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Adapting Consumer Advertising Appeals to Cultural Values:

A Meta-Analytic Review of Effects on Persuasiveness and Ad Liking

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Abstract

It is a truism that successful persuasive messages should be adapted to audience values. A substantial research literature—not previously systematically reviewed—has examined whether advertisements with appeals adapted to the audience's important cultural values (e.g., individualism for North Americans) are more persuasive and better liked than appeals that are unadapted to such values. A meta-analytic review of that research finds that adapted ads are only slightly more persuasive (mean r = .073, 67 cases) and slightly better liked (mean r = .082, 66 cases) than unadapted ads. Moreover, these effects were mainly limited to North Americans and Asians and to values related to individualism-collectivism. In this chapter, we discuss explanations for these results and identify directions for future research.

Adapting Consumer Advertising Appeals to Cultural Values:

A Meta-Analytic Review of Effects on Persuasiveness and Ad Liking

Persuasion is a pervasive communicative function, occurring in personal relationships, the workplace, political settings, and in a variety of mediated contexts. Not surprisingly, persuasion has historically attracted considerable attention from scholars in many academic fields. For centuries, students of persuasion have taken it to be a commonplace that, in order to be effective, persuasive messages should be adapted to the audience. Indeed, this belief seems very nearly to be taken for granted, to the point that standard treatments of persuasion research do not give the matter much elaboration (e.g., Dillard & Pfau, 2002; O'Keefe, 2002; Perloff, 2003; Stiff & Mongeau, 2003). Of course, offering a systematic treatment of this question is complicated by the very large number of different possible specific bases of audience adaptation. A persuader might try to adapt to the audience's demographic characteristics such as sex and age (e.g., Martin, 2003; Yoon, Lee, & Danziger, 2007), psychographic characteristics such as values, attitudes, and lifestyles (e.g., Kahle, 1996; Novak & MacEvoy, 1990), information-processing style (e.g., level of sensation-seeking; Stephenson & Southwell, 2006), regulatory focus (e.g., Keller, 2006), attitudinal ambivalence (e.g., Broemer, 2002), and so forth.

Of all the possible bases of persuasive message adaptation, however, adaptation to the audience's *values* might plausibly be supposed to be the most important. Values are people's guiding principles in life (Rokeach, 1973; Schwartz, 1992), affecting their attitudes, intentions, and behavior. To the extent that a persuader's arguments speak to the audience's values, surely to that same extent the persuader is likely to be successful. Conversely, an advocated action (whether buying a product, voting for a candidate, adopting a policy, and so on) that is justified in terms of attributes or outcomes not valued by the audience is not likely to find much support.

In short, adapting persuasive appeals to the audience's values would seem to be an obviously important element of successful persuasion. Although it seems reasonable to suppose that value adaptation will be important—or indeed crucial—to persuasive success, until rather recently relatively little direct research attention had been given to this supposition. A substantial body of relevant research has quietly accumulated in the form of studies that compare the persuasiveness of consumer advertising appeals that vary in the degree to which the appeals invoke the audience's important cultural values.

Cultural Values and Advertising Adaptation

People differ in the extent to which they prefer one specific value over another. One individual may prefer adventure over harmony, whereas another may prefer harmony over adventure. Not only do individuals vary in their value priorities, but cultures also differ in their value hierarchies, that is, their rankings of which values are relatively important and unimportant (Hofstede, 1980, 2001). In the United States, for instance, individualist values (e.g., independence) are relatively important; however, in the Korean culture, members prioritize collectivist values (e.g., interdependence) (Hofstede, 1980, 2001).

Values are the core element of culture, which can be defined as "collective programming of the mind that distinguishes the members of one group or category of people from another" (Hofstede, 2001, p. 9). Although various definitions of and approaches to the fuzzy concept of culture exist, researchers concur that values play a central role in distinguishing and characterizing different cultures (Fiske, Kitayama, Markus, & Nisbett, 1998; Hofstede, 1980, 2001; Smith & Schwartz, 1997). Hofstede (1980, 2001) identified five value dimensions on which cultures can be classified and compared: individualism-collectivism (the relationship between the self and groups), high-low uncertainty avoidance (the tolerance for uncertainty),

large-small power distance (the acceptance of power inequality), masculinity-femininity (the distribution of gender roles), and long-term versus short-term orientation. This dimensional approach taken by Hofstede and by other scholars has been the most popular means of characterizing and studying cultural value variation (e.g., Fiske et al., 1998). Within this approach, the Hofstede dimensions have been most widely adopted in cross-cultural marketing research in general (e.g., Soares, Farhangmehr, & Shoham, 2007), and—as will become apparent—in studies on adapting advertising appeals to cultural values in particular.

Given that cultures vary in what values are emphasized, advertising in different cultures naturally displays corresponding variation. Corpus analyses of advertising appeals in magazines (e.g., Han & Shavitt, 1994), on television (e.g., Lin, 2001), or on websites (e.g., Singh & Matsuo, 2004) indicate that advertisements in a given culture often reflect that culture's values (cf. Cutler, Erdem, & Javalgi, 1997). Han and Shavitt (1994), for instance, found that appeals in Korean ads were more frequently related to interdependence and harmony, whereas those in U.S. ads tend to feature independence and individuality.

It is plausible to hypothesize that adaptation to important cultural values enhances the persuasiveness of advertising. To be sure, it is possible to adapt advertising to a culture in other ways. For example, some studies comparing the effectiveness of culturally adapted ads with culturally unadapted ads have based adaptation on such message elements as (non)comparative advertising (Choi & Miracle, 2004), attribute-focused or context-focused pictures (Meng, 2004), and associational or claimless information (Wells & Van Auken, 2006). However, just as adaptation to an audience's basic values is likely to be more important (generally speaking) than adaptation to (say) age or information-processing style, so adapting advertising appeals to cultural values is likely to be an especially important contributor to persuasive success. In fact,

the most prominently studied message element in cultural advertising adaptation has been the value appeal (see overviews of Gelbrich & Roschk, 2008; Shavitt & Zhang, 2004).

This research on adapting advertising appeals to culture can be seen to be spurred by the increasing globalization of brands and products and by the consequent need to address the question of the degree to which advertising can be standardized across cultures as opposed to culturally adapted (e.g., M. Agrawal, 1995; Taylor, 2005; Taylor & Johnson, 2002). For companies the benefits of standardization include not only economies of scale and the creation of a corporate brand image, but also the possibility to more fully exploit good creative ideas (see, for an overview, White, 2000). Adaptation, on the other hand, allows companies to tailor their ads to the needs and tastes of each local culture; the supposition is that the existence of different cultural values makes for corresponding differences in product use and purchase motives (e.g., De Mooij, 2005).

The paradigmatic research design in this area has compared the persuasiveness of two advertisements (appealing to different values) in each of two cultures, with one ad well-adapted to one culture and the other ad well-adapted to the other culture. For example, several studies have compared the persuasiveness of an ad appealing to individualist values and an ad appealing to collectivist values for both American and Chinese audiences (e.g., Aaker & Schmitt, 2001; J. Zhang, 2004). Researchers have generally expected that Americans will be more persuaded by (and will like better) an ad with an individualist appeal compared to one with a collectivist appeal, with the reverse expected for the Chinese. However, despite the apparent importance of illuminating the effects of advertising standardization or adaptation, the existing experimental research has not attracted much careful review. For example, Le Pair, Crijns, and Hoeken's

(2000) narrative review identified six relevant experiments, but it did not address questions of the size of the observed effects.

Thus, we undertook a meta-analytic review of the effects of cultural value appeal adaptation on the persuasiveness of, and liking for, consumer advertisements. We sought not only to provide information about the practical issues concerning the question of the use of standardization or adaptation in international advertising—information called for by various scholars (e.g., Luna & Gupta, 2001; Zou, 2005)—but also to speak to broader theoretical questions about the effects of adapting persuasive appeals to audience values. Our analysis addressed two broad research questions, corresponding to the two outcome variables most commonly assessed in this research literature.

- RQ1: Are ads with culturally adapted value appeals more persuasive than ads with culturally unadapted value appeals?
- RQ2: Are ads with culturally adapted value appeals better liked than ads with culturally unadapted value appeals?

These two outcomes—persuasion and ad liking—are conceptually distinct; it is possible, for example, that a consumer positively evaluates an advertisement even if she or he is not persuaded by it. Indices of persuasiveness and ad liking are sometimes empirically positively associated. For example, with unfamiliar products, a positive evaluation of the advertisement can provide a basis for a similarly positive evaluation of the product (e.g., M. P. Gardner, 1985; Mitchell, 1986). However, ad liking and persuasion can also diverge, especially with more familiar products (e.g., Cox & Locander, 1987; Machleit, Allen, & Madden, 1993; Machleit & Wilson, 1988; for a relevant review, see Brown & Stayman, 1992). Hence, ad persuasiveness and ad liking are best treated as different outcomes, even if sometimes closely related empirically.

To help assess the generality of any obtained effects on these outcomes, we also examined the effects of two potential moderating factors. First, to examine the possibility that adaptation effects might vary from one culture to another, we distinguished cases on the basis of the audience's culture (specifically, on the basis of geographic region). Second, to explore the possibility that effects might vary from one value to another, we distinguished cases on the basis of the particular values invoked by the appeals.¹

Method

Literature Search

We identified relevant research reports through personal knowledge of the literature and through examination of reviews, reference lists of located reports, and relevant conference proceedings such as from the American Academy of Advertising, the Association for Business Communication, the Association for Consumer Research, and the Society for Consumer Psychology. In addition, we located reports through the computerized database retrieval systems ABI-INFORM, Communication Abstracts, Dissertations Abstracts, and PsycINFO through at least March 2008. We used a number of terms (in appropriate combinations), including *adapt*, *adaptation*, *congruent*, *congruency*, *culture*, *cultural*, *match*, *matched*, *matching*, *tailored*, *tailoring*, *targeted*, *targeting*, *sensitive*, *sensitivity*, *standardize*, *standardized*, and *standardization*. Mindful of the possibility of publication bias and the attendant possibility that research appearing in the published research literature might yield an inflated estimate of the average effect size (Rothstein, Sutton, & Borenstein, 2005), we sought both published and unpublished research reports.

