Matching Advertising Appeals to Culture: The Influence of Products’ Use Conditions

Yong Zhang and Betsy D. Gelb

In an empirical study, the authors investigated the effects of different advertising appeals used in the United States and China. The study focused on the match between values expressed in advertising and values in each of the two cultures, and included the influence of product use condition (socially visible use vs. use in a private setting). Results indicate that although culturally congruent appeals were more effective in general, product use condition moderated the effectiveness of culturally incongruent advertising appeals. Specifically, the subjects' reactions to the appeal were more positive when the appeal matched the product use condition than when the appeal did not match either the culture or the product use condition. Managerial implications are discussed.

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Understanding cultural differences is often considered a prerequisite for successful international advertising (Keegan 1989). The reasoning is that consumers grow up in a particular culture and become accustomed to that culture’s value systems, beliefs, and perception processes. Consequently, they respond to advertising messages that are congruent with their culture, rewarding advertisers who understand that culture and tailor ads to reflect its values (Bodewyn, Soehl, and Picard 1986; Buzzell 1968; Harris 1984; Hornik 1980).

Is such tailoring worth the incremental cost? That question has elicited several decades of heated discussions about the wisdom of standardization or adaptation (see Elinder 1961; Fatt 1967; Donnelly 1970; Levitt 1983; Onkvisit and Shaw 1987). International advertisers have become particularly interested in what circumstances require culturally congruent advertising (i.e., advertising that conforms to the norms of a particular culture) versus a more uniform global approach (Jain 1989). Although a standardized approach in advertising has been acknowledged to be more suitable for industrial and high technology products than for consumer products (Bakker 1977; Bodewyn, Soehl, and Picard 1986), relatively little is known about differences between various consumer products and, in particular, how the way a product is used might affect the best advertising approach.

We investigated product use conditions and their impact on the effectiveness of different advertising appeals across contrasting cultures. Specifically, we explored the effectiveness of advertising appeals matched to culture in the United States and China for an advertised product used in a private setting versus one used in a socially visible setting. The United States and China were chosen to provide maximum cultural contrast.

Advertising in China

For decades after 1949, advertising in China seemed to be an oxymoron. Particularly during the so-called “Cultural Revolution” from 1966 to 1975, advertising was labeled as evil, deceptive, and reflective of capitalistic decadence. No advertising was allowed or needed, because the Chinese economy was managed through Soviet-style “five-year plans.”

However, remarkable changes have taken place since 1978 when the
“open-door policy” was adopted. China has evolved from an egalitarian orthodox Marxist state to a more pragmatic “socialist market economy” oriented toward economic development and modernization. Increasingly, like their Western counterparts, Chinese managers now face productivity and marketing concerns as China continues to move away from a centrally planned economy. Meanwhile, China has come a long way from having no advertising at all to having a contemporary advertising infrastructure with all modern media in use (Tse, Belk, and Zhou 1989). For example, in terms of print media, about 8,000 different periodicals are currently published in China, many of which carry a variety of consumer advertisements (Lou 1995). As per capita income has risen, advertising spending has skyrocketed. From 1985 to 1992 advertising expenditure’s proportion of gross domestic product more than tripled from 0.07% to 0.23% (Karp 1994). As a result, advertising has become one of China’s fastest-growing industries (Tefft 1994). With the current annual advertising spending growth rate, China is expected to become one of the world’s top 10 advertising markets within a few years (Parton 1994). Many U.S. and Japanese advertising agencies, therefore, have entered the Chinese market either to serve their present clients that have expanded to China or to pursue new opportunities with local firms.

Despite its rapid growth, the Chinese advertising industry has yet to reach the levels of sophistication found in most Western countries. For example, the relative “newness” of the advertising industry means great difficulties in assessing advertising effectiveness in China (Lohtia, Johnston, and Aab 1994). Television audience measures and newspaper and magazine readership data are almost nonexistent. Therefore, it is difficult for advertisers to assess consumer media habits, which may be very different from those in other parts of the world. Many advertisements are informational and unsophisticated in style. In addition, although a wide variety of media options are available, both consumer and industrial products (such as large trucks, construction machinery, etc.) are advertised through mass media, indicating either a lack of sophistication in media planning or simply a lack of specific media to target certain groups.

As mass advertising becomes a reality for many American companies operating in China, understanding cultural differences between the United States and China and the impact of such differences on the effectiveness of advertising appeals will be increasingly important to those companies. However, little empirical research has examined the cultural differences between the two countries. Samiee and Jeong (1994) reviewed cross-cultural advertising studies published in 18 major periodicals between 1980 and 1992 and found that only one study pertained to China and none compared China with the United States. Our study was undertaken in part to address this deficiency.

Theoretical Background

Cultural Values and Advertising Appeals

Hofstede (1980, p.19) has defined culture as “the interactive aggregate of common characteristics that influences a group’s response to its environment,” and has referred to culture as the “collective programming of the mind which distinguishes the members of one group or category of people from those of another” (1991, p.5). According to some researchers, fundamental cultural differences can be identified by examining the culturally generalizable aspects of values (e.g., Munson and McIntyre 1979). Advertisers heed such differences because values are of central concern in understanding consumer behavior (Carman 1978; Rosenberg 1956; Vinson, Scott, and Lamont 1977).

