category to be uniquely positioned along these types of needs. For example in the United States toothpaste category, Crest's functional image is based on cavity, tartar, and decay prevention, Ultra Brite is positioned toward social needs to provide whiter teeth and social acceptability, and Aim's image is based on taste and sensory gratification. Although the normative model suggests firms should select only one type of need when developing brand images (Park, Jaworski, and MacInnis 1986), research has shown that (1) firms tend not to emphasize only one need, and (2) strategies emphasizing one need do not necessarily lead to better financial performance than those based on multiple needs (Roth 1992). The findings indicate that managers feel it is either necessary and/or advantageous to diversify their brand image strategies across two or more needs. The frequency with which firms try to be "many things to many people" indicates a need to better understand the linkages between market environments and consumer needs. Identifying environmental factors that favor one type of consumer need over another will help managers select the brand image strategies with the greatest market potential.

#### *Cultural and Socioeconomic Characteristics of International Markets*

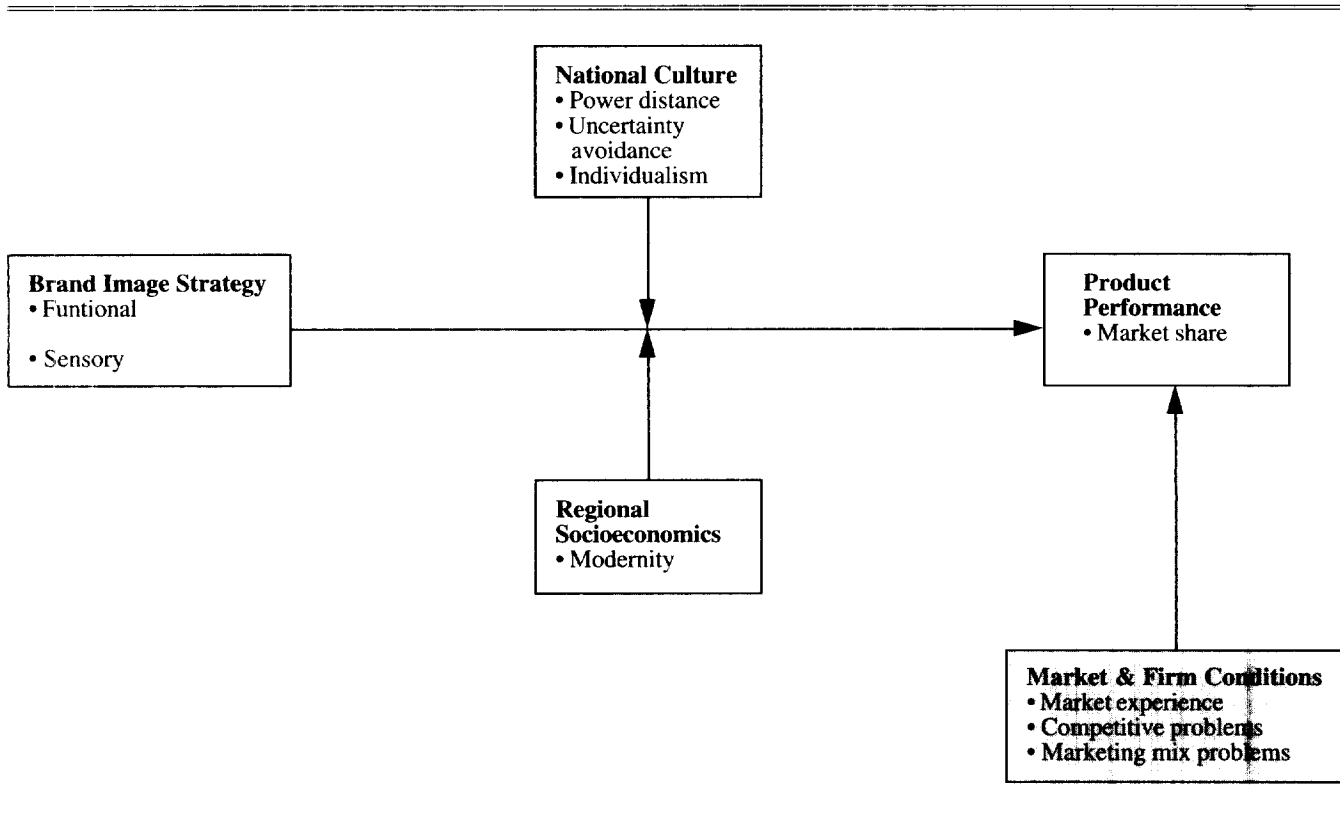
Social science and management research offer insights into the effects cultural and socioeconomic characteristics of foreign markets may have on consumer needs and the subsequent success of brand image strategies. Figure 1 presents a conceptual model of the potential moderating effects of culture and socioeconomics on the performance of brand image strategies. In international markets, environmental characteristics are likely to moderate the image-performance relationship. As shown, two characteristics, (1) national culture and (2) regional socioeconomic conditions affect the performance of functional, social, and sensory brand images. In addition, because market and firm conditions may also impact performance, the model shows likely covariates, that is, market experience, extent of competition, and marketing mix implementation problems, that should be managed when examining the effects of environmental factors and brand image on performance.

#### *National Culture*

A country's culture has long been identified as an environmental characteristic that influences consumer behavior, and the many aspects of a culture affect differently the needs

Figure 1

THE EFFECTS OF CULTURAL AND SOCIOECONOMIC FACTORS ON THE PERFORMANCE OF BRAND IMAGE STRATEGIES



consumers satisfy through the acquisition and use of goods and services. Hofstede's (1984) influential work on cross-cultural value systems identifies three aspects of culture that can be related to consumer needs and brand images—power distance, uncertainty avoidance, and individualism. Although Hofstede's research was conducted in organizational settings, the values he identifies have been associated with consumer behavior as well as with work-related activities (for a recent example, see Lynn, Zinkhan, and Harris 1993).