Inclusion Criteria

We selected studies for the review if they met two criteria. First, the study had to compare at least two consumer ads that differed only in whether their value appeals were culturally adapted or culturally unadapted to an audience. By this criterion, we excluded studies in which it was not made clear which appeals were adapted or not adapted for a given cultural audience (e.g., Tai, 1999; Williams & Aaker, 2002). We also eliminated studies that presented only one ad appeal to two cultural audiences (e.g., Grier & Brumbaugh, 1999; Pitts, Whalen, O'Keefe, & Murray, 1989) or that confounded the adapted-versus-unadapted manipulation with other manipulations such as brand (e.g., Chiou, 2002; Donthu, 1998; Garcia, 2004) or product (e.g., Paik, 1995). We included any study whose design provided evidence relevant to our research questions, even if the study's rationale was not explicitly formulated in such terms (e.g., Lau-Gesk, 2003; Van Hartingsveldt, 2004).²

Second, appropriate quantitative information had to be available in order to compute effect sizes for a dependent variable of interest, namely, persuasion or ad liking. By this criterion, we excluded studies with other dependent variables, such as perceived persuasiveness (Cooperman, 2003), ad interpretation (Callow, 2000), and so on (e.g., Hornik, 1980; J. Zhang, 2004, study 2). Whenever reports did not provide sufficient quantitative information, we sought to obtain it from the authors. Studies for which we could not obtain enough information (either because the information was no longer available or because multiple e-mail requests went unanswered) included: Aaker (2000) study 1, and study 2; Aaker (2000) study 3, ad liking; Aaker and Williams (1998) pilot study and study 2; Callow (2000); Chang (2005, 2006b); Chiou (1996); Han and Shavitt (1994) study 2, Koreans, intention measure for chewing gum ad and running shoes ad; Lepkowska-White, Brashear, and Weinberger (2003), all dependent variables for Polish participants; Sara (2004); Shavitt, Nelson, and Yuan (1997); Shavitt, Zhang, and

Johnson (2002); Shim (2002); Teng (2003); Wang and Mowen (1997) study 2; Wilcox, Ko, Gentry, Stricklin, and Jun (1996).

Dependent Variables

Two dependent variables were relevant. We assessed the first one, persuasion, through measures such as attitude toward the product, attitude toward the brand, purchase intention, and product choice. Whenever a study reported multiple measures for persuasion, we computed an effect size estimate for each measure and then averaged these estimates into an overall persuasion measure.³ The other dependent variable was liking for the ad (sometimes referred to as attitude toward the ad).⁴ Most, but not all, studies collected both dependent variables of interest.

Effect Size Measure

We computed an effect size r for each comparison between the adapted version of an ad and the unadapted version of the ad. We chose r as the effect size index because of its familiarity and easy interpretability. Effect sizes with a positive sign indicate an advantage of the adapted version over the unadapted version. We converted results not reported as correlations to r using formulas provided by Rosenthal (1991). When effect sizes had to be averaged (such as with several measures of the persuasion dependent variable), we calculated an average r using the r-to-z-to-r transformation procedure, weighted by n.

Moderators

We coded studies for two potential moderating factors, geographic region (as a proxy for culture) and the value dimension that was investigated.

Geographic region. Adaptation effects might vary from one culture to another, so examining mean effects in different cultures could be informative. The studies reviewed included

participants from a large number of different cultures (countries), but we often found too few cases for any given culture to permit useful analysis on a culture-by-culture basis. Hence, as a proxy for variation in the audience's cultural identity, we recorded each audience's geographic region: Asia-Pacific (e.g., China, New Zealand), Central and South America (e.g., Puerto Rico), Europe (e.g., France, The Netherlands), or North America (U.S.).

Value dimension. In the majority of the cases, adaptation effects were hypothesized on the basis of cultural differences on Hofstede's (1980, 2001) value dimensions. For these cases, three such dimensions were distinguished: individualism-collectivism, masculinity-femininity, and high-low uncertainty avoidance. Hofstede's other value dimensions were not investigated in the studies under review.

Unit of Analysis

The central comparison of interest was that between an adapted message and an unadapted message for a given cultural audience, and, hence, our fundamental unit of analysis was the conjunction of a given message pair and a given audience. For each message-pair-by-audience combination, we recorded an effect size. For instance, one common design in this research area has two audiences and two advertisements for a given product, with each advertisement's appeals designed to be adapted to one audience and unadapted to the other. As an example, Aaker and Schmitt (2001, study 1) compared differentiation and assimilation appeals for American and Chinese participants, using advertisements for a watch. They expected the differentiation appeal to be adapted for the American audience and unadapted for the Chinese audience and vice versa for the assimilation appeal. This kind of design provided two effect sizes indicating the relative effects of the adapted and the unadapted versions, one for each of the two audiences.

Usually, researchers used a given message pair only in a single investigation. Some message pairs, however, were used in more than one study. In such circumstances, we averaged the effect sizes for the message pair before inclusion in the analysis. We combined and recorded data from Hoeken et al. (2003) and Noordhoek (2003) as Hoeken et al. (2003) combined, and data from Y. Zhang and Gelb (1996) and Y. Zhang and Neelankavil (1997) as Y. Zhang and Gelb (1996).

For studies with more than one message pair, we recorded effect sizes for each pair if appropriate information was available (e.g., Gregory, Munch, & Peterson, 2002). When separate effect sizes could not be obtained, we computed composite effect sizes across the different message pairs (Gunaratne, 2000; Lepkowska-White et al., 2003, ad liking, and purchase intention for the American participants; Y. Zhang & Neelankavil, 1997, ad liking, attitude toward the brand).

When primary research data appeared in more than one publication, we treated the data as belonging to a single study. The same data were reported, in whole or in part, in: Briley and Aaker (2006, 2007), reported as Briley and Aaker (2006); Diehl, Terlutter, and Weinberg (2003) and Diehl and Terlutter (2004), recorded as Diehl and Terlutter (2004); Gregory (1997) and Gregory, Munch, and Peterson (1997, 2002), recorded as Gregory et al. (2002); Han (1990) and Han and Shavitt (1994) study 2, recorded as Han and Shavitt (1994); Hoeken et al. (2003), Hornikx and Starren (2004), and Van den Brandt, Domínguez, and Hoeken (2001), recorded as Hoeken et al. (2003) combined; Lau (2002) and Lau-Gesk (2003) study 1, recorded as Lau-Gesk (2003) study 1; Lepkowska-White (1999) and Lepkowska-White et al. (2003), recorded as Lepkowska-White et al. (2003), and Brunel and Nelson (1999) and Nelson (1997), recorded as Nelson (1997).

Meta-Analytic Procedure

We initially transformed the effect sizes (correlations) to Fisher's zs. We analyzed these zs using Borenstein and Rothstein's (2005) random-effects procedures (Hedges & Vevea, 1998; Shadish & Haddock, 1994), with results transformed back to r. We employed a random-effects analysis in preference to a fixed-effects analysis because of an interest in generalizing across the different ads (Jackson, 1992).

Results

Overall Effect

We found effect sizes for 67 cases for persuasion outcomes (see Table 2.1) and for 66 cases for ad liking outcomes (see Table 2.2). Overall, as Tables 2.3 and 2.4 indicate, ads with culturally adapted value appeals were, compared to ads with culturally unadapted value appeals, more persuasive (RQ1; mean r = .073, p = .001), and better liked (RQ2; mean r = .082, p = .002).

Alternative Analyses

As mentioned above, the usual design in this research area has two audiences and two advertisements for a given product, with each advertisement's appeals designed to be adapted to one audience and unadapted to the other. However, three variations on this design recommended some alternative analyses.

Within-subject designs. In one design variation, participants saw both the adapted and unadapted advertisements (e.g., Nelson, 1997). Such a within-subjects design has the potential to artificially inflate effect sizes, so we conducted an alternative analysis excluding such cases. The results excluding within-subjects designs were virtually identical to those of the main analysis with all cases—persuasion: k = 65, mean r = .071 (N = 6,579), 95% CI limits of .026 and .115, p

= .002, Q(64) = 200.1, p < .001; ad liking: k = 55, mean r = .087 (N = 5,133), 95% CI limits of .028 and .146, p = .004, Q(54) = 233.3, p < .001.

Multiple ads for each participant. In another design variation, participants were exposed to multiple advertisements for different products. In some such studies, a given participant saw either all adapted ads or all unadapted ads (e.g., J. Zhang, 2004, study 3); in other studies, a given participant saw some adapted ads and some unadapted ads (e.g., Han & Shavitt, 1994). These designs pose a methodological dilemma. If one records a separate effect size for each different pair of messages (each different product), the resulting effect sizes are not statistically independent, because they are based on the same human sample. On the other hand, if one records a composite effect size for the human sample in question (by averaging effect sizes across the different message pairs), the resulting effect size conceals any differences in effects from one product (message pair) to another, that is, artificially reduces the apparent heterogeneity of effects. We approached this problem by recording separate effect sizes for each message pair by audience combination (this is the main analysis reported above) and then conducting a subsequent alternative analysis using effect sizes collapsed across message pairs for a given human sample. The mean effect sizes of the latter analysis were virtually identical to those of the main analysis—persuasion: k = 45, mean r = .078 (N = 4,665), 95% CI limits of .031 and .125, p = .001, Q(44) = 107.7, p < .001; ad liking: k = 49, mean r = .080 (N = 4,564), 95% CI limits of .023 and .136, p = .006, Q(48) = 167.3, p < .001.

Hypothesized within-study moderating factors. In some studies, researchers hypothesized that a moderating factor, such as participants' age (J. Zhang, 2004) or the type of product (e.g., Han & Shavitt, 1994), would influence the size of the persuasive advantage expected for adapted appeals. For example, J. Zhang hypothesized that, for younger participants, the usual persuasive

advantage of adapted appeals would diminish or vanish. In a subsidiary analysis, we recomputed effect sizes so as to remove such conditions and, hence, analyzed only circumstances in which researchers expected the persuasive advantage of adapted appeals to be maximized. This analysis produced a pattern of significant effects identical to those of the main analysis, although, unsurprisingly, the means commonly showed a slightly greater advantage for adapted appeals than in the main analysis—persuasion: k = 62, mean r = .095 (N = 5,638), 95% CI limits of .046 and .143, p < .001, Q(61) = 193.2, p < .001; ad liking: k = 61, mean r = .112 (N = 5,299), 95% CI limits of .055 and .168, p < .001, Q(60) = 245.6, p < .001.

Moderators

Two potential moderators were examined, geographic region and value dimension.

Geographic region. Adaptation effects varied depending on the audience's geographic region (that is, cultural identity). Adapted appeals were significantly more persuasive than unadapted appeals for Asian-Pacific audiences (r = .124, p = .019) and for North American audiences (r = .096, p = .029); there was no such adaptation effect for European (r = .034, p = .315) or for Central/South American (r = .003, p = .916) audiences, despite reasonable statistical power (as indicated in Table 2.3). The difference between the effect for Asian-Pacific audiences and the effect for Central/South American audiences was significant; Q(1) = 3.9, p = .049; differences between other pairs of effects were not significant.

Ads with adapted appeals generated significantly greater ad liking than did ads with unadapted appeals only for Asian-Pacific audiences (r = .184, p = .024). Despite generally good statistical power (see Table 2.4), we found no significant difference in ad liking between adapted and unadapted appeals by audiences in North America (r = .084, p = .134), Europe (r = .050, p = .050), and p = .050, p

.142), or Central/South America (r = .025, p = .433). These four effects were not significantly different from each other.