Although culture is a complex, multifaceted construct, one of its most basic dimensions is the value placed on individualism versus collectivism, an aspect of culture employed in many studies (see Kim et al. 1994). The core meaning of individualism is giving priority to personal goals over the goals of the ingroup; that of collectivism is the reverse (Triandis 1989a, 1989b). For example, in individualistic cultures such as those in some European countries and North America, individuals prefer independent relationships to each other and individual goals take precedence over group goals. In contrast, people in Asia, Africa, and Latin America have an interdependent relationship with one another within a collectivity and group goals take precedence over individual goals. The individualism-collectivism dichotomy essentially reflects basic value emphases at the cultural level — the priorities or preferences, present in cultures or expressed by individuals, for particular goals rather than for others (Kluckhohn 1951; Rokeach 1973; Schwartz 1990).

Researchers have argued that the difference in the individualism-collectivism dimension represents a prime distinction between Chinese and American cultures (e.g., Chan 1986; Ho 1979). In fact, China is
typically considered to exemplify a collectivistic culture. Chinese society has historically emphasized family, social interests, and collective actions, and deemphasized personal goals and accomplishments (Li 1978; Oh 1976). Contrary to the American individualistic lifestyle and resentment of conformity, the Chinese way of life has traditionally stressed interdependence and conformity. Despite the recent emergence of some consumer enclaves that have embraced such values as conspicuous consumption, conformity still tends to govern interpersonal relationships in Chinese society, and continues to have social and cultural approval (Hsu 1981).

The United States, in contrast, is known for its "rugged individualism," the belief that each person is an entity separate from others and the group and, as such, is endowed with natural rights (Spence 1985). American individualism means not only that one is self-sufficient as a matter of fact, but also that one must strive toward self-sufficiency as an ideal: each individual controls his or her own destiny without help from others (Hsu 1983). Thus, individualism is considered central to the American character (Spence 1985), and American values that encourage individual achievement and the attainment of material prosperity are rooted in that concept. It is also evidenced in theories of ego and moral development postulating that the highest stage a person can attain is one of autonomy, which is above acceptance of and conformity to society's standards (e.g., Loevinger 1976).

Such cultural values, norms, and characteristics are embedded in advertising appeals, the specific approaches advertisers use to communicate how their products will satisfy customer needs (Arens and Bovee 1994). The appeals are typically carried in the illustration and headlines of the ad and are supported and reinforced by the ad copy. Researchers have argued that cultural values are the core of advertising messages and typical advertisements endorse, glorify, and inevitably reinforce cultural values (Pollay and Gallagher 1990). Evidence indicates that different cultures seem to emphasize different advertising appeals. For example, Japanese ads have been found to contain more emotional and fewer comparative appeals than American ads (Hong, Muderrisoglu, and Zinkhan 1987). Ads in China have been found to contain more utilitarian appeals that focus on state of being and promise a better life (Tse, Belk, and Zhou 1989).

Of course, neither the United States nor China is a culturally homogeneous society. Multiculturalism in the United States is well documented, and China has 56 nationalities, many with their own distinctive cultural values and belief systems. However, the largest nationality, the Han, constitutes more than 90% of the total population, most of whom share Confucian values and virtues that emphasize family and collectivity. Although disparity in economic development across the different regions of China may have resulted in a multicultural environment even within the Han nationality, ample evidence shows that culture has great inertia and cultural change is slow (Triandis et al. 1988). In societies with long traditions, emphasis on collectivism changes very slowly, as evidenced by the traditional Chinese cultures found today in Taiwan and Hong Kong despite their economic divergence from China.

To the extent that advertising does reflect cultural differences and there are clear differences between Chinese and American cultures, one would predict greatest success in each culture for culturally congruent appeals, that is, appeals that conform to prevailing cultural values and norms (such as those illustrating group benefits in China or those illustrating individual benefits in the United States). Similarly, the effectiveness of a particular appeal should differ between cultures that do not share the same values and norms.

The preceding considerations suggested two hypotheses.

H1a: In the United States, a culturally congruent individualistic appeal elicits more positive responses than a culturally incongruent collectivistic appeal.

H1b: In China, a culturally congruent collectivistic appeal elicits more positive responses than a culturally incongruent individualistic appeal.

Products’ Use Condition as a Moderator

In certain situations, advertising appeal and culture may not match for several reasons. An advertiser may follow a global, standardized approach, and the advertising appeals employed may not reflect the prevailing cultural values of a particular country. For example, an individualistic appeal may be used in a collectivistic culture vice versa. Moreover, an individual in the audience for an ad may not be a part of the prevailing culture for which the ad was designed for. Some researchers hold that for the individualism-collectivism dimension of culture, the difference between two cultures’ orientation is a matter of de-
The purpose an object serves may substantially influence its function of attitude. According to Shavitt (1990), the functions of product-related factors as product differentiation, life cycle, scarcity, and conspicuousness and of such consumer-related factors as involvement, prior knowledge, and self-monitoring. Hence, the effectiveness of a culturally incongruent advertising appeal may be moderated by a variety of factors.