Power distance describes the extent to which a culture fosters social inequality. Cultures high in power distance tend to emphasize the importance of prestige and wealth in shaping boundaries or vertical relationships between social and economic classes such as rich and poor, and superiors and subordinates (Hofstede 1984; Inkeles 1960; Lenski 1966). In high power distance cultures, people seek to maintain and increase their power as a source of satisfaction. Social consciousness is high, and they are motivated by the need to conform with those in their class or in classes to which they aspire. In low power distance cultures, people are much less focused on class differences and social aspirations. If one relates the aspects of cultural power distance to consumer needs, then it appears that social brand images should be the best fit for high power distance cultures because people are highly motivated by social status and affiliation norms. On the other hand, when power distance is low, social brand images will not match the cultural norms because consumers are not motivated by group-related

needs. More formally, power distance is hypothesized to affect brand image performance as follows:

H<sub>1</sub>: The effects of social brand images on market share will be greater (lower) when cultural power distance is high (low) than when power distance is low (high).

Uncertainty avoidance captures the cultural pattern of seeking stability, predictability, and low stress rather than change and new experiences (Hofstede 1984). People in high uncertainty avoidance cultures are risk averse, resistant to change and variety seeking, and have a low tolerance for ambiguity. For brand image management, uncertainty avoidance can be linked to aversion to a stimulus or event. When consumers experience some type of aversion, they will be motivated to remove the aversion or at least reduce it as far as possible (Rossiter and Percy 1987). For example, when averse to cavities or other dental hygiene problems, consumers will seek a toothpaste capable of reducing the risk of cavities. Functional brand images are positioned to prevent or solve problems and, therefore, reduce perceived risk. When cultures are high in uncertainty avoidance, consumers will be very focused on risk aversion and problem solving and prevention and, thus, will be good candidates for functional brand images. In contrast, when uncertainty avoidance is low, risk aversion is diminished, and consumers are more open to variety and novelty behaviors. Thus, in low uncertainty avoidance cultures, sensory brand images focusing on variety, novelty, and sensory gratification are effective.

tive. More formally, uncertainty avoidance is hypothesized to affect brand image performance in the following ways:

- H<sub>2a</sub>: The effects of functional brand images on market share will be greater (lower) when cultural uncertainty avoidance is high (low) than when uncertainty avoidance is low (high).  
 H<sub>2b</sub>: The effects of sensory brand images on market share will be greater (lower) when cultural uncertainty avoidance is low (high) than when uncertainty avoidance is high (low).

Individualism is an aspect of culture that pertains to people's tendency to value personal and individual time, freedom, and experiences (Hofstede 1984; Parsons and Shils 1951; Riesman, Glazer, and Denney 1953). In contrast, cultures that emphasize collectivism exhibit patterns of group or collective thinking and acting. In other words, cultures high in individualism tend to seek variety and hedonistic experiences, whereas collectivist cultures correlate more with conformity and group behavior. In addition, people in high individualism cultures tend not to follow social norms, but, rather, form relationships, make decisions, and initiate behaviors independent of others. In terms of brand image strategies, cultures high in individualism seem well-suited for sensory images that emphasize variety, novelty, and individual gratification. On the other hand, cultures with low individualism will find social brand images that reinforce group membership and affiliation more attractive. The following hypotheses describe how cultural individualism will affect brand image performance:

- H<sub>3a</sub>: The effects of sensory brand images on market share will be greater (lower) when cultural individualism is high (low) than when uncertainty avoidance is low (high).  
 H<sub>3b</sub>: The effects of social brand images on market share will be greater (lower) when cultural individualism is low (high) than when individualism is high (low).

#### *Regional Socioeconomics*

Although country-level factors, such as national culture, affecting brand image strategy are important, micro geographic units, that is, regions within countries, merit investigation as well. Although the predominant approach in past international brand management research has been to examine country-level differences (e.g., Boote 1983; Huszagh, Fox, and Day 1986; Martenson 1989), national analyses of marketing strategy effectiveness may be too broad in scope, causing important intra- and inter-country similarities and differences to be overlooked. Greater homogeneity will be found within more localized regions than in countries. (See anthropological research on intra- versus inter-cultural variation in Boster 1987; Roth and Moorman 1988.) Although proponents of the global standardization approach (e.g., Levitt 1983) have espoused the growing similarity of consumers cross-nationally, domestic managers, in fact, continually look for sophisticated ways to define markets and develop micromarketing strategies, such as the integration of census and market research data bases to identify geodemographic, geopsychographic, and other area-based target markets within the United States (McKenna 1992; Mehrotra 1990). Furthermore, as trading nations reduce and eliminate structural, political, and economic barriers, the search for

similar consumers within trading blocs will become more important than national differences.

Although cultures tend to transcend entire nations, social and economic conditions often vary substantially within countries. Within most countries, regions exist that differ markedly from one another with regards to income, mobility, media access, employment, and other socioeconomic characteristics. Sociologists often assess a region's socioeconomic level in terms of its "modernity"—a measure of the institutions and organizations that provide life experiences for members of a society (Inkeles 1983; Inkeles and Smith 1974).