Value dimension. Ads with adapted appeals were significantly more persuasive than ads with unadapted appeals when the appeals were based on individualism-collectivism values (r = .105, p = .001), but not when the appeals involved high-low uncertainty avoidance (r = .053, p = .281) or masculinity-femininity (r = .015, p = .741) values. These three effects were not significantly different from each other.

Ad liking for ads with adapted appeals was significantly higher than that for ads with unadapted appeals when the appeals were based on individualism-collectivism values (r = .139, p < .001) or on masculinity-femininity values (r = .132, p = .003), but not when the appeals concerned high-low uncertainty avoidance values (r = .023, p = .700). The effect for high-low uncertainty avoidance appeals was significantly smaller than both the effect for individualism-collectivism-based appeals—Q(1) = 5.2, p = .023—and the effect for masculinity-femininity-based appeals—Q(1) = 4.4, p = .037; the latter two effects did not significantly differ.

Discussion

These meta-analytic results, perhaps unsurprisingly, confirm that ads with culturally adapted value appeals are significantly more persuasive and better liked than ads with culturally unadapted value appeals. The signal advantage of meta-analytic reviews, of course, is the diversity of evidence on which such conclusions are based. The studies reviewed here used appeals with a variety of different values (e.g., adventure, modesty, peacefulness) and value dimensions (e.g., individualism-collectivism, masculinity-femininity), advertisements for various kinds of products (e.g., detergent, jeans, watches), and participants from a large number of different countries (e.g., Belgium, Sri Lanka, Mexico). Thus, taken at face value, these results

favor cultural value adaptation rather than standardization in advertising appeals. However, two caveats need to be addressed—one about the size of the effects and one about moderating variables.

Size of the Effects

The mean effect size for persuasion in this meta-analysis was r = .073, which is a rather small effect. This effect magnitude is, however, typical of those found in persuasive effects research. O'Keefe's (2005) review of 12 meta-analyses of persuasion variables reported an average effect size (expressed as a correlation) of .07. However, those meta-analyses concerned studies of what would seem to be relatively superficial variations in persuasive messages, such as including rhetorical questions or explicit conclusions. By contrast, in the studies reviewed here, researchers varied the values invoked in the persuasive appeals. One would naturally suppose that this more fundamental aspect of persuasive messages would correspondingly have much greater impact, but it does not. The observed mean effect size is, if anything, surprisingly small, even though statistically significant. So why is the effect characteristically so small? We consider five possible explanations: poor choice of values to be invoked in the advertisements, poor realization of values in the advertisements, divergence between the sex of the study participants and the sex of the participants in Hofstede's (1980, 2001) research, divergence between the individual values of the study participants and the values of their cultures, and processes of globalization.

One explanation might be that the values researchers selected were not culturally important ones, and so appeals invoking those values did not make the ads that much more persuasive. Conveniently, assessing this explanation is made possible by the large number of studies that used values drawn from Hofstede's (1980, 2001) work. Hofstede's value dimension

indices provide assessments of the importance of specified values in different cultures. The maximum score 100 stands for the culture in which the set of values is the most important relative to the other 52 cultures (nations or groups of nations) Hofstede investigated. Examination of these scores yielded two indications that the explanation of a selection of culturally unimportant values is unsound. First, in the studies reviewed here that used values examined by Hofstede, the values had mean importance scores of 83.9 (SD = 11.24) in the persuasion subset (k = 50) and 81.1 (SD = 12.76) in the ad liking subset (k = 51). That is, these values were plainly important ones. Second, although this explanation implies that the size of the adaptation effect should increase as value importance increases, the correlations between the effect size and its related value importance were not significant—persuasion: r (48) = -.13, p = .38; ad liking: r (49) = -.15, p = .31.5

A second possible explanation for the small effect size is that the experimental advertisements were in some way uncharacteristic of actual consumer advertising and, specifically, were poorly designed with respect to engaging the relevant cultural values. However, the advertisements used in the included studies appeared to employ appeals quite typical of consumer advertising. Indeed, in some studies, experiments were preceded by corpus analyses—analyses of extant consumer advertisements—to ensure the realism of the experimental materials (e.g., Han & Shavitt, 1994; J. Zhang, 2004); other studies referred to these or other corpus analyses (such as Albers-Miller & Gelb, 1996) as a basis for their experimental variations (e.g., Hoeken, Starren, Nickerson, Crijns, & Van den Brandt, 2007; Y. Zhang & Gelb, 1996). That is, generally speaking, the value-appeal variations in the studies reviewed here were based on research on cultural dimensions and advertising characteristics.

Although it is possible that some ads activated the relevant values better than did others, examination of the ads did not suggest any manifestly implausible invocations of cultural values.

A third potential explanation for the small effect size might arise from the sex of the participants. Hofstede's (1980, 2001) research was based on a predominantly male sample, and some evidence suggests that males and females differ in their reactions to Hofstede's cultural value dimensions (e.g., Hofstede, 2001, p. 91, p. 286). The mean percentage of female participants in the studies reviewed here (for which relevant information was available) is much higher than in Hofstede's original work: 52.93 (SD = 20.55, k = 53) for the persuasion subset, and 56.36 (SD = 14.08, k = 54) for the ad liking subset. However, the correlations between the percentage of female participants in a study and the study's effect size are neither large nor significant—persuasion: r(51) = -.10, p = .47; ad liking: r(52) = -.12, p = .40). Therefore, the higher proportion of female participants in these studies (compared to that in Hofstede's research) is apparently not the cause of the small observed effect.

A fourth possible explanation is that the participants in these studies might not themselves have endorsed the relevant cultural values; that is, the participants' individual value preferences might have diverged in some way from those of their larger culture. Unfortunately, in most cases, we could not confirm or disconfirm whether the relative value rankings of participants matched the relative rankings in the participants' culture. Even where researchers collected individual-level value assessments (such as Singelis's, 1994, scale related to individualism-collectivism and Schwartz's, 1992, values that have been related to several Hofstede dimensions), the reported information was not always sufficient to compare the relevant rankings. Moreover, some significant methodological questions have been raised about individual- and cultural-level value measurement (e.g., Fischer, 2006; Levine et al., 2003; Smith

& Schwartz, 1997). In short, the individual-level value assessments in hand are limited and of uncertain value. Still, in the relatively few cases in which such information was available, participants' relative value rankings were usually, though not always, congruent with their culture's value rankings. We observed such congruency in 15 of 22 persuasion effect sizes and 14 of 21 ad liking effect sizes. Thus, the relatively small effect sizes cannot be ascribed to some general divergence between the participants' value rankings and the value rankings in the participants' culture; the individual-level value assessments available in these studies suggest that the cultural value variations relevant to a given experiment were for the most part mirrored in the judgments of the individual participants.

Even though participants' value preferences and those of their culture did not generally diverge, one would naturally expect that, if the value rankings of a particular set of participants differed from those of the participants' culture, to that same extent the advantage of culturally adapted advertising value appeals would be diminished. In the current set of studies, for each of the two outcome measures, the advantage of culturally adapted appeals was not significantly larger when participants' rankings matched their culture's rankings than when the rankings were noncongruent. For persuasion, congruent value rankings (k = 15) mean r = .120, noncongruent value rankings (k = 7) mean k = .009; k = .009. For ad liking, congruent value rankings (k = 14) mean k = .142, noncongruent value rankings (k = 7) mean k = .042; k = .042;

advertising appeals to broad cultural values will likely on average yield only relatively small effects, as observed here.

One final possible explanation for the small observed effects is that processes of globalization may have eroded the salience of cultural values—or even cultural value differences themselves (Featherstone, 1990). Although cultural value hierarchies have been claimed to be stable over time because of the reinforcement of cultural patterns within cultures (Hofstede, 1980, 2001), globalization in advertising may affect the salience of important values in a given culture (Craig & Douglas, 2006; Shavitt, Lee, & Johnson, 2008). A number of corpus-analytic studies have suggested changes in the value appeals used in ads in Eastern cultures (e.g., Lin, 2001; J. Zhang & Shavitt, 2003). For instance, J. Zhang and Shavitt determined that appeals to youth and modernity, which are characteristically individualistic appeals, appeared frequently in Chinese ads. In Europe, where geographically close cultures differ sharply in femininitymasculinity, uncertainty avoidance, and power distance, individuals are exposed to a variety of advertising appeals related to different value dimensions, which might diminish the salience of one's own cultural values. Ideally, the plausibility of this account might be assessed by seeing whether the advantage of culturally adapted value appeals has diminished over time, but the time span of this research is quite short—we discovered no studies appearing before 1994, for example. This time span naturally corresponds precisely to the period of time in which globalization has been prominent. (Without globalization, advertisers may have little need to consider whether to standardize or adapt their advertising.) Still, to the extent that such erosion of cultural differences underlies the small effects, the plain implication is that even the currently observed small persuasive advantage of culturally adapted value appeals may well diminish in the future.

Moderators: When Does the Adaptation Effect Disappear?

The moderator variables that were explored—geographic region and specific values—do, indeed, affect the effect sizes for adaptation, but, even under optimum conditions, the maximum mean correlation hardly exceeds .18. That is, rather than identifying conditions under which notably large effects occur, these results indicate particular geographic regions and specific values for which adaptation effects disappear. An adaptation effect on persuasion was not found for Europe or Central/South America; an effect on ad liking was absent for both these two areas and for North America. For the value dimension of high-low uncertainty avoidance, adaptation effects on persuasion and ad liking did not occur; for masculinity-femininity, an effect on persuasion did not occur.

Broadly speaking, cultural value adaptation of ads seems dependably effective for only some cultural audiences (Asia-Pacific and North America) and for only one value dimension (individualism-collectivism). However, these two apparent limitations are related; in the studies reviewed in this chapter, value dimensions were confounded with the audiences' geographic regions. For example, of the 41 persuasion effect sizes based on individualism-collectivism-based appeals, 36 involved a North American or an Asian-Pacific audience; of the 35 ad liking effect sizes based on individualism-collectivism-based appeals, 28 involved a North American or an Asian-Pacific audience. This confounding, of course, is entirely natural given that these cultures vary with respect to individualism-collectivism, but the question that arises is whether the observed adaptation effects result from the particular value dimension (individualism-collectivism), the particular audiences (Asia-Pacific and North America), or the combination of the two.

As another example, all of the 13 studies concerned with the persuasive effectiveness of appeals based on the masculinity-femininity value dimension used European audiences, a natural confounding given that European cultures are thought to vary with respect to masculinity-femininity (Hofstede, 1980, 2001). Across these cases, the overall effect on persuasion was nonsignificant (r = .015, p = .741). The question is whether this finding is a consequence of the particular value dimension (masculinity-femininity), the particular audience (Europeans), or the combination.