That view is consistent with theories on the object-based function of attitude. According to Shavitt (1990), the purpose an object serves may substantially influence the functions of attitude toward the object. Some objects (such as a toothbrush) mainly serve a personal purpose because they are used mostly in private and do not have social meaning (i.e., the social projection of self through the display of the object). Other objects, such as a car or camera, often serve a social purpose of self-projection and status communication although they can also serve a personal purpose such as providing transportation or taking pictures.

Closely related to the purpose of an object is its meaning to the consumer. Researchers have argued that consumers own objects for the value they provide (e.g., Csikszentmihalyi and Rochberg-Halton 1981; Furby 1978; Richins 1994). Such a value of possession is rooted in the objects' meanings to the consumer, according to Richins (1994), which may be either public (i.e., meanings assigned to an object by members of society at large) or private (i.e., personal and subjective meanings of an object held by an individual). In a similar vein, other researchers have demonstrated that consumption visibility significantly influences consumers' expectations of social approval (e.g., Fisher and Price 1992).

Hence, we expect that a consumer's need to conform to cultural values and norms when evaluating products may depend on how the products are used (the product use condition). A toothbrush need not reflect the prevailing collectivist societal value the way a camera would in a collectivistic culture, given that the latter is used in public and serves a social purpose and the former does not. An appeal that emphasizes individual benefits (individualistic appeal) therefore may be effective in promoting the toothbrush in a predominantly collectivistic culture. In a parallel way, a socially visible product such as a camera need not reflect a society's level of individualism to the extent that would be expected for a product for private use. An appeal that highlights the social benefits of the product (collectivistic appeal) may work well for such a product in a predominantly individualistic culture.

Further, we expect this influence of product use condition to be more evident for a culturally incongruent advertising appeal than for a culturally congruent appeal. Stated differently, moderation by product use condition when a culturally congruent advertising appeal is used would be less obvious because of the predominance of the culturally congruent appeal, as argued previously. However, when a culturally incongruent appeal is used, product use condition would become more salient. Hence, when a culturally incongruent advertising appeal matches the product's use condition, the ad would be more effective than one in which a culturally incongruent advertising appeal matches neither the culture nor the product's use condition.

The preceding considerations suggested the following hypotheses.

H2: Product use condition moderates the effectiveness of culturally-incongruent advertising appeals.

H2a: In the United States, a culturally incongruent collectivistic appeal elicits more positive responses for a socially visible product than for a product used in private.
Table 1
Sample Profile

<table>
<thead>
<tr>
<th>Sample Characteristics</th>
<th>United States</th>
<th>China</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>47.4%</td>
<td>58.7%</td>
</tr>
<tr>
<td>Female</td>
<td>52.6%</td>
<td>41.3%</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>23.7</td>
<td>21.5</td>
</tr>
<tr>
<td>SD</td>
<td>4.6</td>
<td>3.2</td>
</tr>
<tr>
<td>Race/Nationalities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasian</td>
<td>65.8%</td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>11.3%</td>
<td></td>
</tr>
<tr>
<td>Hispanic</td>
<td>7.5%</td>
<td></td>
</tr>
<tr>
<td>Asian</td>
<td>16.2%</td>
<td></td>
</tr>
<tr>
<td>Han</td>
<td></td>
<td>91.3%</td>
</tr>
<tr>
<td>Hui</td>
<td></td>
<td>3.8%</td>
</tr>
<tr>
<td>Others</td>
<td></td>
<td>5.0%</td>
</tr>
<tr>
<td>Employed</td>
<td>36.3%</td>
<td>23.0%</td>
</tr>
<tr>
<td>Full-time Students</td>
<td>54.0%</td>
<td>78.0%</td>
</tr>
</tbody>
</table>

H2b: In China, a culturally incongruent individualistic appeal elicits more positive responses for a product used in private than for a socially visible product.

Method

Design of the Experiment

An experiment was designed to test the hypotheses. Subjects were 160 students, 80 in each country; 93 were men and 67 were women. They were enrolled in undergraduate and graduate business classes in a large university in southern China and a large university in the northeastern United States (see Table 1 for sample profiles). Both are comprehensive universities in major metropolitan areas with diverse cultural and economic activities.

Three independent variables were used in the experiment: 1) country (the United States and China), 2) advertising appeals (collectivistic versus individualistic), and 3) product use conditions (socially visible versus privately used). The first two were between-subjects variables. Students in each country were selected randomly to receive an individualistic or collectivist appeal in each of the test ads they saw. For the third variable, product use condition, a within-subject design was devised to provide control of extraneous influences and thus increase the power of the test. The within-subject design also afforded greater efficiency in the use of subjects, an issue of particular concern given the high cost of conducting cross-cultural studies. Hence, the study had a 2 X 2 X 2 factorial design.