One aspect of modernity that relates to consumption and the viability of brand image strategies is disposable income. Disposable income indicates the amount of resources consumers allocate to goods and services. When resources are limited, consumers use goods and services to satisfy their most basic, functional needs. As resources increase, so does consumer willingness to spend money on products that satisfy more symbolic and sensory needs. For example, the major consumption goal of Zinderiois Nigerians, a culture with very limited economic resources, is nutritional self-sufficiency, in contrast to the more symbolic and experiential consumption patterns of more affluent North Americans (Wallendorf and Arnould 1988). Hence, when socioeconomic conditions are low, functional brand image strategies will have the most appeal. When socioeconomic conditions increase, consumption of social and sensory goods to satisfy symbolic and hedonic needs is more likely.

Another aspect of modernity that influences consumer behavior is exposure to consumption. The extent to which consumers are exposed to Western, material-oriented consumption cultures will influence their attraction to specific products. The demonstration effect, a phenomenon in which poorer consumers buy symbolic and sensory products (with little functional value) to identify with consumption societies to which they have been exposed (Keyfitz 1982; Nurske 1953), explains why consumers in poorer or lesser-developed countries purchase status and hedonic goods when functional ones would seem more appropriate (Belk 1988; Keegan, Still, and Hill 1987). In short, what consumers see, hear, and access via television, other media, automobiles, and other forms of mobility shapes their needs and attitudes toward the consumption of products and services (Belk 1988; Jain 1989; Keegan, Still, and Hill 1987; Keyfitz 1982; O'Guinn, Lee, and Faber 1986; Weimann 1984). When markets are characterized by low levels of regional modernity, consumers will not be familiar with the material aspects of consumer culture nor with the ability of goods and services to satisfy social and sensory needs. Their lack of mobility and exposure to media will prevent them from learning about the more symbolic and experiential aspects of product consumption. Instead, products will be valued for their functional capabilities, thus making functional brand image strategies more suited to the environment than social or sensory images. As regions become more modern, however, exposure to material culture increases, motivating people to both desire the goods they see being consumed in other cultures and to purchase products that associate them with other cultures and societies. Hence, social brand images that promote group identification will have greater appeal in high modernity regional markets. However, high lev-

els of modernity also foster more individual and self-awareness values (Inglehart 1977; Yankelovich 1981), which are associated with needs for self-enhancement and personal fulfillment and consistent with arousal and stimulation (sensory) need-based brand images.

In most countries, the correlation between per capita income and modernity is quite high (e.g., Johansson and Moinpour 1977; Sethi 1971). Measures of mobility and Western exposure can provide an accurate description of a market's degree of modernity, capturing both economic and demonstration effects on consumption. The hypothesized relationships between regional socioeconomics (modernity) and brand image performance are summarized as follows:

- H<sub>3a</sub>: The effects of functional brand images on market share will be greater (lower) when regional socioeconomics is low (high) than when regional socioeconomics is high (low).  
 H<sub>3b</sub>: The effects of social brand images on market share will be greater (lower) when regional socioeconomics is high (low) than when regional socioeconomics is low (high).  
 H<sub>3c</sub>: The effects of sensory brand images on market share will be greater (lower) when regional socioeconomics is high (low) than when regional socioeconomics is low (high).

#### METHOD

I identified and collected environmental data from countries and the regions within them that are culturally and socioeconomically varied. Then I administered surveys to firms marketing consumer goods in these countries and regions to determine both the brand images used and the resulting product performance. Collectively, these two data sources provided the means for testing the model and hypotheses outlined previously.

#### Data Collection

*Step 1—Socioeconomic data base.* I compiled a data base of socioeconomic characteristics for 60 cities and towns within 10 countries (Argentina, Belgium, China, France, Germany, Japan, Italy, Netherlands, Peru, and Yugoslavia), which were chosen because of their social, economic, and cultural diversity. Socioeconomic data for the regions within each country (the number of regions per country ranged from four to nine) were drawn from a variety of publicly available statistical data sources. Because multiple socioeconomic variables were collected, factor analysis was used to develop a scale indicating each regional market's degree of socioeconomics (see the Appendix for a description of the analysis).

*Step 2—Survey development.* My survey measured all items at the regional level and included questions about the brand image strategy used, market experience, problems encountered, and market share for a brand in a particular regional market. The survey was developed, pretested, and modified for administration to marketing and product managers responsible for marketing their products in one or more of the 10 countries in the data base.

*Step 3—Sample development.* United States firms manufacturing consumer goods in the blue jean and athletic shoe categories were then identified and chosen because of the diverse brand image strategies used to market them. In addition, both of these categories have many United States-based multinational competitors, thus offering an opportunity to explore

strategic performance across all of the regions in the database.

*Step 4—Manager identification.* I contacted marketing managers at each company and asked them to identify the countries in which they marketed their products. The person contacted often provided the name of another manager responsible for international marketing for a particular country. I asked managers of firms marketing their brand in one or more markets within the 10 countries to participate in a market research study examining the performance of brand image strategies in international markets.

*Step 5—Survey administration.* I mailed surveys customized for each country, a cover letter, and \$1 as a token of gratitude to the managers. The survey contained items for each region within the countries served by the firm. If a response was not received after two to three weeks, I mailed reminder letters and questionnaires.

Thirty eight managers from 11 firms returned usable questionnaires, yielding a response rate of 33% (115 managers were mailed surveys). Many of the participants in the study managed a brand in multiple foreign markets. Collectively, they reported on 209 cases of a particular brand's strategy, market, and performance in a particular regional market. On average, each manager participating in the study reported six cases. To assess the degree of non-response bias, a sample of 10 of the 77 managers who did not return questionnaires were contacted by phone and found not to differ from respondents with regard to the brand image, covariate, or performance survey measures described subsequently. The most common reasons for not responding were proprietary data concerns, lack of time, and lack of regional-level data.