Consider first the hypothesis that the observed variation in effects is a consequence of the particular values involved. This hypothesis implies that something about individualism-collectivism makes it an especially receptive basis for developing ad appeals (compared to other value dimensions). This suggestion gains some plausibility from the extensive research indicating the importance of this value dimension (see, for a review, Oyserman, Coon, & Kemmelmeier, 2002). Individualism-collectivism may be more closely related to important personality characteristics (e.g., self-schema; Markus & Kitayama, 1991; cf. Levine et al., 2003) than are other value dimensions such as high-low uncertainty avoidance and masculinity-femininity, perhaps reflecting greater individual internalization of individualism-collectivism values compared to others. Fischer (2006, study 1) reported congruence between important values at a cultural level and important values at an individual level for values related to individualism-collectivism in particular. For values related to, for instance, masculinity-femininity, such internalization may be less apparent (for a further discussion of the two levels of values, see Smith & Schwartz, 1997; Van de Vijver & Leung, 1997).

If the observed adaptation effects for Asian-Pacific and North American audiences are, indeed, explained by researchers' use of the individualism-collectivism value dimension, then

similar effects should be found for individualist and collectivist appeals in Europe (with predominantly individualist cultures, like North America). Thus, future research might usefully compare the effects on European participants of individualist (adapted) and collectivist (unadapted) appeals. Similarly, more studies should be conducted in which individuals from Asia-Pacific and North America receive appeals based on other value dimensions such as masculinity-femininity. As an example for North America, masculine or low-uncertainty-avoidant value appeals could be selected as culturally adapted appeals for Americans and Canadians (Hofstede, 2001). Such work would illuminate the possibility that individualism-collectivism is a value dimension that provides a distinctively good basis for developing culturally adapted ad appeals.

Alternatively, the observed variation in effects could stem from the particular cultural audiences involved, reasoning that some cultural audiences are more sensitive to cultural value appeal variations than other audiences. This explanation would have it that Europeans and Central and South Americans are not sensitive to differences in value appeals as are people from North America and Asia-Pacific. The suggestions for future research mentioned above are also well-suited to examining this explanation. The current data do, however, contain one bit of evidence against this hypothesis. Adapted appeals based on the masculinity-femininity dimension produced significantly greater ad liking than did unadapted appeals for European audiences (k = 13, r = .115, p = .011). This finding suggests that European audiences are not entirely insensitive to these appeal variations. Still, more direct research evidence will certainly be welcomed.

Submerged Complexities in Value Variation and Functioning

Our discussion thus far has offered a relatively simple picture of value variations and of value functioning. In this brief section, we note some submerged complexities concerning each of these matters.

Value variation. In research on cultural value adaptation of advertising, the conceptualization of value variation has been dominated by Hofstede's (1980, 2001) analysis. Indeed, the design of experimental appeal variations in this research literature is commonly aimed at producing appeals that vary in their invocation of one or another of Hofstede's value dimensions, especially (as we have seen) individualism-collectivism. However, this approach may be too simple in two ways.

First, although individualism-collectivism is the most broadly used of Hofstede's value dimensions, it is arguably insufficient as a basis for capturing cultural variations. Shavitt, Lalwani, Zhang, and Torelli (2006) underlined the importance of also distinguishing between horizontal (equality) and vertical (hierarchy) individualism-collectivism (e.g., Triandis, 1995). Regardless of whether this distinction, which resembles power distance, is integrated into individualism-collectivism or is disentangled from it (e.g., Oyserman, 2006), various scholars have urged an expansion of the set of cultural value dimensions beyond individualism-collectivism (e.g., Shavitt et al., 2008).

Second, it may be useful to consider ways of capturing cultural value dimensions that are wholly different from Hofstede's. For example, the Global Leadership and Organizational Behavior Effectiveness (GLOBE) research program provided a large-scale study of crosscultural values (House, Hanges, Javidan, Dorfman, & Gupta, 2004). GLOBE distinguished nine dimensions of variation, dimensions conceptually dissimilar to the five identified by Hofstede (1980, 2001). Okazaki and Mueller (2007) argued that the GLOBE project offers a potentially

useful typology for research on cultural value adaptation. The GLOBE project may be imperfect (see, in particular, Hofstede, 2006), but it underlines the desirability of continuing attention to the task of developing a reliable and valid set of dimensions that are useful for the study of human values generally and cultural value variation in particular.

Value functioning. Cultural values do not always function straightforwardly in human behavior. Two specific complexities are worth noting. First, the salience of cultural values can be situationally primed (e.g., Hong, Morris, Chiu, & Benet-Martínez, 2000). Activating a value makes it salient, even if the value is relatively unimportant for the individual, and such activation can affect subsequent judgments (e.g., W. L. Gardner, Gabriel, & Lee, 1999; Monga & John, 2007). In W. L. Gardner et al., for instance, American participants endorsed more collectivist values when primed with interdependence than when not exposed to such a prime. In a similar vein, Asian participants who were primed with independence endorsed more individualistic values than those not exposed to such a prime. It might be that advertising appeals adapted to cultural values might gain effectiveness if the relevant values are situationally primed (as might occur, for instance, when television program content primes the values invoked by a subsequent commercial).

Second, a given culture can appear to embrace contradictory values simultaneously—a phenomenon that De Mooij (2005) referred to as the "value paradox," which arises from a conflict between the desired (what people desire) and the desirable (what people think ought to be desired). For example, in cultures with low uncertainty avoidance, innovation may be an especially appropriate basis for an appeal. However, as De Mooij explained, appealing to innovation can also be important in a high uncertainty avoidance culture, such as France, in which citizens desire innovation yet also traditional, conservative behavior. Taken together, the

value paradox and the situational priming of values underscore the potentially complex relationships among culture, values, persuasion, and behavior, and affirm the usefulness of future research that recognizes these complexities.

Broader Implications

The research reviewed in this chapter addresses both narrower practical questions and broader theoretical ones. In practical terms, this meta-analysis obviously speaks to the adaptation-standardization debate in international advertising, where each approach has received some critical attention (e.g., Luna & Gupta, 2001; Okazaki, Taylor, & Zou, 2006; Taylor, 2005; Zou, 2005). The results show that adapting ads to the audience's cultural values makes ads more persuasive and better-liked—but they also demonstrate that these effects are not especially large. By implication, advertisers should carefully consider the costs of adapting ads to ensure appropriate return on investment.

More generally, these results appear to cast doubt on a common assumption about the role of audience values in reactions to persuasive messages. Values are widely presumed to exert substantial influence on conduct (e.g., Rokeach, 1973). Naturally, then, advertising appeals invoking a consumer's important values should be considerably more persuasive than appeals based on other values. However, as the current review indicates, value-adapted appeals are only slightly more persuasive than unadapted appeals, and, in some circumstances, value adaptation confers no dependable advantage.

This observed weak effect coincides with a good deal of previous work on the effects of value on behavior. As Shrum and McCarty (1997, p. 140) observed, "When relationships between values and behavior have been observed, they have tended to be relatively weak."

However, Shrum and McCarty also noted that "the lack of robust relationships in past research

does not necessarily suggest a true weak effect" (p. 141). For instance, results that underestimate the true effect might arise from various methodological shortcomings, individual differences, or situational variations (e.g., Maio, Olson, Allen, & Bernard, 2001).

In the present case, one might wonder whether the use of broad cultural values (as opposed to the specific values of individuals) has contributed to the observed weak effects. Members of a culture do vary in their endorsement of that culture's values, and individual-level value assessments might therefore produce larger effects (see Chang, 2006b; Wang & Mowen, 1997; more generally, see Hullett, 2002, 2006). As discussed earlier in this chapter, the present data hint that variation in individual subscription to cultural values might moderate the size of these effects. However, even where participants' value preferences could be confirmed to match those of their culture, the mean persuasive advantage was only r = .12—still not a remarkably large effect if one imagines values to be powerfully influential.

So it may simply be that values are only weakly related to behavior—and so only weakly related to audience reactions to persuasive appeals. It remains to be seen whether other kinds of persuasive message adaptation might yield larger effects, but, if similar conclusions were to be confirmed in other areas of message-adaptation research, it would obviously warrant far-reaching reexamination of widespread fundamental assumptions about what makes for successful persuasive messages.

In a similar vein, these results may have implications beyond the narrow context of consumer advertising. In particular, these results are suggestive with respect to the practice of devising "culturally tailored" health interventions (see related review by Noar, Harrington, and Aldrich, this volume). An intervention might be culturally or ethnically tailored in any number of ways. For example, the communicator's ethnicity might match that of the audience (e.g.,

Anderson & McMillion, 1995; Ramirez, 1977), or an intervention designer might choose what is taken to be a culturally-appropriate communicative vehicle. For example, Larkey and Gonzalez (2007, p. 272) compared a "culturally aligned, brief storytelling intervention" against a "numeric risk tool intervention" for promoting colorectal cancer screening among Latinos.

However, these other kinds of cultural adaptation commonly involve tailoring through relatively peripheral considerations (e.g., message format) as opposed to tailoring by adapting appeals to the audience's basic values. It seems unlikely that, as a general matter, such peripheral adaptations will produce greater persuasive advantages than are obtained by value adaptation. This is not to say that other varieties of cultural tailoring will be without benefit, but such tailoring will not likely yield persuasive advantages any larger than those observed in this review. In the end, these are empirical questions for future research; our results can be no more than suggestive concerning the effects of other kinds of cultural tailoring, but little in the present results gives much hope that other sorts of cultural tailoring will yield dramatic persuasive benefits (tailoring based on considerations other than culture might yield larger benefits; see Noar et al., this volume).

This meta-analysis may point to the limits of general cultural stereotypes as a basis for understanding or influence. The sorts of broad value characterizations employed in the research reviewed in this chapter ("Americans are individualistic") amount to a form of cultural stereotyping, in the sense that a general description ("individualistic") is deployed to cover a large cultural category that contains substantial intracategory variation ("Americans"). Simply put, such characterizations may contain a grain of truth (as indicated by the persuasive advantage of appeals adapted on such bases)—but it is a very small grain indeed.

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Notes

¹As with any literature review, exploration of potential moderating factors is to some degree constrained by the character of the research under review. In this research area, a number of different possible moderating factors have been suggested, such as the level of brand commitment (Agrawal & Maheswaran, 2005) and the decision risk associated with product purchase (Gregory & Munch, 1997). However, primary research on any given moderator is sparse, making meta-analytic treatment of such factors problematic. As another example, a reader suggested that the medium of communication (video, audio, print) might be explored as a potential moderator, but, unfortunately, the research to date has relied exclusively on print materials.

²We accepted at face value researchers' assertions about what constituted value adaptation of appeals. We realize that researchers might, upon seeing experimental results, construct post hoc some hypothesis that matches the obtained pattern of significant and nonsignificant effects—such that in a condition where no significant effect of value adaptation occurred, the reasoning is presented as being that in that condition neither appeal was adapted and hence no difference was hypothesized. In such a circumstance, our procedure would exclude the condition in which the researchers indicated neither appeal was adapted (i.e., the condition in which the nonsignificant effect occurred). The plain implication is that our procedure is, if anything, likely to have overestimated the size of the effects of adaptation.