Products. A 35mm camera was selected as the socially visible product. It was given a fictional brand name to remove influences due to prior brand evaluation and knowledge. A camera was selected because of university students' general familiarity with the product class in both countries; in a pretest conducted in both countries prior to the study, all students owned or operated some type of camera. Many types of cameras are widely advertised in consumer magazines in China. Foreign cameras accounted for 57% of the total camera sales in 1995 (Yan 1995a). With the rapid improvement in standard of living, cameras and other consumer electronic products have been in high demand (Yan 1995b). Domestic camera sales in 1995 exceeded 8 million units, and surveys indicate that more than 85% of all households in major cities own cameras (Rao 1995). The sales growth rates in large and mid-sized cities for the next few years are estimated to be about 12 to 15% annually (Rao 1995). In selecting the type of camera for the ad, we took into account the obvious disparity in purchasing power between the two countries; a simple point-and-shoot type was featured because it was in common use in both countries. The print ads for the camera, which differed only in appeal employed, were constructed to imitate actual ads in photography magazines (see Figure 1) and were in color.

The other product chosen was a toothbrush, on the basis that it is used most often in private. It was used widely by and equally familiar to the subjects in both countries. Undoubtedly, the levels of dental care differ considerably between the two countries. However, data obtained from China's National Committee for Oral Health and the Department of Prevention and Dental Hygiene, Beijing Medical University, indicate that toothbrush use rate is high among urban dwellers (80%) (Zhang 1995). In certain population groups (such as students), the use rate is close to 100% (Niu, Niu, and Chen 1995). Given the widespread use of
Figure 1
Experimental Stimuli: A Socially Visible Product with Collectivistic Appeal

Share the Moments of Joy and Happiness
With Your Friends and Family!
dentified in collectivistic cultures (Triandis et al. 1986).

Both headlines reflected family/in-group orientation and social conformity, value orientations predominant in collectivistic cultures (Triandis et al. 1986).

The back-translation technique was used in translating the copy (Brislin 1980; Douglas and Craig 1983). Specifically, the copy was first translated into Chinese by a native Chinese who knew both languages and then back-translated into English by two other bilingual persons to ensure the accuracy of the translation. The translated copy was further examined and modified by one of the principal investigators who is proficient in both languages. A pragmatic translation (Casagrande 1954) approach was followed in the translation of the brand names and other elements of the ads, whereas an aesthetic-poetic/ethnographic translation approach was followed in the translation of the headline copy. The translated copy was further pretested with both Chinese and U.S. college students to ensure the effectiveness of the perceived appeal type (Brislin 1980, p. 431). The pretest subjects (total sample size = 24) were recruited to participate in an advertising study. They were given copies of the ads and were asked to indicate whether they understood the material and whether the copy had either individualistic appeal or collectivistic appeal. They all indicated that they understood the material and correctly identified the ad copy. Table 2 contains the translated headline copy.

Filler ads from both Chinese and U.S. magazines chosen by a panel of judges were used to disguise the purpose of the study. The advertisements were compiled into a magazine-like booklet and appeared in the following sequence: filler ad 1, experimental ad 1 (socially visible product with individualistic appeal/private used product with collectivistic appeal), filler ad 2, experimental ad 2 (privately used product with individualistic appeal/socially visible product with collectivistic appeal), and filler ad 3. The order of the products was alternated in the experimental ads to eliminate any sequence effect due to the order of presentation.

**Procedure and Dependent Variables**

Subjects were recruited to participate in a study ostensibly investigating how people read printed materials. The students completed the task in groups of five to ten. They were instructed to be as natural as possible in reading the materials presented to them. After the subjects finished reading the experimental materials, they completed a questionnaire containing several scales on which they indicated their responses.
Figure 2
Experimental Stimuli: A Privately Used Product with Individualistic Appeal
to the ads and the products. All the dependent measures were adapted from previous studies.

**Attitude toward the Ad.** Ad attitude ($A_{ad}$) was measured with a 4-item, 9-point semantic differential scale (unpleasant-pleasant, unlikable-likable, not irritating-irritating, and not interesting-interesting, with the third item reverse-scaled). Semantic differential scales have been characterized as “pancultural” scales suitable for measuring similar traits in cross-cultural studies (Osgood, May, and Miron 1975). Such scales have been demonstrated to capture concepts and dimensions used to evaluate stimuli—either objects or subjects—and to account for major proportions of the variation in responses. An average of the multiple ratings served as the measure of $A_{ad}$. Because the study had one within-subject factor, each subject responded separately to the two product types.

**Attitude toward the Brand.** Brand attitude ($A_{br}$) was measured with a 3-item scale (bad-good, not nice-nice, and unlikable-likable). Again, the mean score of the ratings was used as the dependent measure of the construct. All semantic differential scales used for both $A_{ad}$ and $A_{br}$ had a range from -4 to 4 with zero being the central point.

**Product Choice.** To measure choice behavior, subjects were given a choice of three different brands in each product category. They were informed that they would receive for their participation in the study two coupons good toward the purchase of one brand in each product category. They were asked to place an “X” next to the brand name of the chosen products listed on the questionnaire. Subjects’ choices were coded as 1 if the advertised brand was chosen and 0 otherwise (see Table 3).