#### Measures

*Brand images.* The survey asked managers to characterize their brand's image in each particular regional market by allocating 100 points across three types of strategies: functional, social, and sensory, with more points being allocated to the more emphasized images (see the Appendix). Managers could allocate 100% of the points to one brand image (a depth strategy approach) or allocate the points across two or three of the strategies (breadth approach).

*Culture and socioeconomics.* Cultural measures of national power distance, uncertainty avoidance, and individualism were taken from indexes developed by Hofstede (1984), on the basis of his survey of over 100,000 respondents from 66 countries. Hofstede's sample is not representative of the entire population, but of the middle classes employed in multinational corporations. Because we are not interested in absolute scores, but in cross-national cultural differences, the indexes are valid because the sampled respondents were well-matched demographically, with the only systematic difference being their nationality. I measured regional socioeconomics in terms of each region's modernity, which was estimated as a factor score determined using scoring coefficients computed from the factor loadings (refer to the Appendix). The scoring coefficients were estimated using the Anderson and Rubin (1956) method, which produces accurate estimates for use as independent variables in regression analyses (Lastovicka and Thomodaran 1991).

*Product performance.* Managers indicated the brand's market share during the most recent annual period for the brand in each regional market. Market share was chosen be-

cause of its wide use as an indicator of performance among consumer product marketers (e.g., Smith and Park 1992), association with a business's relative size in its served market (e.g., Buzzell and Gale 1987), and consistent use in other international marketing studies of business performance (e.g., Ryans 1988; Szymanski, Bharadwaj, and Varadarajan 1993). Although market share differs from typical measures of communication effectiveness (e.g., brand awareness, brand attitude), the images reported are a function of the firm's entire marketing program—not just their advertising (Park, Jaworski, and MacInnis 1986) and, therefore, better accounts for the entire marketing program's performance.

*Covariates.* The survey included three covariates: market experience, extent of competition, and marketing mix problems. International marketing experience is often a key determinant of international marketing success (Denis and Depelteau 1985; Gronhaug and Graham 1987; Johanson and Vahlne 1977). In addition, the length of time the brand has been available in the market often explains unstable growth rates and performance measures. In some cases, new market entrants demonstrate rapid performance growth before progressing into the growth and maturity stages of the product life cycle. On the other hand, some firms exporting products to new markets often encounter slow growth rates until they adjust their marketing programs as more market experience is gained. Managers reported the number of years the brand had been available in the regional market.

Managers also reported the extent to which they encountered competition problems in each regional market. This item was measured using a seven-point Likert scale. Extent of competition is an important covariate because direct competitors try to serve the same niche, and fight for market share. In addition, competition affects international marketing performance (Denis and Depelteau 1985; Jain 1989). Hence, brand image performance could be negatively affected when competitive problems are encountered in a regional market.

Effective implementation of the marketing mix brand conveys to consumers the image intended by the firm. Firms experiencing difficulties managing their marketing mix will have problems effectively communicating the intended brand image to consumers, and, subsequently, their performance will be adversely affected. The prevalence of marketing implementation problems can hurt a brand's performance and is, therefore, another important covariate. The survey included four Likert scaled questions on problems encountered with the marketing mix and enabled managers to report the extent of product, distribution, pricing, and advertising and promotion problems experienced in each regional market. A principal components analysis showed the four items to load on a single factor. All items had factor loadings and communalities greater than .4. Cronbach's alpha, when combining the four variables into one scale, was .727. The Appendix displays the covariate measures.

Using multiple regression, I examined the hypotheses predicting the effects of the environmental factors on brand image strategy market share. Specifically, I used moderated regression analysis (Arnold 1982; Sharma, Durand, and Gur-Arie 1981) to examine the moderating effects of culture and socioeconomic factors on the market share of brand image strategies. Prior to hypothesis testing, the data were examined for outlying cases. Sixteen cases had market shares be-

yond three standard deviations of the mean and, therefore, were not included in subsequent analysis. The sample used for hypothesis testing was thus 193 cases. Table 1 reports Pearson correlations and descriptive statistics for the variables used in this study. Social and sensory images had a small, positive correlation, indicating a weak pattern of joint emphasis in the same brand image strategy. In contrast, functional image had a strong, negative correlation with both social and sensory images, which indicated that these image pairs tended not to be emphasized together. Also, no firms reported using a single-need brand image strategy—the maximum points allocated to any one strategy was 75 of 100—thus, all firms incorporated two or more needs into their brand image strategy.

The level of intercorrelations among the independent, moderator, and covariate variables was, in general, low to moderate, ranging from .001 to .54. There were two exceptions—(1) cultural individualism and regional socioeconomic factors ( $r = .714$ ), and (2) marketing mix problems and cultural individualism ( $r = -.579$ ). Correlations at this level signal the possible presence of multicollinearity, which inflates the standard errors of parameter estimates.

To minimize and check for the presence of multicollinearity, a number of steps were taken. First, I centered all of the independent, moderator and covariate variables (i.e., put them in deviation score form so that their means are zero).<sup>1</sup> As shown by Aiken and West (1991, p. 32), centering variables significantly reduces multicollinearity, thereby providing unbiased parameter estimates. Second, I calculated variance inflation factors (VIF) to examine the extent to which nonorthogonality among independent, moderator, and covariate variables inflates standard errors. The average VIF was 1.94, ranging from 1.32 to 2.95—well below the cutoff of 10 recommended by Neter, Wasserman, and Kutner (1989, p. 409). The centering procedure and the VIF findings suggest that multicollinearity is not a threat to the substantive conclusions to be drawn from the analysis discussed subsequently.