³These various persuasion outcomes are of course distinct variables but nevertheless appropriately combined as indicators of *relative* persuasiveness (comparing the adapted and unadapted appeal conditions). It might be the case that, for example, attitudes are more easily changed than behaviors, but this tendency does not mean that the difference in persuasiveness

between one message form and another will vary between these outcomes. As a relevant bit of empirical evidence, consider that Witte and Allen's (2000) meta-analytic review reported that the mean effects of variations in depicted threat severity (high versus low depicted severity) were statistically indistinguishable for attitudinal (mean r = .15), intention (mean r = .14) and behavioral (mean r = .13) outcomes. That is, conclusions about the relative persuasiveness of high- versus low-depicted-severity messages were identical regardless of whether attitude, intention, or behavior was the outcome variable. Witte and Allen reported a similar pattern of effects for variations in depicted threat susceptibility (mean rs of .12, .17, and .14, respectively), variations in depicted response efficacy (mean rs of .14, .17, and .13), and variations in depicted self-efficacy (mean rs of .12, .17, and .13). We do not argue that, for example, product attitude and purchase behavior are the same thing. But these results do suggest that, where one's research question concerns the relative persuasiveness of two message forms (as in the present enterprise). one's conclusions are not likely to be much affected by whether the persuasive outcome assessed is attitude, intention, or behavior. That is, as indicators of the *relative* persuasiveness of two messages, these outcome variables appear to function similarly and hence are appropriately combined.

⁴As Smit, Van Meurs, and Neijens (2006) observed, researchers have commonly assessed ad liking in one of two ways, either through assessment of multiple specific dimensions (e.g., the degree to which the ad is entertaining, irritating, etc.—though these items are commonly highly correlated; see, e.g., Mitchell & Olson, 1981) or through a global evaluative judgment (though this assessment is commonly based on multiple general-evaluation scale items; see, e.g., Biehal, Stephens, & Curlo, 1992). Following Brown and Stayman (1992) and Smit et al., we treated these as alternative assessments of a single underlying construct.

⁵These results excluded cases involving China, for which Hofstede (2001, p. 502) provided only an estimated score for collectivism (80). However, means and correlations based on a larger dataset including these estimated scores hardly differ from those reported in the text. The mean importance scores were 83.3 (SD = 10.35) in the persuasion subset (k = 60) and 81.0 (SD = 12.07) in the ad liking subset (k = 57). The correlations between the effect size and its related value importance were not significant—persuasion: r(58) = -.12, p = .38; ad liking: r(55) = -.14, p = .31.

References

- References marked with an asterisk indicate studies included in the meta-analysis.
- *Aaker, J. L. (2000). Accessibility or diagnosticity? Disentangling the influence of culture on persuasion processes and attitudes. *Journal of Consumer Research*, *26*, 340–357.
- *Aaker, J. L., & Schmitt, B. (2001). Culture-dependent assimilation and differentiation of the self: Preferences for consumption symbols in the United States and China. *Journal of Cross-Cultural Psychology*, 32, 561–576.
- *Aaker, J. L., & Williams, P. (1998). Empathy versus pride: The influence of emotional appeals across cultures. *Journal of Consumer Research*, 25, 241–261.
- Agrawal, M. (1995). Review of a 40-year debate in international advertising: Practitioner and academician perspectives to the standardization/adaptation issue. *International Marketing Review*, 12, 26–48.
- *Agrawal, N., & Maheswaran, D. (2005). The effects of self-construal and commitment on persuasion. *Journal of Consumer Research*, *31*, 841–849.
- Albers-Miller, N. D., & Gelb, B. D. (1996). Business advertising as a mirror of cultural dimensions: A study of eleven countries. *Journal of Advertising*, 25(4), 57–70.
- Anderson, R. B., & McMillion, P. Y. (1995). Effects of similar and diversified modeling on African American women's efficacy expectations and intentions to perform breast self-examination. *Health Communication*, 7, 327–343.
- Biehal, G., Stephens, D., & Curlo, E. (1992). Attitude toward the ad and brand choice. *Journal of Advertising*, 21(3), 19–36.
- Borenstein, M., & Rothstein, H. (2005). Comprehensive meta-analysis (Version 2.2.023) [Computer software]. Englewood, NJ: Biostat.

- *Briley, D. A., & Aaker, J. L. (2006). When does culture matter? Effects of personal knowledge on the correction of culture-based judgments. *Journal of Marketing Research*, 43, 395–408.
- *Briley, D. A., & Aaker, J. L. (2007). When does culture matter? Effects of personal knowledge on the correction of culture-based judgments. In G. J. Fitzsimons & V. G. Morwitz (Eds.), *Advances in consumer research* (Vol. 34, p. 148). Duluth, MN: Association for Consumer Research.
- Broemer, P. (2002). Relative effectiveness of differently framed health messages: The influence of ambivalence. *European Journal of Social Psychology*, *32*, 685–703.
- Brown, S. P., & Stayman, D. M. (1992). Antecedents and consequences of attitude toward the ad: A meta-analysis. *Journal of Consumer Research*, 19, 34–51.
- *Brunel, F. F., & Nelson, M. R. (1999). Toward an understanding of gender, personality and cultural differences in responses to charity ad appeals. In E. J. Arnould & L. M. Scott (Eds.), *Advances in consumer research* (Vol. 26, p. 267). Provo, UT: Association for Consumer Research.
- Callow, M. A. (2000). Do you see what I see? A cross-cultural analysis of the social identity metaphor in visual print advertisements (Doctoral dissertation, City University of New York, 2000). *Dissertation Abstracts International*, 61 (04), 1512A. (UMI No. 9969681)
- Chang, C. (2005). The moderating influence of ad framing for ad-self-congruency effects.

 *Psychology and Marketing, 22, 955–968.
- *Chang, C. (2006a). Cultural masculinity/femininity influences on advertising appeals. *Journal of Advertising Research*, 46, 315–323.

- Chang, C. (2006b). Seeing the small picture: Ad-self versus ad-culture congruency in international advertising. *Journal of Business and Psychology*, 20, 445–465.
- Chiou, J.-S. (1996). International marketing standardization versus adaptation from the consumer's perspective (Doctoral dissertation, Michigan State University, 1996). *Dissertation Abstracts International*, *57* (09), 4034A. (UMI No. 9706461)
- Chiou, J.-S. (2002). The effectiveness of different advertising message appeals in the Eastern emerging society: Using Taiwan TV commercials as an example. *International Journal of Advertising*, 21, 217–236.
- Choi, Y. K., & Miracle, G. E. (2004). The effectiveness of comparative advertising in Korea and the United States: A cross-cultural and individual-level analysis. *Journal of Advertising*, 33(4), 75–87.
- Cooperman, R. A. (2003). The effectiveness of localized versus standardized international industrial advertising in the European Union (Doctoral dissertation, Nova Southeastern University, 2003). *Dissertation Abstracts International*, 65 (05), 1856A. (UMI No. 3132804)
- Cox, D. S., & Locander, W. B. (1987). Product novelty: Does it moderate the relationship between ad attitudes and brand attitudes? *Journal of Advertising*, *16*(3), 39–44.
- Craig, C. S., & Douglas, S. P. (2006). Beyond national culture: Implications of cultural dynamics for consumer research. *International Marketing Review*, 23, 322–342.
- Cutler, B. D., Erdem, S.A., & Javalgi, R. G. (1997). Advertisers' relative reliance on collectivism-individualism appeals: A cross-cultural study. *Journal of International Consumer Marketing*, *9*(3), 43–55.

- De Mooij, M. (2005). *Global marketing and advertising: Understanding cultural paradoxes* (2nd ed.). Thousand Oaks, CA: Sage.
- *Diehl, S., & Terlutter, R. (2004). Comparing the effects of individualistic versus collectivistic advertising on Germans and Chinese. In P. Neijens, C. Hess, B. van den Putte, & E. Smit (Eds.), *Content and media factors in advertising* (pp. 62–47). Amsterdam: Het Spinhuis.
- *Diehl, S., Terlutter, R., & Weinberg, P. (2003). Advertising effectiveness in different cultures:

 Results of an experiment analyzing the effects of individualistic and collectivistic
 advertising on Germans and Chinese. In D. Turley & S. Brown (Eds.), *European advances*in consumer research (Vol. 6, pp. 128–136). Provo, UT: Association for Consumer
 Research.
- Dillard, J. P., & Pfau, M. (Eds.). (2002). *The persuasion handbook: Developments in theory and practice*. Thousand Oaks, CA: Sage.
- Donthu, N. (1998). A cross-country investigation of recall of and attitude toward comparative advertising. *Journal of Advertising*, *27*(2), 111–122.
- Featherstone, M. (Ed.). (1990). *Global culture: Nationalism, globalization and modernity*. London: Sage.
- Fischer, R. (2006). Congruence and functions of personal and cultural values: Do my values reflect my culture's values? *Personality and Social Psychology Bulletin, 32*, 1419–1431.
- Fiske, A. P., Kitayama, S., Markus, H. R., & Nisbett, R. E. (1998). The cultural matrix of social psychology. In D. T. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), *The handbook of social psychology* (4th ed., Vol. 2, pp. 915–981). Boston: McGraw-Hill.

- Garcia, E. (2004). The effects of cultural values on international advertising effectiveness: A study of sex appeals in fashion advertising. (Master's thesis, University of Texas at El Paso). *Masters Abstracts International*, *43* (03), 646. (UMI No. 10783)
- Gardner, M. P. (1985). Does attitude toward the ad affect brand attitude under a brand evaluation set? *Journal of Marketing Research*, 22, 192–198.
- Gardner, W. L., Gabriel, S., & Lee, A. Y. (1999). "I" value freedom, but "we" value relationships: Self-construal priming mirrors cultural differences in judgment.

 *Psychological Science, 10, 321–326.
- Gelbrich, K., & Roschk, H. (2008). Cross-cultural advertising. In W. Donsbach (Ed.), *International encyclopedia of communication* (pp. 50–56). Malden, MA: Wiley-Blackwell.
- *Gregory, G. D. (1997). An examination of the moderating role of attitude functions in the value-attitude relationship: Implications for the development of cross-cultural advertisements (Doctoral dissertation, University of Texas at Arlington, 1997).

 *Dissertation Abstracts International, 58 (08), 3218A. (UMI No. 9804666)
- *Gregory, G. D., & Munch, J. M. (1997). Cultural values in international advertising: An examination of familial norms and roles in Mexico. *Psychology and Marketing*, *14*, 99–119.
- *Gregory, G. D., Munch, J. M., & Peterson, M. (1997, December). Extending attitude function theory to cross-cultural consumer research: A comparison of value-attitude relations in the U.S. and Columbia. Paper presented at the Sixth Symposium on Cross-Cultural Consumer and Business Studies, Honolulu, HI.