Several ancillary measures also were taken to check for potential biases in responses. Demographic data were requested and product familiarity was measured with a scale ranging from -4 to 4 to detect differences in subjects’ familiarity with each product across the two countries. A question to assess demand characteristics asked the subjects what they felt was the true purpose of the study. The questionnaire was translated into Chinese with a procedure similar to that used in ad copy translation.

Because the objective of our study was to investigate the main effect of different appeals and the interactive effect of moderation by product use condition, we used analysis of variance to test the proposed hypotheses. Choice data were analyzed with logistic regression.

## Results

To reduce potential problems due to different response styles (Chun, Campbell, and Yoo 1974) of subjects in the two countries, all scaled responses were standardized before they were subjected to analyses. Such a standardization procedure removes location and scale attributes from the data, thereby helping to reduce possible distortion due to potential extreme responses style differences. The standardized variables had a mean of zero and a standard deviation of one. Table 4 contains the cell means of the variables.

As a preliminary step, we assessed measurement reliability by calculating coefficient alpha for the scaled measures. It was quite high (averaged $A_{ad}$ scores across product type: .92; averaged $A_{br}$ measures: .88). We found no statistically significant difference in the product familiarity measure between subjects in the two countries for either product ($F_s < 1$). No subject

### Table 2
Translation of Ad Copy Headlines

<table>
<thead>
<tr>
<th>Product</th>
<th>Individualistic Appeal</th>
<th>Collectivistic Appeal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Camera</td>
<td>“Come and Indulge in the Joy of Self Expression!”</td>
<td>“Share the Moments of Joy and Happiness with Your Friends and Family!”</td>
</tr>
<tr>
<td>Toothbrush</td>
<td>“Reach Out for the Pleasure of Brushing!”</td>
<td>“Everybody Likes the Brand Name Flexbrush!”</td>
</tr>
</tbody>
</table>

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Table 3
Measures

Dependent Variables

Ad attitude (semantic differential)
Unpleasant - Pleasant
Unlikable - Likable
Not irritating - Irritating (reverse scaled)
Not interesting - Interesting

Brand attitude (semantic differential)
Bad - Good
Not nice - Nice
Unlikable - Likable

Choice behavior (binary responses)
Choice of advertised brand 1
Choice of other brands 0

Ancillary Measures

Demographics
Age
Gender, etc.

Product familiarity
Unfamiliar - Familiar

Experimental demand
The purpose of the study

guessed the true purpose of the experiment, and responses did not differ by gender.

Prior to testing the specific hypotheses, we conducted a full-factor omnibus repeated-measures MANOVA with Ad measures on the two products as the dependent variables and country and appeal type as the independent variables. As noted previously, country and appeal type were between-subjects factors and product was a within-subject factor; significant interactions would suggest the presence of a potential moderation effect. The results revealed a significant between-subjects country by appeal interaction (see Table 5 for a summary of the results) and a product by appeal two-way interaction. Also significant was the product by country interaction. No other effects were significant. These interactions suggested that possible moderation was occurring, as had been predicted.

Similarly, we conducted a full-factor procedure with Abr as the dependent variable. Results revealed a significant country by appeal interaction and significant product by appeal interaction. No other effects were significant. We further analyzed these results to test each specific hypothesis.

Tests of H1a and H1b

The significant country by appeal interaction in the overall analysis provided initial evidence that the appeals differed in effectiveness between the two cultures. To test H1a and H1b, further analyses were conducted on the between-subjects factor appeal type
The results show a significant appeal main effect ($F = 8.52, p < .01$) among U.S. subjects. U.S. subjects preferred an individualistic appeal; the averaged scores across product for the U.S. respondents are $-.20$ (collectivistic appeal) versus $.23$ (individualistic appeal). Results from Chinese subjects show the opposite pattern ($F = 19.21, p < .001$) with a significantly higher score for the collectivistic appeal. The mean scores are $.30$ (collectivistic appeal) versus $-.32$ (individualistic appeal). The country by appeal interaction with $A_{ad}$ in the initial and followup analyses is illustrated in Figure 3, panel A.

Results on $A_{br}$ scores also show a significant appeal effect ($F = 7.53, p < .01$) among U.S. subjects. The averaged scores across product for the U.S. subjects are $-.21$ (collectivistic appeal) versus $.26$ (individualistic appeal). Scores for the Chinese subjects show a different pattern (see Figure 3, panel B), with a significantly higher score ($F = 14.48, p < .001$) associated with the collectivistic appeal (.24) rather than the individualistic appeal (-.22). These results clearly support H1a and H1b, that a culturally congruent appeal is associated with more favorable attitudes.

**Test of H2, H2a, and H2b**

The significant product by appeal interaction found in the initial multivariate analysis provided preliminary evidence supporting H2, that product use condition moderates the effectiveness of advertising appeals. Further analyses were conducted with data from respondents in each country; ANOVAs were carried out within each appeal type subsequently to test for the moderating effect of product use condition in each country. These analyses were conducted separately for $A_{ad}$ and $A_{br}$ scores.