The multiple regression model tested contained the effects of each independent and moderator variable (i.e., three different brand images; and one regional and four cultural factors, respectively), three covariate variables, and the independent X moderator interactions for testing each hypothesis. The interaction terms indicate the moderating effect of the environmental factors on the performance of the brand image strategies. To control for any correlated residuals due to multiple product category and within-category brand observations, 10 dummy variables were created (one dummy variable for the two product categories, five dummy variables for the six blue jean brands, and four dummy variables for the five athletic shoe brands) and included in the regression model.

<sup>1</sup>This process is recommended when conducting regression analyses (e.g., Dillon and Goldstein 1984; Marquardt 1980), especially when product terms such as independent X moderator interactions are to be used (Aiken and West 1991; Cronbach 1987).

Table 1  
CORRELATIONS AND DESCRIPTIVE STATISTICS FOR DEPENDENT, INDEPENDENT, MODERATOR, AND COVARIATE VARIABLES

	DEPENDENT			INDEPENDENT			MODERATORS				COVARIATES		
	Market Share (%)	Functional Brand Image (%)	Social Brand Image (%)	Sensory Brand Image (%)	National Cultural Power Distance	National Cultural Uncertainty Avoidance	National Cultural Individualism	Regional Socio-economics	Regional Market Experience	Regional Competitive Problems	Regional Marketing Mix Problems		
Functional Brand Image	.124												
Social Brand Image	-.318	-.745											
Sensory Brand Image	.254	-.829	.245										
Power Distance	.192	.068	.144	.013									
Uncertainty Avoidance	-.153	-.538	.360	-.480	.502	.323							
Individualism	-.067	-.329	.208	.304	-.226	-.217	.714						
Regional Socioeconomics	.448	.134	-.001	-.194	.046	-.025	.156	.043					
Market Experience	-.512	.153	-.098	-.140	-.262	-.136	-.099	.030	-.501				
Competitive Problems	-.207	.361	-.167	-.391	.232	.254	-.579	-.358	-.402	.323			
Marketing Mix Problems													
Mean	11.49	48.52	18.16	33.32	54.36	80.96	58.03	0.00	14.63	3.60	3.65		
S.D.	6.36	24.24	13.98	16.67	12.47	12.15	18.77	.93	5.56	.97	.71		
Range-High	31	75	60	65	76	94	80	1.33	20	6	6	5.25	
Range-Low	2	0	0	0	35	29	16	-2.53	2.2	2	2		

n = 193

**Table 2**  
**MODERATING EFFECTS ON BRAND IMAGE STRATEGY**  
**PERFORMANCE: STANDARDIZED REGRESSION**  
**COEFFICIENTS**

Variables	Market Share (n = 193)
<i>Main effects of independent variables</i>	
Functional Brand Image	.001
Social Brand Image	.117
Sensory Brand Image	-.042
<i>Main effects of moderators</i>	
National Cultural Power Distance	.117
National Cultural Uncertainty Avoidance	-.074
National Cultural Individualism	-.023
Regional Socioeconomics	.165*
<i>Independent X moderator interactions</i>	
Functional Image X Power Distance	-.074
Social Image X Power Distance	.198**
Sensory Image X Power Distance	.175**
Functional Image X Uncertainty Avoidance	-.025
Social Image X Uncertainty Avoidance	.094
Sensory Image X Uncertainty Avoidance	.053
Functional Image X Individualism	.169*
Social Image X Individualism	-.339***
Sensory Image X Individualism	.261***
Functional Image X Regional Socioeconomics	-.203**
Social Image X Regional Socioeconomics	.305***
Sensory Image X Regional Socioeconomics	.286***
<i>Main effects of covariates</i>	
Market Experience	.042
Competitive Problems	-.174**
Marketing Mix Problems	-.365***
<i>Dummy variables</i>	
Product Category	.021
Brand 1	-.339***
Brand 2	.001
Brand 3	.470***
Brand 4	-.104
Brand 5	.012
Brand 6	.333***
Brand 7	.234**
Brand 8	.023
Brand 9	-.019
Adjusted R-square	.502
F for full model (32 d.f.)	24.86***

\*\*\*p < .01

\*\*p < .05

\*p < .10

## RESULTS

### Brand Image and Moderator Main Effects

Table 2 shows the results of the moderator regression analyses. Although the hypothesis did not address main effects, all independent, moderator, covariate, and dummy variable main effects were included in the model first to more precisely estimate the moderating (interaction) effects. The main effects of the brand images on market share were very small and not statistically significant ( $p > .10$ ), which indicates that firms do not necessarily benefit from any one type of brand

image strategy. Market share was not directly related to the three national culture measures ( $p > .10$ ). Marketing products when regional socioeconomics is high, however, does tend to enhance market share ( $\beta = .165, p < .10$ ).

### Moderating Effects of Culture and Socioeconomics on Brand Image Performance

The sign and significance of the independent X moderator variable interaction  $\beta$  coefficients are used to accept or reject the hypotheses. I accomplished further diagnosis of statistically significant interactions via post-hoc simple slope tests (Aiken and West 1991). Following Cohen and Cohen's (1983) study, I recomputed moderators exhibiting a significant interaction with brand image into high, medium, and low values corresponding to (1) one standard deviation above the mean, (2) at the mean, and (3) one standard deviation below the mean, respectively. The high, medium, or low value represents the "conditional value" of the moderator (Darlington 1990). I then performed simple regressions of market share on brand image, the conditional value of the moderator, and the brand image X conditional moderator interaction for the high, medium, and low moderator values. I used *T*-tests to assess whether the simple slopes differ from zero, which indicated if the regression of market share on brand image was positive or negative at different conditional values of the moderator.