- *Gregory, G. D., Munch, J. M., & Peterson, M. (2002). Attitude functions in consumer research:

 Comparing value-attitude relations in individualist and collectivist cultures. *Journal of Business Research*, *55*, 933–942.
- Grier, S. A., & Brumbaugh, A. M. (1999). Noticing cultural differences: Ad meanings created by target and non-target markets. *Journal of Advertising*, 28(1), 79–93.
- *Gunaratne, K. A. (2000). The influence of culture and product consumption purpose on advertising effectiveness. In A. O'Cass (Ed.), *Visionary marketing for the 21st century:*Facing the challenge (pp. 443–447). Brisbane, Australia: Griffith University.
- *Han, S.-P. (1990). Individualism and collectivism: Its implications for cross-cultural advertising (Doctoral dissertation, University of Illinois at Urbana-Champaign, 1990). *Dissertation Abstracts International*, *51* (12), 3942A. (UMI No. 9114257)
- *Han, S.-P., & Shavitt, S. (1994). Persuasion and culture: Advertising appeals in individualistic and collectivistic societies. *Journal of Experimental Social Psychology*, *30*, 326–350.
- Hedges, L. V., & Pigott, T. D. (2001). The power of statistical tests in meta-analysis. *Psychological Methods*, 6, 203–217.
- Hedges, L. V., & Vevea, J. L. (1998). Fixed- and random-effects models in meta-analysis. *Psychological Methods*, *3*, 486–504.
- *Hoeken, H., van den Brandt, C., Crijns, R., Dominguez, N., Hendriks, B., Planken, B. et al. (2003). International advertising in Western Europe: Should differences in uncertainty avoidance be considered when advertising in Belgium, France, The Netherlands and Spain? *Journal of Business Communication*, 40, 195–218.

- *Hoeken, H., Starren, M., Nickerson, C., Crijns, R., & van den Brandt, C. (2007). Is it necessary to adapt advertising appeals for national audiences in Western Europe? *Journal of Marketing Communications*, 13, 19–38.
- Hofstede, G. (1980). *Culture's consequences: International differences in work-related values*. Beverly Hills, CA: Sage.
- Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations* (2nd ed.). Thousand Oaks, CA: Sage.
- Hofstede, G. (2006). What did GLOBE really measure? Researchers' minds versus respondents' minds. *Journal of International Business Studies*, *37*, 882–896.
- Hong, Y., Morris, M. W., Chiu, C., & Benet-Martínez, V. (2000). Multiple minds: A dynamic constructivist approach to culture and cognition. *American Psychologist*, 55, 709–720.
- Hornik, J. (1980). Comparative evaluation of international vs. national advertising strategies. *Columbia Journal of World Business*, 15(1), 36–48.
- *Hornikx, J., & Starren, M. (2004). Publicités en France et aux Pays-Bas: Peut-on standardiser ou faut-il adapter? [Advertising in France and in The Netherlands: Should we standardize or adapt?]. *Studies in Communication Sciences*, 4(1), 219–233.
- House, R. J., Hanges, P. J., Javidan, M., Dorfman, P. W., & Gupta, V. (Eds.). (2004). *Culture, leadership, and organizations: The GLOBE study of 62 societies*. Thousand Oaks, CA: Sage.
- Hullett, C. R. (2002). Charting the process underlying the change of value-expressive attitudes: The importance of value-relevance in predicting the matching effect. *Communication Monographs*, *69*, 158–178.

- Hullett, C. R. (2006). Using functional theory to promote HIV testing: The impact of value-expressive messages, uncertainty, and fear. *Health Communication*, 20, 57–67.
- Jackson, S. (1992). *Message effects research: Principles of design and analysis*. New York: Guilford Press.
- Kahle, L. R. (1996). Social values and consumer behavior: Research from the List of Values. InC. Seligman, J. M. Olson, & M. P. Zanna (Eds.), *The psychology of values: The Ontario symposium* (Vol. 8, pp. 135–151). Mahwah, NJ: Erlbaum.
- Keller, P. A. (2006). Regulatory focus and efficacy of health messages. *Journal of Consumer Research*, *33*, 109–114.
- *Kirk, M. D. (2003). How to make a "splash" for Puerto Rican women? An exploratory investigation into the effectiveness of appealing to "security" and "stimulation" values in written advertisements for "Splash Lotions", targeted at female Puerto Rican migrants in New York state. Unpublished master's thesis, Radboud University Nijmegen, Nijmegen, The Netherlands.
- Larkey, L. K., & Gonzalez, J. (2007). Storytelling for promoting colorectal cancer prevention and early detection among Latinos. *Patient Education and Counseling*, 67, 272–278.
- *Lau, L. G. (2002). Activating culture-related selves through persuasion appeals. In S. M. Broniarczyk & K. Nakamoto (Eds.), *Advances in consumer research* (Vol. 29, p. 454). Valdosta, GA: Association for Consumer Research.
- *Lau-Gesk, L. G. (2003). Activating culture through persuasion appeals: An examination of the bicultural consumer. *Journal of Consumer Psychology*, *13*, 301–315.

- Le Pair, R., Crijns, R., & Hoeken, H. (2000). Het belang van cultuurverschillen voor het ontwerp van persuasieve teksten [The importance of cultural differences for the design of persuasive texts]. *Tijdschrift voor Taalbeheersing*, 22, 358–372.
- *Lepkowska-White, E. (1999). The influence of cultural and socioeconomic variables on reactions to ad appeals (Doctoral dissertation, University of Massachusetts Amherst, 1999). *Dissertation Abstracts International*, 60 (11), 4096A. (UMI No. 9950182)
- *Lepkowska-White, E., Brashear, T. G., & Weinberger, M. G. (2003). A test of ad appeal effectiveness in Poland and the United States: The interplay of appeal, product, and culture. *Journal of Advertising*, 32(3), 57–67.
- Levine, T. R., Bresnahan, M. J., Park, H. S., Lapinski, M. K., Wittenbaum, G. M., Shearman, S.
 M. et al. (2003). Self-construal scales lack validity. *Human Communication Research*, 29, 210–252.
- Lin, C. A. (2001). Cultural values reflected in Chinese and American television advertising. *Journal of Advertising*, 30(4), 83–94.
- Luna, D., & Gupta, S. F. (2001). An integrative framework for cross-cultural consumer behavior. *International Marketing Review, 18*, 45–69.
- Machleit, K. A., Allen, C. T., & Madden, T. J. (1993). The mature brand and brand interest: An alternative consequence of ad-evoked affect. *Journal of Marketing*, *57*(4), 72–82.
- Machleit, K. A., & Wilson, R. D. (1988). Emotional feelings and attitude toward the advertisement: The roles of brand familiarity and repetition. *Journal of Advertising*, *17*(3), 27–35.

- Maio, G. R., Olson, J. M., Allen, L., & Bernard, M. M. (2001). Addressing discrepancies between values and behavior: The motivating effects of reasons. *Journal of Experimental Social Psychology*, *37*, 104–117.
- Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, *98*, 224–253.
- Martin, B. A. S. (2003). The influence of gender on mood effects in advertising. *Psychology and Marketing*, 20, 249–273.
- Meng, L. (2004). The role of culture and gender in consumer information processing styles:

 Exploring the effects on ad memory and attitude. In B. E. Kahn & M. F. Luce (Eds.),

 Advances in consumer research (Vol. 31, pp. 694–695). Valdosta, GA: Association for Consumer Research.
- Mitchell, A. A. (1986). The effects of verbal and visual components of advertisements on brand attitudes and attitude toward the advertisement. *Journal of Consumer Research*, 13, 12–24.
- Mitchell, A. A., & Olson, J. C. (1981). Are product attribute beliefs the only mediator of advertising effects on brand attitude? *Journal of Marketing Research*, 18, 318–332.
- Monga, A. B., & John, D. R. (2007). Cultural differences in brand extension evaluation: The influence of analytic versus holistic thinking. *Journal of Consumer Research*, *33*, 529–536.
- *Nelson, M. R. (1997). Examining the horizontal and vertical dimensions of individualism within the United States and Denmark: How culture affects values, moral orientations and advertising persuasion (Doctoral dissertation, University of Illinois at Urbana-Champaign, 1997). Dissertation Abstracts International, 58 (10), 3768A. (UMI No. 9812720)

- *Noordhoek, F. (2003). Waarde-appels in Nederlandse en Spaanse advertenties [Value appeals in Dutch and Spanish ads]. Unpublished master's thesis, Radboud University Nijmegen, Nijmegen, The Netherlands.
- Novak, T. P., & MacEvoy, B. (1990). On comparing alternative segmentation schemes: The List of Values (LOV) and Values and Life Styles (VALS). *Journal of Consumer Research*, *17*, 105–109.
- Okazaki, S., & Mueller, B. (2007). Cross-cultural advertising research: Where we have been and where we need to go. *International Marketing Review*, 24, 499–518.
- Okazaki, S., Taylor, C. R., & Zou, S. (2006). Advertising standardization's positive impact on the bottom line: A model of when and how standardization improves financial and strategic performance. *Journal of Advertising*, *35*(3), 17–33.
- O'Keefe, D. J. (2002). Persuasion: Theory and research (2nd ed.). Thousand Oaks, CA: Sage.
- O'Keefe, D. J. (2005). News for argumentation from persuasion effects research: Two cheers for reasoned discourse. In C. A. Willard (Ed.), *Selected papers from the thirteenth NCA/AFA conference on argumentation* (pp. 215–221). Washington, DC: National Communication Association.
- Oyserman, D. (2006). High power, low power, and equality: Culture beyond individualism and collectivism. *Journal of Consumer Psychology*, *16*, 352–356.
- Oyserman, D., Coon, H. M., & Kemmelmeier, M. (2002). Rethinking individualism and collectivism: Evaluation of theoretical assumptions and meta-analyses. *Psychological Bulletin*, 128, 3–72.
- Paik, K. H. (1995). The development of individualist and collectivist self-concept across cultures and its effects on the response to television commercials (Doctoral dissertation, Cornell

- University, 1995). *Dissertation Abstracts International*, 55 (11), 5098B. (UMI No. 9509468)
- Perloff, R. M. (2003). *The dynamics of persuasion: Communication and attitudes in the 21st century* (2nd ed.). Mahwah, NJ: Erlbaum.
- Pitts, R. E., Whalen, D. J., O'Keefe, R., & Murray, V. (1989). Black and white response to culturally targeted television commercials: A values-based approach. *Psychology and Marketing*, *6*, 311–328.
- Ramirez, A. (1977). Social influence and ethnicity of the communicator. *Journal of Social Psychology*, *102*, 209–213.
- *Reesink, R. (1994). Waarden in internationale reclame [Values in international advertising].