*Ad Attitude.* The analyses of data from U.S. subjects show a significant product by appeal interaction ($F = 9.16, d.f. = 1/78, p < .01$) and an appeal main effect ($F = 8.52, p < .01$). As a follow up, a repeated-measures ANOVA was conducted within each appeal type. A product main effect is significant for the culturally incongruent collectivistic appeal ($F = 17.13, d.f. = 1/39, p < .001$), with a mean $A_{ad}$ of $-.46$ for the toothbrush (privately used product) versus $.06$ for the camera (socially visible product). As expected, however, no significant $A_{ad}$ difference between the two products is found for U.S. subjects exposed to the culturally congruent individualistic appeal (see Figure 2, panel A), and both values are higher than those associated with the collectivistic appeal.

### Table 4: Means of the Dependent Measures and Product Familiarity

<table>
<thead>
<tr>
<th>Measures</th>
<th>U.S.</th>
<th>People's Republic of China</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ad attitude</td>
<td>Brand attitude</td>
</tr>
<tr>
<td><strong>Ad Attitude</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individualistic</td>
<td>.31 (.78)</td>
<td>.15 (.94)</td>
</tr>
<tr>
<td>Collectivistic</td>
<td>.06 (.77)</td>
<td>.03 (.85)</td>
</tr>
<tr>
<td></td>
<td>.37 (.76)</td>
<td>.17 (1.16)</td>
</tr>
<tr>
<td><strong>Social</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individualistic</td>
<td>.13 (.78)</td>
<td>.15 (.94)</td>
</tr>
<tr>
<td>Collectivistic</td>
<td>.02 (.67)</td>
<td>.00 (.86)</td>
</tr>
<tr>
<td></td>
<td>.14 (.89)</td>
<td>.01 (1.12)</td>
</tr>
<tr>
<td><strong>Product Familiarity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individualistic</td>
<td>.50 (.95)</td>
<td>.50 (.95)</td>
</tr>
<tr>
<td>Collectivistic</td>
<td>.05 (92)</td>
<td>-.05 (.92)</td>
</tr>
<tr>
<td></td>
<td>.34 (.67)</td>
<td>.34 (.67)</td>
</tr>
<tr>
<td><strong>Social</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individualistic</td>
<td>-.70 (.56)</td>
<td>-.70 (.56)</td>
</tr>
<tr>
<td>Collectivistic</td>
<td>-.06 (.56)</td>
<td>-.06 (.56)</td>
</tr>
<tr>
<td></td>
<td>-.52 (.89)</td>
<td>-.52 (.89)</td>
</tr>
<tr>
<td><strong>Product Familiarity</strong></td>
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</tr>
<tr>
<td>Individualistic</td>
<td>-.10 (.83)</td>
<td>-.10 (.83)</td>
</tr>
<tr>
<td>Collectivistic</td>
<td>.60 (1.09)</td>
<td>.60 (1.09)</td>
</tr>
<tr>
<td></td>
<td>.09 (1.19)</td>
<td>.09 (1.19)</td>
</tr>
</tbody>
</table>

* Standard deviations are in parentheses.
Table 5
Results of Initial Analyses of Data

<table>
<thead>
<tr>
<th>Measure</th>
<th>Sources</th>
<th>d.f.</th>
<th>F-Value</th>
<th>p-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ad attitude</td>
<td>Country (C)</td>
<td>1</td>
<td>0.06</td>
<td>0.80</td>
</tr>
<tr>
<td></td>
<td>Appeal (A)</td>
<td>1</td>
<td>0.96</td>
<td>0.32</td>
</tr>
<tr>
<td></td>
<td>Product (P)</td>
<td>1/156</td>
<td>0.02</td>
<td>0.98</td>
</tr>
<tr>
<td></td>
<td>C X A</td>
<td>1</td>
<td>26.54</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>C X P</td>
<td>1/156</td>
<td>4.39</td>
<td>0.03</td>
</tr>
<tr>
<td></td>
<td>A X P</td>
<td>1/156</td>
<td>30.94</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>C X A X P</td>
<td>1/156</td>
<td>1.77</td>
<td>0.18</td>
</tr>
<tr>
<td>Brand attitude</td>
<td>Country (C)</td>
<td>1</td>
<td>0.26</td>
<td>0.60</td>
</tr>
<tr>
<td></td>
<td>Appeal (A)</td>
<td>1</td>
<td>0.11</td>
<td>0.73</td>
</tr>
<tr>
<td></td>
<td>Product (P)</td>
<td>1/156</td>
<td>0.00</td>
<td>0.98</td>
</tr>
<tr>
<td></td>
<td>C X A</td>
<td>1</td>
<td>20.66</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>C X P</td>
<td>1/156</td>
<td>3.31</td>
<td>0.07</td>
</tr>
<tr>
<td></td>
<td>A X P</td>
<td>1/156</td>
<td>25.01</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>C X A X P</td>
<td>1/156</td>
<td>0.04</td>
<td>0.84</td>
</tr>
</tbody>
</table>

Therefore, the results support H2a. The moderation was salient with the culturally incongruent collectivistic appeal. When appeal matched product, the $A_{ad}$ score (.06) was higher than that observed for the double-mismatch case (-.46): a collectivistic appeal inappropriate for both a privately used toothbrush and the individualistic U.S. culture. The score in the double-mismatch case lowered the overall score of the collectivistic appeal, contributing to the appeal main effect.