*Cultural power distance.*  $H_1$  stated that social brand images would perform well when power distance was high. As exhibited in Table 2, the power distance X social brand image interaction term was positive and statistically significant ( $\beta = .198, p < .05$ ). Although no formal hypotheses were made about the moderating effect of power distance on the performance of functional or sensory brand images, these effects were also explored and are shown in Table 2. Power distance had a significant, positive moderating effect on market share for sensory brand images ( $\beta = .175, p < .05$ ), but did not significantly affect functional images.

The results of simple slope analyses shown in Table 3 provide more insight into the moderating effects of power distance on brand image. The first line in Table 3 illustrates the brand image beta coefficient when market share is regressed on three variables: (1) brand image, (2) the cultural power distance moderator at one standard deviation above its mean (high power distance), and (3) the brand image X high cultural power distance interaction. If the regression is significantly different from zero, evidence exists that the brand image's effect on market share is indeed moderated at the high conditional value of cultural power distance. For social brand images, when power distance is high, the effect on market share is very positive ( $\beta = .501, p < .01$ ). When power distance is medium, the effect on market share is positive, but much less so than when power distance is high ( $\beta = .134, p < .05$ ). When power distance is low, the impact on market share is negative ( $\beta = -.233, p < .05$ ). Thus, social brand images enhance performance when power distance is high, and to a lesser extent when it is medium, whereas social images hurt share when power distance is low, supporting hypothesis  $H_1$ .

The results in Tables 2 and 3 show that power distance has a similar moderating effect on the performance of sensory



Table 3  
SLOPE ANALYSIS OF SIGNIFICANT INDEPENDENT X MODERATOR INTERACTIONS:  
STANDARDIZED REGRESSION COEFFICIENTS AND T-VALUES

Variables (a)	Functional Brand Image		Social Brand Image		Sensory Brand Image	
	$\beta$	t-value	$\beta$	t-value	$\beta$	t-value
<i>Cultural Power Distance X Brand Image</i>						
Image at High Power Distance			.501	4.64**	.452	3.47**
Image At Medium Power Distance		n.s.	.134	2.00*	-.256	-2.92*
Image at Low Power Distance			-.233	-2.18*	-.259	-3.04**
<i>Cultural Individualism X Brand Image</i>						
Image at High Individualism	.374	4.71**	-.402	-2.78**	.486	4.39**
Image at Medium Individualism	.519	4.10**	.198	2.26*	-.063	-.67
Image at Low Individualism	-.136	-1.51	.300	3.57**	-.424	-5.40**
<i>Regional Socioeconomics X Brand Image</i>						
Image at High Regional Socioeconomics	-.098	-1.35	.538	4.50**	.468	4.27**
Image at Medium Regional Socioeconomics	.046	.25	.108	1.47	-.088	-.71
Image at Low Regional Socioeconomics	.215	2.43*	-.282	-3.07**	-.278	-4.02**

\*\*p < .01

\*p < .05

brand images. High levels of power distance ( $\beta = .452, p < .01$ ) enhance market share, but medium ( $\beta = -.256, p < .05$ ) and low ( $\beta = -.259, p < .01$ ) levels reduce share. In summary, the results show that cultural power distance is a relatively strong moderator of social and sensory brand image performance. When a market's power distance is high, increased use of social and sensory brand image strategies enhances performance, whereas limited use of social and sensory images enhances performance when cultural power distance is low.

*Cultural uncertainty avoidance.*  $H_{2a}$  and  $H_{2b}$  stated that functional brand images would perform well in high uncertainty avoidance markets and that sensory brand images would perform well when uncertainty avoidance was low. Although not addressed by the hypotheses, the effects of uncertainty avoidance on the performance of social brand images were examined as well. The uncertainty avoidance X brand image interactions found in Table 2 were not statistically significant ( $\beta = .025$  for functional image,  $\beta = .094$  for social image,  $\beta = .053$  for sensory image; all had  $p$ -values > .10).  $H_{2a}$  and  $H_{2b}$  were not supported.

*Cultural individualism.*  $H_{3a}$  stated that sensory brand images would perform well in high individualism cultures, and  $H_{3b}$  stated that social brand image strategies would perform well in cultures low in individualism. The results in Table 2 show strong, positive individualism X sensory brand image interactions ( $\beta = .261, p < .01$ ), as well as a negative individualism X social brand image interaction ( $\beta = -.339, p < .01$ ). Although not included in the hypotheses, cultural individualism had a positive and marginally significant moderating effect on the market share of functional brand images ( $\beta = .169, p < .10$ ). Slope analyses illustrated in Table 3 provide specific insights into the moderating effects of individualism. For sensory images, high individualism has a positive effect on sensory image market share ( $\beta = .486, p < .01$ ). Medium individualism has no effect on sensory image share ( $\beta = -.063, p > .05$ ), and low individualism has a negative effect on sensory image share ( $\beta = -.424, p < .01$ ).

Thus,  $H_{3a}$  received strong support.

For social images, market share was affected negatively when individualism was high ( $\beta = -.402, p < .01$ ), enhanced when individualism was medium ( $\beta = .198, p < .05$ ), and greatly enhanced when individualism was low ( $\beta = .300, p < .01$ ). Hence,  $H_{3b}$  also received strong support.

Although I made no hypothesis about the moderating effects of individualism on functional image performance, Table 3 shows that functional images are enhanced when individualism is at high ( $\beta = .374, p < .01$ ) and medium ( $\beta = .519, p < .01$ ) levels, but not affected when individualism is low ( $\beta = -.136, p > .05$ ). In summary, when cultural individualism is high, sensory and functional images should be emphasized, whereas social images should not. When individualism is low, social images will have the greatest positive impact on market share, whereas sensory images will hurt performance.