 Unpublished master's thesis, Radboud University Nijmegen, Nijmegen, The Netherlands.
- Rokeach, M. (1973). The nature of human values. New York: Free Press.
- Rosenthal, R. (1991). *Meta-analytic procedures for social research* (2nd ed.). Beverly Hills, CA: Sage.
- Rothstein, H. R., Sutton, A. J., & Borenstein, M. (Eds.). (2005). *Publication bias in meta-analysis: Prevention, assessment and adjustments*. Chichester, UK: Wiley.
- *Sanderse, W. (2004). De overtuigingskracht van culturele waardeappèls in internationale reclame: Een vergelijking tussen Groot-Brittannië en Nederland [The persuasiveness of cultural value appeals in international advertising: A comparison between the United Kingdom and The Netherlands]. Unpublished master's thesis, Radboud University Nijmegen, Nijmegen, The Netherlands.

- Sara, H. K. (2004). Effects of cultural differences and product types on advertising effectiveness in Costa Rica and the U.S. Unpublished master's thesis, University of Florida, Gainesville, FL.
- Schwartz, S. (1992). Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 25, pp. 1–65). Orlando, FL: Academic.
- Shadish, W. R., & Haddock, C. K. (1994). Combining estimates of effect size. In H. Cooper & L. V. Hedges (Eds.), *Handbook of research synthesis* (pp. 261–281). New York: Russell Sage Foundation.
- Shavitt, S., Lalwani, A. K., Zhang, J., & Torelli, C. J. (2006). The horizontal/vertical dimension in cross-cultural consumer research. *Journal of Consumer Psychology*, *16*, 325–342.
- Shavitt, S., Lee, A. Y., & Johnson, T. P. (2008). Cross-cultural consumer psychology. In C. P. Haugtvedt, P. M. Herr, & F. R. Kardes (Eds.), *Handbook of consumer psychology* (pp. 1103–1131). New York: Erlbaum.
- Shavitt, S., Nelson, M. R., & Yuan, R. M. L. (1997). Exploring cross-cultural differences in cognitive responding to ads. In M. Brucks & D. J. MacInnis (Eds.), *Advances in consumer research* (Vol. 24, pp. 245–250). Provo, UT: Association for Consumer Research.
- Shavitt, S., & Zhang, J. (2004). Advertising and culture. In C. Spielberger (Ed.), *Encyclopedia of applied psychology* (pp. 47–51). San Diego, CA: Academic Press.
- Shavitt, S., Zhang, J., & Johnson, T. P. (2002). Horizontal and vertical orientations in cross-cultural consumer persuasion. In S. M. Broniarczyk & K. Nakamoto (Eds.), *Advances in consumer research* (Vol. 29, p. 47). Valdosta, GA: Association for Consumer Research.

- Shim, S. W. (2002). Advertising appeals and culture: The difference between culturally congruent and culturally deviant individuals in Korea (Doctoral dissertation, University of Florida, 2002). *Dissertation Abstracts International*, 63 (10), 3409A. (UMI No. 3065986)
- Shrum, L. J., & McCarty, J. A. (1997). Issues involving the relationship between personal values and consumer behavior: Theory, methodology, and application. In L. R. Kahle & L. Chiagouris (Eds.), *Values, lifestyles, and psychographics* (pp. 139–159). Mahwah, NJ: Erlbaum.
- Singelis, T. M. (1994). The measurement of independent and interdependent self-construals.

 *Personality and Social Psychology Bulletin, 20, 580–591.
- Singh, N., & Matsuo, H. (2004). Measuring cultural adaptation on the Web: A content analytic study of U.S. and Japanese Web sites. *Journal of Business Research*, *57*, 864–872.
- Smit, E. G., van Meurs, L., & Neijens, P. C. (2006). Effects of advertising likeability: A 10-year perspective. *Journal of Advertising Research*, 46, 73–83.
- Smith, P. B., & Schwartz, S. H. (1997). Values. In J. W. Berry, M. H. Segall, & C. Kagitçibasi (Eds.), *Handbook of cross-cultural psychology: Vol. 3. Social behavior and applications* (2nd ed., pp. 77–118). Boston: Allyn & Bacon.
- Soares, A. M., Farhangmehr, M., & Shoham, A. (2007). Hofstede's dimensions of culture in international marketing studies. *Journal of Business Research*, 60, 277–284.
- Stephenson, M. T., & Southwell, B. G. (2006). Sensation seeking, the activation model, and mass media health campaigns: Current findings and future directions for cancer communication. *Journal of Communication*, *56*, S38–S56.
- Stiff, J. B., & Mongeau, P. A. (2003). Persuasive communication (2nd ed.). New York: Guilford.

- Tai, H. C. S. (1999). Advertising ethics: The use of sexual appeal in Chinese advertising. *Teaching Business Ethics*, *3*, 87–100.
- Taylor, C. R. (2005). Moving international advertising research forward: A new research agenda. *Journal of Advertising*, 34(1), 7–16.
- Taylor, C. R., & Johnson, C. (2002). Standardized vs. specialized international advertising campaigns: What we have learned from academic research in the 1990s. *New Directions in International Advertising Research*, 12, 45–66.
- Teng, L. (2003). Effects of competition on consumer decision-making: Matching advertising to culture (Doctoral dissertation, Concordia University, 2003). *Dissertation Abstracts International*, 64 (04), 1336A. (UMI No. NQ78630)
- *Terlutter, R., Mueller, B., & Diehl, S. (2005). The influence of culture on responses to assertiveness in advertising messages: Preliminary results from Germany, the U.S., the U.K., and France. In S. Diehl, R. Terlutter, & P. Weinberg (Eds.), *Advertising and communication: Proceedings of the 4th international conference on research in advertising* (pp. 183–190). Wiesbaden, Germany: Gabler.
- Triandis, H. C. (1995). *Individualism and collectivism*. Boulder, CO: Westview Press.
- *Van den Brandt, C., Domínguez, N., & Hoeken, H. (2001). De relatieve overtuigingskracht van waarde-appèls in Nederlandse en Spaanse advertenties: Spelen cultuurverschillen een rol? [The relative persuasiveness of value appeals in Dutch and Spanish ads: Do cultural differences play a role?] *Toegepaste Taalwetenschap in Artikelen, 66*, 101–112.
- Van de Vijver, F. J. R., & Leung, K. (1997). *Methods and data analysis for cross-cultural research*. Thousand Oaks, CA: Sage.

- *Van Hartingsveldt, H. (2004). *Internationaal adverteren: Standaardisatie of adaptatie?*[Advertise internationally: Standardization or adaptation?]. Unpublished master's thesis,
 Radboud University Nijmegen, Nijmegen, The Netherlands.
- *Wang, C. L., Bristol, T., Mowen, J. C., & Chakraborty, G. (2000). Alternative modes of self-construal: Dimensions of connectedness-separateness and advertising appeals to the cultural and gender-specific self. *Journal of Consumer Psychology*, *9*, 107–115.
- Wang, C. L., & Mowen, J. C. (1997). The separateness-connectedness self-schema: Scale development and application to message construction. *Psychology and Marketing*, 14, 185–207.
- Wells, L. G., & van Auken, S. (2006). A comparison of associational and claimless-informational advertising in Russia. *Journal of East-West Business*, 12, 29–48.
- White, R. (2000). International advertising: How far can it fly? In J. P. Jones (Ed.), *International advertising: Realities and myths* (pp. 29–40). Thousand Oaks, CA: Sage.
- Wilcox, J. S., Ko, G., Gentry, J. W., Stricklin, M., & Jun, S. (1996). Advertising presentations of the independent versus interdependent self to Korean and U.S. college students. *Advances in International Marketing*, 7, 159–174.
- Williams, P., & Aaker, J. L. (2002). Can mixed emotions peacefully coexist? *Journal of Consumer Research*, 28, 636–649.
- Witte, K., & Allen, M. (2000). A meta-analysis of fear appeals: Implications for effective public health programs. *Health Education and Behavior*, *27*, 591–615.
- Yoon, C., Lee, M. P., & Danziger, S. (2007). The effects of optimal time of day on persuasion processes in older adults. *Psychology and Marketing*, *24*, 475–495.

- *Zhang, J. (2004). Cultural values reflected in Chinese advertisements: Self-construal and persuasion implications (Doctoral dissertation, University of Illinois at Urbana-Champaign, 2004). *Dissertation Abstracts International*, 65 (11), 4037A. (UMI No. 3153479)
- Zhang, J., & Shavitt, S. (2003). Cultural values in advertisements to the Chinese X-generation: Promoting modernity and individualism. *Journal of Advertising*, *32*(1), 23–33.
- *Zhang, Y., & Gelb, B. D. (1996). Matching advertising appeals to culture: The influence of products' use conditions. *Journal of Advertising*, 25(3), 29–46.
- *Zhang, Y., & Neelankavil, J. P. (1997). The influence of culture on advertising effectiveness in China and the USA: A cross-cultural study. *European Journal of Marketing*, *31*, 134–149.
- Zou, S. (2005). Contributions to international advertising research: An assessment of the literature between 1990 and 2002. *Journal of Advertising*, *34*(1), 99–110.

Table 1

Cases Analyzed (Persuasion Outcomes)

Study	r	N Codings ^a
Aaker (2000) study 3, Japan, ruggedness	.221	48 4/1
Aaker (2000) study 3, Japan, sophistication	.044	52 4/1
Aaker (2000) study 3, US, peacefulness	025	66 4/4
Aaker (2000) study 3, US, sophistication	002	52 4/4
Aaker & Schmitt (2001) study 1, China	.272	50 1/1
Aaker & Schmitt (2001) study 1, US	.235	71 1/4
Aaker & Williams (1998) study 1, China	137	90 1/1
Aaker & Williams (1998) study 1, US	274	60 1/4
Agrawal & Maheswaran (2005) study 1	.140	167 1/1
Agrawal & Maheswaran (2005) study 2	.219	198 1/4
Gregory & Munch (1997) automobile	.043	316 1/2
Gregory & Munch (1997) gelatin	.025	316 1/2
Gregory et al. (2002) Colombia, toothbrush	052	135 1/2
Gregory et al. (2002) Colombia, t-shirt	.023	135 1/2
Gregory et al. (2002) Colombia, watch	092	135 1/2
Gregory et al. (2002) US, toothbrush	053	141 1/4
Gregory et al. (2002) US, t-shirt	.041	141 1/4
Gregory et al. (2002) US, watch	.243	141 1/4
Gunaratne (2000) New Zealand	.287	140 1/1
Gunaratne (2000) Sri Lanka	.298	140 1/1