Analysis of the Chinese responses also show a significant product by appeal effect ($F = 23.22, d.f. = 1/78, p < .001$) and a significant appeal main effect ($F = 19.28, p < .001$). As expected, for the culturally congruent collectivistic appeal, the product effect is not significant. However, for the culturally incongruent individualistic appeal, the product effect is significant (means .05 versus -.70, $F = 22.62, d.f. = 1/39, p < .001$). The lower score elicited by the double mismatch of individualistic appeal with the socially visible product and collectivist culture (-.70) contributed to the low score of the overall individualistic appeal in the main effect. Figure 4, panel B is a plot of the means.

**Brand Attitude.** The results on $A_{br}$ are consistent with those on $A_{ad}$. For the U.S. subjects, the results show a significant product by appeal interaction ($F = 13.16, d.f. = 1/78, p < .001$) and appeal main effect ($F = 7.53, p < .01$). Analyses within appeal type show that collectivistic appeal had a significant product effect ($p < .01$, means: -.43 for privately used product vs. .03 for socially visible product), whereas the individualistic appeal did not. The combination of collectivistic appeal with privately used product substantially lowered the scores, contributing to the appeal type main effect (see Figure 4, panel C) and again supporting the hypothesis that a culturally incongruent appeal to collectivism is least effective when (a) the appeal does not match the culture and (b) the appeal also does not match the product (a product not used for social purposes).

Results among the Chinese subjects are in the expected direction, indicating a product by appeal interaction ($F = 11.85, d.f. = 1/78, p < .001$) and a main appeal effect ($F = 14.48, p < .001$). Follow-up analyses within appeal types show that the collectivistic appeal had an nonsignificant product effect, whereas the individualistic appeal had a significant product effect ($F = 9.05, d.f. = 1/39, p < .01$, mean -.08 for toothbrush vs. -.52 for camera). The main effect appears to be caused mainly by the lower score for the camera ad with an individualistic appeal (-.52), as hypothesized.

**Product Choice**

In analyzing the choice data with logistic regression procedures, we used brand choice as the crite-
rion variable and country, appeal type, product, and the interactions between them as the predictor variables. The logistic regression results failed to show the country by appeal interaction predicted by H1a and H1b (Wald $\chi^2 = .03$), but did provide some support for the hypotheses about product and appeal interaction ($\chi^2 = 3.20, p < .05$).

To investigate the product by appeal interaction, we fitted two logistic models within each level of the product factor. For the toothbrush data, the model reveals a significant appeal main effect ($\chi^2 = 7.03, p < .01$, see Table 6). Examination of the cell frequencies indicates that choice probability for the advertised product was higher with the individualistic appeal than with the collectivistic appeal for both American subjects (probability .65 vs. .37) and Chinese subjects (probability .60 vs. .30). For U.S. respondents, individualistic appeals would be expected to be most effective. For Chinese respondents, individualistic appeals would be expected to trail collectivistic appeals in effectiveness. However, the results show that individualistic appeals worked better for the privately used product in both countries, thus supporting the notion that product use condition may influence advertising effectiveness.

For the data on the camera, the model show a significant country by appeal interaction ($\chi^2 = 4.97, p < .05$; see Table 6). We examined cell frequencies to understand the nature of the interaction. Chinese subjects were more likely to choose the advertised camera with a collectivistic appeal (choice probability .63) than to choose the same product with an individualistic appeal (choice probability .30), as would be expected. However, U. S. subjects did not exhibit the same pattern of choice behavior; the proportions choosing the advertised camera were almost identical, regardless of advertising appeal (.43 vs. .45). Figure 5 shows results for this socially visible product.

In sum, the product choice data do not exhibit a strong pattern as in the case of $A_{ad}$ and $A_{br}$ with respect to the interaction effect between country and advertising appeals. However, the results show an appeal main effect favoring the individualistic appeal for the privately used product in both countries. This finding is consistent with our reasoning that product use condition does have some effect beyond cultural influence. The results for the socially visible camera show that U. S. subjects were indifferent between the two appeals. Therefore, the choice data provide only limited support for the hypotheses.
Discussion

Findings and Implications

Our finding that disproportionately favorable outcomes were associated with a match between advertising appeal and cultural values supports the idea that cultural congruence brings about more favorable attitudes. Therefore, matching advertising appeals to culture is advisable for advertisers, especially in the case of sharply contrasting cultures, such as those of the United States and China. Rapid economic changes taking place in China have created a huge market with numerous opportunities for U.S. businesses (Barnathan, Engardio, and Einhorn 1993). Our results suggest that an advertiser who takes such a market seriously will seek to align message with culture.

We also addressed the role of product use condition in situations where appeal and culture do not match. Our results indicate that when the appeal matches the product use condition, employing a culturally in-
congruent advertising appeal may not be a problem. This finding may have important implications for firms that strive to standardize their global advertising appeals.