*Regional socioeconomics.*  $H_{4a-4c}$  stated that in low socioeconomic regions, functional brand images will perform well, and in high socioeconomic regions, social and sensory brand images will perform well. Table 2 exhibits directional and statistical support for these hypotheses. The functional brand image X regional socioeconomics interaction was negative and statistically significant ( $\beta = -.203, p < .05$ ), and the social and sensory brand image X regional socioeconomics interactions were positive and statistically significant ( $\beta = .305, p < .01$  for social image;  $\beta = .286, p < .01$  for sensory image). The slope analyses in Table 3 provide further insights into the moderating effects of regional socioeconomics. For functional images, low regional socioeconomics positively impacts market share ( $\beta = .215, p < .05$ ). At medium and high levels of socioeconomics, functional images have little impact on share ( $\beta = .046, p > .05$  at medium socioeconomics;  $\beta = -.09, p > .05$  at high socioeconomics). Thus,  $H_{4a}$  receives partial support because low levels of regional socioeconomics enhances functional brand image performance, but does not affect performance at high levels. For social images, market share is enhanced when re-

gional socioeconomics is high ( $\beta = .538, p < .01$ ), not affected when socioeconomics is medium ( $\beta = .108, p > .05$ ), and negatively affected when socioeconomics is low ( $\beta = -.282, p < .01$ ), thus providing strong support for  $H_{4b}$ . The results also strongly support  $H_{4c}$ : For sensory images, market share is enhanced when regional socioeconomics is high ( $\beta = .468, p < .01$ ), not affected when socioeconomics is medium ( $\beta = -.088, p > .05$ ), and adversely affected when socioeconomics is low ( $\beta = -.278, p < .01$ ). In summary, low regional socioeconomics enhances performance when functional brand images are emphasized as opposed to social and sensory images. High regional socioeconomics achieves better performance using social and sensory brand image strategies.

#### *Main Effects of the Covariates*

The main effects of market experience, competitive problems, and marketing mix problems are also found in Table 2. Market experience, operationalized as length of time in the market, did not affect market share ( $p > .10$ ), however, competitive and marketing mix problems did. For competition problems, the effect on market share was negative ( $\beta = -.174$ ) and significant at  $p < .05$ , indicating that the presence of competitive problems hampers market share. For marketing mix problems, the beta coefficient was also negative ( $\beta = -.365$ ) and significant at  $p < .01$ , indicating that when managers experience difficulties implementing their marketing programs, product performance suffers. In summary, the more (fewer) competitive and implementation problems experienced, the lower (higher) market share tended to be.

#### *DISCUSSION AND IMPLICATIONS*

My study addressed important limitations of past international marketing management research by linking brand image strategies, the management of which should precede marketing mix customization and standardization decisions, to product performance across a variety of global markets. The findings suggest that environmental characteristics of foreign markets are (1) important indicators of customer segments and market potential and (2) provide insights into the emphasis managers should place on functional, social, and sensory brand image strategies.

Brand image success relied on several factors. First, regional socioeconomics was a strong moderator of brand image market share. Most international marketing research focuses on cross-national differences, but the results presented here imply that managers should narrow their geographical focus to cities and towns in addition to examining entire countries. Heterogeneity within countries makes it difficult for managers to develop brand image strategies with strong within-country appeal, yet, the micro-marketing, regional focus allows managers to develop strategies targeted at more homogeneous target markets. As the findings illustrate, emphasis on functional brand image strategies enhances performance when regional socioeconomics is low. When regional socioeconomics is high, and consumers have wide exposure and easy access to Western consumer culture through media and mobility, emphasis should be shifted to social and sensory brand images to maximize market share.

Second, managers can use knowledge of a market's national culture to develop successful brand image strategies.

Two aspects of culture had significant impact on the performance of brand image strategies—power distance and individualism. In low power distance cultures (e.g., Germany, Netherlands, Argentina) in which people are not highly focused on social roles and group affiliation, functional brand images that de-emphasize the social, symbolic, sensory, and experiential benefits of products are most appropriate. When the country's degree of power distance is high (e.g., China, France, Belgium), social and/or sensory needs should be emphasized.

In countries with high individualism cultures (e.g., European countries), brand images that emphasize functional, variety, novelty, and experiential needs are more effective than social image strategies. On the other hand, cultures with low individualism (e.g., Asian countries) are more amenable to social brand image strategies that emphasize group membership and affiliation benefits than they are to sensory brand images.

Given the strong regional effects on modernity, one could expect regional culture also to have a moderating effect on brand image performance. Unfortunately, cultural data for regions within countries are not widely available outside of North America (e.g., Kahle 1986). Nonetheless, further research examining subculture effects may enrich our understanding of brand image performance.

#### *FURTHER RESEARCH*

My study provides a starting point for helping managers market products internationally so as to best align brand images with customer needs. As with all empirical research, the study and results presented have limitations, which provide interesting avenues for further research in three specific areas: (1) extensions of the present model to other product categories, (2) the impact of brand image customization on brand equity, and (3) alternative measures of brand image.

First, the findings can, to some extent, be generalized to consumer goods positioned on a variety of consumer needs. This study found the moderating effects of culture and regional socioeconomics on market share for the two product categories examined after accounting for both category and brand effects. These product categories, however, may be somewhat unique because they are very "American" goods that often carry strong cultural messages. These goods generate strong country-of-origin effects, because perceptions of athletic shoe and blue jean brands encompass the United States' images of modern, Western fashion and athleticism. Research has shown, in fact, that brand purchase intentions are elevated when a country's positive image is closely linked with benefits desired from a product category (Han and Terpstra 1988; Roth and Romeo 1992). Here, because most of the brands were marketed abroad using the United States brand name, country image effects have likely occurred. Yet, within two categories of country image-sensitive brands, managers implemented unique brand image strategies, which resulted in varying market shares depending on the environmental conditions of their foreign markets. Nonetheless, the generalizability of these findings might be limited to brands that can be tied to a strong, positive country image. Further research on categories not so positively related to country image will be useful to explore the marketing environment's impact on brand image strategy effectiveness.