Han & Shavitt (1994) Korea, chewing gum	063	64	1/1
Han & Shavitt (1994) Korea, clothes iron	.324	64	1/1
Han & Shavitt (1994) Korea, detergent	.330	64	1/1
Han & Shavitt (1994) Korea, running shoes	268	64	1/1
Han & Shavitt (1994) US, chewing gum	.352	64	1/4
Han & Shavitt (1994) US, clothes iron	.294	64	1/4
Han & Shavitt (1994) US, detergent	.284	64	1/4
Han & Shavitt (1994) US, running shoes	.348	64	1/4
Hoeken et al. (2003) combined, The Netherlands	.135	177	3/3
Hoeken et al. (2003) combined, Spain	140	183	3/3
Hoeken et al. (2003) Belgium	.137	142	3/3
Hoeken et al. (2003) France	040	125	3/3
Hoeken, Starren, Nickerson, Crijns, & Van den Brandt			
(2007) study 1, Belgium	.016	72	3/3
Hoeken et al. (2007) study 1, The Netherlands	.271	57	3/3
Hoeken et al. (2007) study 1, Spain	.121	123	3/3
Hoeken et al. (2007) study 2, Germany	.204	98	2/3
Hoeken et al. (2007) study 2, The Netherlands	076	79	2/3
Hoeken et al. (2007) study 2, UK	.114	74	2/3
Kirk (2003)	090	24	3/2
Lau-Gesk (2003) study 1, easterners	.437	29	1/1
Lau-Gesk (2003) study 1, westerners	.534	25	1/4
Lepkowska-White et al. (2003) US, collectivistic	.005	275	1/4

Lepkowska-White et al. (2003) US, functional	194	278	4/4
Reesink (1994) The Netherlands	054	106	2/3
Reesink (1994) UK	.383	70	2/3
Sanderse (2004) UK, camera	.115	78	2/3
Sanderse (2004) UK, mp3 player	142	73	2/3
Sanderse (2004) The Netherlands, camera	112	80	2/3
Sanderse (2004) The Netherlands, mp3 player	123	92	2/3
Van Hartingsveldt (2004) Belgium, added attributes	.009	50	2/3
Van Hartingsveldt (2004) Belgium, product attributes	093	50	2/3
Van Hartingsveldt (2004) The Netherlands, added attributes	s142	50	2/3
Van Hartingsveldt (2004) The Netherlands, product attribut	es .064	50	2/3
Wang, Bristol, Mowen, & Chakraborty (2000) China	.134	105	1/1
Wang et al. (2000) US	.182	96	1/4
J. Zhang (2004) study 3, China, body wash	320	93	1/1
J. Zhang (2004) study 3, China, car	080	93	1/1
J. Zhang (2004) study 3, China, chocolate	.273	93	1/1
J. Zhang (2004) study 3, China, frozen food	.108	93	1/1
J. Zhang (2004) study 3, US, body wash	180	74	1/4
J. Zhang (2004) study 3, US, car	195	74	1/4
J. Zhang (2004) study 3, US, chocolate	.075	74	1/4
J. Zhang (2004) study 3, US, frozen food	.006	74	1/4
Y. Zhang & Gelb (1996) China, camera	.459	80	1/1
Y. Zhang & Gelb (1996) China, toothbrush	092	80	1/1

Y. Zhang & Gelb (1996) US, camera	.046	80	1/4
Y. Zhang & Gelb (1996) US, toothbrush	.355	80	1/4

Note. In labeling cases, we have given simply the authors and the date when that was sufficient to identify the study; we have provided additional information only where disambiguation was needed, as when a given publication had several studies (thus "study 1"), audiences ("China"), products ("t-shirt"), comparisons of different appeals ("ruggedness"), or conditions ("added attributes").

^aThe coding judgments are, in order: value dimension (1 = individualism-collectivism, 2 = masculinity-femininity, 3 = uncertainty avoidance, 4 = other), and geographic region (1 = Asia-Pacific, 2 = Central/South America; 3 = Europe, 4 = North America).

Table 2

Cases Analyzed (Ad Liking Outcomes)

Study	r	N C	odings ^a
Aaker and Williams (1998) study 1, China	164	90	1/1
Aaker and Williams (1998) study 1, US	320	60	1/4
Briley and Aaker (2006) study 1, China	.222	80	4/1
Chang (2006a), US	.304	112	2/4
Diehl and Terlutter (2004) China	.121	36	1/1
Diehl and Terlutter (2004) Germany	.247	39	1/3
Gregory and Munch (1997) automobile	.067	316	1/2
Gregory and Munch (1997) gelatin	.084	316	1/2
Gregory et al. (2002) Colombia, toothbrush	081	135	1/2
Gregory et al. (2002) Colombia, t-shirt	.015	135	1/2
Gregory et al. (2002) Colombia, watch	095	135	1/2
Gregory et al. (2002) US, toothbrush	.203	141	1/4
Gregory et al. (2002) US, t-shirt	.047	141	1/4
Gregory et al. (2002) US, watch	.238	141	1/4
Gunaratne (2000) New Zealand	.303	140	1/1
Gunaratne (2000) Sri Lanka	.308	140	1/1
Han and Shavitt (1994) Korea, chewing gum	130	64	1/1
Han and Shavitt (1994) Korea, clothes iron	.311	64	1/1
Han and Shavitt (1994) Korea, detergent	.274	64	1/1
Han and Shavitt (1994) Korea, running shoes	260	64	1/1

Han and Shavitt (1994) US, chewing gum	.411	64	1/4
Han and Shavitt (1994) US, clothes iron	.296	64	1/4
Han and Shavitt (1994) US, detergent	.278	64	1/4
Han and Shavitt (1994) US, running shoes	.306	64	1/4
Hoeken et al. (2003) combined, The Netherlands	.036	178	3/3
Hoeken et al. (2003) combined, Spain	085	183	3/3
Hoeken et al. (2003) Belgium	039	142	3/3
Hoeken et al. (2003) France	.122	124	3/3
Hoeken et al. (2007) study 1, Belgium	313	72	3/3
Hoeken et al. (2007) study 1, The Netherlands	.324	57	3/3
Hoeken et al. (2007) study 1, Spain	171	123	3/3
Hoeken et al. (2007) study 2, Germany	071	98	2/3
Hoeken et al. (2007) study 2, The Netherlands	.258	79	2/3
Hoeken et al. (2007) study 2, UK	114	74	2/3
Kirk (2003)	.003	24	3/2
Lau-Gesk (2003) study 1, easterners	.528	29	1/1
Lau-Gesk (2003) study 1, westerners	.643	25	1/4
Lau-Gesk (2003) follow up, westerners	.247	43	1/4
Lepkowska-White et al. (2003) US, cleanser, collectivist	187	68	1/4
Lepkowska-White et al. (2003) US, cleanser, functional	267	70	4/4
Lepkowska-White et al. (2003) US, chocolate, collectivist	.242	71	1/4
Lepkowska-White et al. (2003) US, chocolate, functional	214	70	4/4
Lepkowska-White et al. (2003) US, fridge, collectivist	311	69	1/4

Lepkowska-White et al. (2003) US, fridge, functional	310	70	4/4
Lepkowska-White et al. (2003) US, jeans, collectivist	.312	67	1/4
Lepkowska-White et al. (2003) US, jeans, functional	220	68	4/4
Nelson (1997) Denmark	.209	37	1/3
Nelson (1997) US	217	71	1/4
Reesink (1994) The Netherlands	054	106	2/3
Reesink (1994) UK	.383	70	2/3
Sanderse (2004) UK, camera	040	79	2/3
Sanderse (2004) UK, mp3 player	.147	76	2/3
Sanderse (2004) The Netherlands, camera	.246	79	2/3
Sanderse (2004) The Netherlands, mp3 player	.086	93	2/3
Terlutter, Mueller, & Diehl (2005) France	153	84	4/3
Terlutter et al. (2005) Germany	046	182	4/3
Terlutter et al. (2005) UK	057	89	4/3
Terlutter et al. (2005) US	.000	132	4/4
Van Hartingsveldt (2004) Belgium, added attributes	.235	50	2/3
Van Hartingsveldt (2004) Belgium, product attributes	.238	50	2/3
Van Hartingsveldt (2004) The Netherlands, added attribu	tes .112	50	2/3
Van Hartingsveldt (2004) The Netherlands, product attrib	outes .163	50	2/3
Y. Zhang and Gelb (1996) China, camera	.610	80	1/1
Y. Zhang and Gelb (1996) China, toothbrush	029	80	1/1
Y. Zhang and Gelb (1996) US, camera	.045	80	1/4
Y. Zhang and Gelb (1996) US, toothbrush	.399	80	1/4

Note. In labeling cases, we have given simply the authors and the date when that was sufficient to identify the study; we have provided additional information only where disambiguation was needed, as when a given publication had several studies (thus "study 1"), audiences ("China"), products ("t-shirt"), comparisons of different appeals ("ruggedness"), or conditions ("added attributes").

^aThe coding judgments are, in order: value dimension (1 = individualism-collectivism, 2 = masculinity-femininity, 3 = uncertainty avoidance, 4 = other), and geographic region (1 = Asia-Pacific, 2 = Central/South America; 3 = Europe, 4 = North America).

Table 3
Summary of Results: Effects on Persuasion

	k	N	mean r	95% CI	power ^a	Q(df)
All cases	67	6,755	.073	.029, .118		209.3 (66)***
Geographic region						
North America	22	2,256	.096	.010, .181		82.7 (21)***
Europe	20	1,829	.034	032, .100	.84	36.7 (19)**
Asia-Pacific	19	1,609	.124	.020, .225		76.0 (18)***
Central/South America	6	1,061	.003	057, .064	.63	2.5 (5)
Specific values appealed to						
Individualism-collectivism	41	4,406	.105	.046, .163		146.9 (40)***
Masculinity-femininity	13	950	.015	075, .105	.57	22.7 (12)*
Uncertainty avoidance	8	903	.053	044, .149	.55	13.8 (7)
Other	5	496	022	176, .133	.34	9.1 (4)

^{*}p < .05; **p < .01; ***p < .001

^aThese are power figures for detecting a population effect size of r = .10, assuming large heterogeneity, with a random-effects analysis, .05 alpha, and a two-tailed test (Hedges & Pigott, 2001).

Table 4
Summary of Results: Effects on Ad Liking

	k	N	mean r	95% CI	power ^a	Q(df)
All cases	66	6091	.082	.029, .135	-	265.2 (65)***
Geographic region						
North America	23	1835	.084	026, .191	.84	118.0 (22)***
Europe	25	2264	.050	017, .116	.91	57.5 (24)***
Asia-Pacific	12	931	.184	.024, .335	-	64.6 (11)***
Central/South America	6	1,061	.025	037, .086	.63	5.1 (5)
Specific values appealed to						
Individualism-collectivism	35	3277	.139	.062, .215	-	159.4 (34)***
Masculinity-femininity	14	1066	.132	.045, .218	-	26.4 (13)*
Uncertainty avoidance	8	903	023	139, .094	.55	19.8 (7)**
Other	9	845	108	209,004	-	17.5 (8)*

^{*}*p* < .05; ***p* < .01; ****p* < .001

^aThese are power figures for detecting a population effect size of r = .10, assuming large heterogeneity, with a random-effects analysis, .05 alpha, and a two-tailed test (Hedges & Pigott, 2001).