Essentially, standardization of advertising is based on the premise that needs and wants of people are basically the same everywhere and that a carefully conceived and executed appeal can strike common responsive chords in consumers in different countries (Peebles 1978). Researchers have long noted product characteristics and argued that standardization is more feasible for industrial products than for consumer products (Boddewyn, Soehl, and Picard 1986), and that among consumer products, durable products may afford greater opportunity for standardization than nondurable products because the latter require more adjustment to unique local tastes, habits, and customs (Douglas and Urban 1977; Hovell and Walters 1972).

Our findings add to these perspectives by providing empirical evidence that product use condition is a key element in determining the feasibility of standardizing advertising appeals. As we demonstrated, advertising standardization is feasible if a product is used in a consumption situation that matches the appeal in the ad. Culture matters, but advertisers need not assume that its influence on responses to advertising appeals is independent of other factors.

On the basis of our findings, what advice might be offered specifically to firms marketing products in China? The results suggest that Chinese consumers respond more favorably to a collectivistic than to an individualistic appeal. Yet, in adapting to the Chinese culture, a firm may also consider factors that may provide bases for cost-effective standardized approaches in advertising. Product use situation can be one such factor. It is particularly meaningful in view of the vast size of the Chinese market and the potential costs of having to adapt to various regional markets. A standardized approach may afford several important advantages, such as economy of scale and more uniform product images. When product use conditions match a planned appeal, a standardized approach is certainly possible. Note, however, that given the nature of the products used in our study, the results are probably more reflective of the needs of the urban than of rural consumers in China. Despite rapid improvements in the standard of living, different areas may have greatly different consumer product needs.

The willingness of Chinese subjects to select the toothbrush with an individualistic appeal is interesting. The anonymity of toothbrush usage enable them to act on a desire to break from the collectivism that pervades their public lives. Possibly appeals counter to the cultural norm will attract buyers—if the product is used in private and the culturally incongruent appeal at least matches the product, as in the case of an individualistic appeal for a toothbrush.

The choice data are less than consistent with other measures. One problem may be the coupon-use measure; although often used to capture behavioral intention, coupon interest is at least open to question as an operationalization of purchase measure. In any

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**Table 6**

Results of Logistic Regression Analyses

<table>
<thead>
<tr>
<th>Variable</th>
<th>d.f.</th>
<th>Parameter Estimates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>1</td>
<td>.84 .85 .30</td>
</tr>
<tr>
<td>Country (C)</td>
<td>1</td>
<td>-.34 -.34 -.81</td>
</tr>
<tr>
<td>Appeal (A)</td>
<td>1</td>
<td>-1.25* -1.25* -.10</td>
</tr>
<tr>
<td>Product (P)</td>
<td>1</td>
<td>-.55</td>
</tr>
<tr>
<td>C X A</td>
<td>1</td>
<td>.12 .12 1.46*</td>
</tr>
<tr>
<td>C X P</td>
<td>1</td>
<td>-.47</td>
</tr>
<tr>
<td>A X P</td>
<td>1</td>
<td>1.15*</td>
</tr>
<tr>
<td>C X A X P</td>
<td>1</td>
<td>2.06</td>
</tr>
</tbody>
</table>

* * p < .01.
** * p < .05.
products were used in the study, caution is warranted in generalization to other products. Also, we relied on direct observation and available use rate information in choosing the products for the study. Given the concerns about the quality of data emanating from developing and historically planned economies, it is always advisable to be cautious about such statistics. Finally our study examined only one among many cultural differences between the United States and China—although that difference is widely acknowledged to be a major one. The study should not be considered a direct test of one of the dimensions of culture (e.g., Hofstede 1980) in isolation. It did not address the interplay and influence of other dimensions. Certainly, the two cultures differ in many ways, and the manifestation of such cultural differences can be subtle and can influence responses to advertising.

Suggestions for further research clearly include studies similar to ours employing other cultural values. In addition to individualism and collectivism, Hofstede (1980) sees cultures placing more or less value on what he calls "masculinity," "power distance," and "uncertainty avoidance." Recently, he added a fifth dimension of cultural difference, "long-term/short-term orientation," reflecting cultural traits such as thrift (saving) and perseverance (Hofstede 1994). Testing culturally congruent versus incongruent advertising that varies on these dimensions could be useful. The more we understand about the impact of culture on the effectiveness of advertising, the more value advertisers obtain from each advertising dollar—and each cross-cultural study.

**Limitations and Future Research**

As is true of laboratory studies, our research has limitations. First, as a cross-cultural study, it may have had biases due to extreme response style differences between respondents in the two cultures. Such potential biases suggest caution in interpreting the results. Second, no manipulation check was undertaken with the actual subjects of the experiment, and such verification would increase confidence in the results. Third, methodologically, because the appeals used in the study reflect different dimensions of individualism and collectivism, ideally the appeals should be crossed with both types of products. The practical difficulty of finding appeals that apply simultaneously to both products without losing realism, as well as the resultant sample size inflation, prevented us from doing so. Future studies should have a fuller design to test the influence of culture. Fourth, as only two

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**References**