Second, further research can examine how changing brand image and marketing program strategies affects image perceptions and brand equity. An important feature of global marketing is the mobility of consumers and the frequency of their exposure (via communication vehicles) to many cultures—especially the Western consumption culture (Belk 1988; Quelch and Hoff 1986). Managers must remain aware that although a product may require brand image customization (for example, shifting an existing brand's relative emphasis from social to more functional needs when entering a new market), cultural and/or socioeconomic shifts may require further brand image adjustments. For example, as a market's level of modernity increases, issues of cross-national brand image consistency must be evaluated to create and maintain a clear image for consumers exposed to the brand from various international sources. Where previously the incidence of cross-border exposure to a brand's multi-regional marketing programs may have been low, increased modernity will make such occurrences more prevalent. Failure to achieve brand image consistency may adversely, in the long run, affect the brand's equity and the company's reputation by causing too much confusion about the brand's position in the marketplace (Levitt 1983), or by negatively affecting perceptions of product quality and value that can affect market share (Smith and Park 1992). Further studies are needed that relate environmental changes, consumer perceptions, and the effects of customizing image strategies.

A third area for further research is the measurement of brand image. Here, I investigated the emphasis placed on three image strategies (functional, social, and sensory). Managers have other positioning alternatives at their disposal (see Crawford 1985) that also warrant investigation. Furthermore, this research used survey data from managers, thus, the brand image measures represents managers' assessments of the image they intended consumers to perceive. The meaning consumers attach to the brand may in fact differ from what management intended. To address this possible validity issue, consumer perceptions of brand images should be measured. One procedure used in other international marketing research (e.g., Mueller 1987; Tse, Belk, and Zhou 1989) would have consumers evaluate advertising content as a means for assessing perceived brand image. Another approach that takes into account not just advertising but the entire marketing program uses more exploratory interviewing techniques. For example, one-on-one interviews, in which consumers elicit image descriptions of the brand and their relationship with it, can be used to develop brand image measures (Blackston 1992; Levy 1985). These approaches would provide richer brand meanings and images, though data collection for subsequent quantitative analysis would be more expensive and time consuming than survey-based methods. These techniques, when applied cross-culturally among diverse regions, may be useful for furthering our understanding of the marketing environment's moderating effects on image perceptions and brand performance.

#### APPENDIX

##### *Regional Socioeconomics Measure*

At the regional level, socioeconomic "summary" measures, such as disposable income or GNP/capita, are simply

not available for cities and towns except in the few countries (such as the United States) with highly developed census systems. I compiled a data base of 17 variables for each region to assess each of the 60 regions' level of socioeconomic. Although additional indicators would be desirable, most international data bases possess limited numbers of accurately measured variables for the desired cases. The number of and types of variables used here appears to capture the same socioeconomic depth and breadth as similar classification efforts on equal or greater numbers of cases (e.g., Jaffe 1974).

I used factor analysis to identify common factors accounted for by the socioeconomic variables and eliminated variables that did not account for variance across regions. Factor scores for each region were generated for subsequent analyses of the effect of environmental factors on brand image performance. I identified factors with the conventional criteria of eigenvalues greater than one and adherence to a scree test. All variables remaining in the final factor solution met the criteria of loading on a factor at .3 or higher, and having communalities of .4 or higher (Acito and Anderson 1986). I eliminated variables with low factor loadings, low communalities, and/or high cross-loadings from the analysis and found a two factor solution. The ratio of number of regions analyzed to number of factors extracted was greater than 20 (60 regions ÷ 2 factors = 30), thus indicating adequate sample size and a stable factor solution (Arrindell and van der Ende 1985). The first factor accounted for 42% of the data base variance, capturing the market's modernity—its mobility, communication exposure, sector employment, growth rate, and household size. The more autos and televisions per capita, the lower the birthrate, population growth, and percent employed in agriculture, and the fewer people per dwelling, the higher the region's modernity or socioeconomic level.

##### *Survey Measures*

*Brand image.* How would you characterize your brand's image in this market? Please allocate 100 points to each of the following types of images. Allocate the most points to the most emphasized image (up to 100 points), and the fewest points to the least emphasized image (as little as zero points).

	<i>Mean (S.D.)</i>
Functional image (problem solving, problem prevention)	48.52 (24.24)
Social image (conveys status, social approval, accreditation)	18.16 (13.98)
Sensory image (provides variety, stimulation, sensory gratification)	33.32 (16.67)
	100%

*Market experience.* For how many years has your brand been available in this market?

Mean = 14.63; S.D. = 5.56

*Extent of competition.* To what extent are you experiencing competitive problems in this market?

(7-point Likert scale, where 1 = no problems, 7 = many problems.)

Mean = 3.60; S.D. = .97

*Marketing implementation problems.* To what extent are you experiencing marketing problems in each of the following areas?

(7-point Likert scale, where 1 = no problems, 7 = many problems.)

	<i>Mean (S.D.)</i>
a) Distribution	4.07 (.99)
b) Pricing	3.39 (.92)
c) Advertising and promotion	3.70 (1.11)
d) Product characteristics	3.23 (.79)

Cronbach's alpha = .727.

Scale mean = 3.65; S.D. = .71

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